University of South Australia | Centre for Workplace Excellence

FINAL PROJECT REPORT

EVALUATION AND VALIDATION OF WELLBEING SA'S HEALTHY WORKPLACE CHECK (HWC) TOOL

Prepared for Wellbeing SA

By

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1. INTRODUCTION

Healthcare costs are escalating in South Australia (SA), with both state and local government expenditure on health reaching $4.33 billion in 2017-2018[1]. With the onset of COVID-19 and the rising costs associated with mental health care, this number is likely to be even higher. Around 251 people in South Australia lost their lives to suicide in 2019[2] and both general health and mental health concerns were intensified due to COVID-19. Costs of mental illness on economic participation and productivity were around 10 percent of Australia's total GDP, approximately $220 billion per annum[3]. Research shows that healthy, safe and thriving workplaces are key to addressing mental health issues at work[4]. However, workplace physical and psychological safety has become a major concern, with a quarter of Australians indicating their workplace is physically unsafe and nearly half reporting that their workplace is psychologically unhealthy[4].

Increased attention has focused on the workplace as an important venue for protecting and promoting worker health, safety and wellbeing[5]. Workplace support such as health promotion via increased access to healthy foods, physical activity programs and smoke-free policies were found to better support worker health[6]. In contrast, work-related physical and psychosocial risk factors such as poor work design, lack of safety climate and ongoing stress and burnout were the major contributors to employee health and safety problems[7]. Businesses and employers are increasingly aware of the benefits that workplace health promotion and wellbeing initiatives can bring to their workers and organisation, including improved physical, mental, emotional health and productivity[8].

Therefore, government agencies in charge of health and employment relations issues in several countries (e.g., Canada, Denmark, Germany, Sweden, UK, USA) and several states (e.g., ACT, QLD, Tasmania) in Australia have, in recent years, started developing relevant tools for businesses and organisations to monitor and measure workplace health, safety and wellbeing[9, 10]. Efforts were also made to validate several scales used to measure a workplace health promotion best practice (e.g., CDC Worksite Total Worker Health ScoreCard), assess workplace safety (e.g., Healthy Workplace Screening), and examine employees' perception of wellness (e.g., Workplace Support for Health Scale; HERO ScoreCard)[6, 8, 11]. However, there have been inconclusive findings regarding strong evidence in predicting workplace health, safety and wellbeing outcomes, using these various instruments. An 'evidence review report' summarising these inconclusive findings was submitted to Wellbeing SA in May 2022 by the research team from the Centre for Workplace Excellence (CWeX)[12] (see Appendix 1). CWeX has been commissioned by Wellbeing SA to conduct an evaluation and validation of the DRAFT Healthy Workplace Self-Assessment Tool initially developed by Wellbeing SA (see Appendix 2), which was subsequently refined and changed the name to the Healthy Workplace Check (HWC) Tool (see Appendix 3).

The tool validation exercises are similar to those conducted in the USA but has not been done in the Australian context so far to measure workplace health especially for South Australia (SA) businesses and organisations.

Our first aim in this research project was to provide quality recommendations for each domain included in the Healthy Workplace Check (HWC) Tool, specifically designed and developed for South Australian (SA) businesses and organisations. As a result of close examination of factors commonly used in several health and wellbeing assessment tools applied in other countries and within the Australian context[9], the HWC tool was purposefully developed to cover six domains: 1) leadership commitment and communication; 2) participation and consultation; 3) policies, practices and procedures; 4) physical work environment; 5) workforce capability & programs; and 6) data-driven measurement and evaluation. Guided by the principles of assessing the quality of evidence[13], low to moderate evidence was found for the efficacy of the six domains as predictors of worker health, safety and wellbeing.

The second aim of this research was to assess the content validity of the newly developed HWC tool. Eighteen interviews of SA business owners, human resource (HR) and occupational health and safety (OHS) managers were conducted. Findings from analysing these interview data confirmed that the items included in each domain met the content validation criteria, and that the HWC tool has been received positively, and can be helpful and easy to use for SA businesses and organisations. The interview findings show that the tool is reasonably robust with an appropriate length and clear navigation to follow (see Appendix 4 – A Brief Report on Findings from Content Validation of the HWC Tool and Justification for Changes submitted to Wellbeing SA on 29 July 2022). Several suggestions made by business owners and managers helped revise the tool and improve the online design of the HWC tool via Qualtrics.

The last aim of this research project was to use the sample of 191 valid and usable responses collected via the online survey to conduct several psychometric analyses, including reliability, exploratory and confirmatory factor analyses, convergent validity and criterion validity of the HWC tool. The results show that there is high internal consistency for each of the six domains (Cronbach's alpha for the overall HWC = 0.97). Exploratory factor analysis (EFA) results indicate that most items in the HWC should be retained. Confirmatory factor analysis (CFA) further supports the factor structure of the HWC tool, although the limited analyses need to be interpreted with caution. Convergent validity analysis indicates that the overall HWC scores are highly correlated with scores of a similar measure of health and safety, the Psychosocial Safety Climate 4-item scale (PSC-4)[14]. Furthermore, correlations between HWC domains and several health measurements items (e.g., general health; healthy food consumption; medical practitioner and allied health professional appointments; the Kessler Psychological Distress Scale (K-10); and Burnout

Assessment Tool (BAT)) indicate that the domains are related to independent criterion outcomes in expected ways.

Therefore, it is recommended that based on our preliminary testing that the HWC tool can be reliably used by SA businesses and organisations for intervention and prevention purposes to identify the best practices and areas for improvement to protect and promote workplace health, safety and wellbeing in South Australia.

The remaining report provides the evidence-based evaluation and validation outcomes of the Healthy Workplace Check (HWC) tool.

2. LITERATURE REVIEW – RESEARCH EVIDENCE

It has been strongly argued that healthy, safe and thriving workplaces are affected by both lead and lag indicators. Lead indicators include organisational culture, safety climate, and communication about ethics and values reflecting health and wellbeing. Organisational policies, practices and procedures to support physical and psychological health, leadership commitment and workforce engagement, allocation of sufficient resources committed to workplace health and wellbeing, and proper workplace design and diversity programs[5, 9] can also be powerful factors in creating healthy workplaces. A safe physical work environment and strong workforce knowledge and skills (specifically regarding workplace health and safety) play a significant role and are also important lead indicators to promote and protect workplace health and safety.

In contrast, lag indicators are shown by organisational performance metrics (e.g., sickness, absenteeism, injury rates, presentism, productivity and worker compensation data) and worker behaviours including the amount and quality of sleep and rest, smoking, healthy eating, and physical activities. Research shows that organisational health and safety performance are typically assessed using lag indicators (i.e., sick days, injury rates and costs), which can be a barrier to genuinely assessing health and safety outcomes at work[15]. For example, companies with few injuries may have insufficient information to identify safety and injury trends[16]. Low absenteeism may be due to lack of reporting and data collection, with this being especially true for smaller firms. Lag indicators are slow to manifest which means that prevention opportunities are missed.

Therefore, businesses and organisations are increasingly expanding their focus on lead indicators such as leadership commitment, organisational support for work-life balance, health promotion activities and HR policies, practices and programs to prevent employees from being stressed and to minimise workplace hazards. The expectation is that lead factors would enable the detection of potential lag indicators to occur and increase the overall organisational health and safety performance[17].

Lead indicators were emphasised in the design and development of several health-related assessment tools in other contexts such as the Centre for Disease Control's (CDC) Worksite Scorecard, the HERO-Mercer Scorecard, Harvard T Chan School of Public Health's WISH (Work-Integrated Safety and Health) tool in the USA, and other Australian states such as Queensland's Healthy Workplace Audit Tool[18]. Several studies conducted by researchers at the Centre for Workplace Excellence (CWeX) have also investigated lead organisational factors for the protection of psychological health (such as senior management support and commitment to stress prevention; management priority on psychological health and safety versus productivity goals; organisational communication and worker participation and consultation) and examined their effects on psychological wellbeing, engagement and productivity at work[19]. The effectiveness of organisational lead indicators was also found to reduce workplace bullying behaviour and risks[20]. Organisational lead indicators, such as management support for worksite health promotion are considered important to measure because of their ability to predict relevant health outcomes[21].

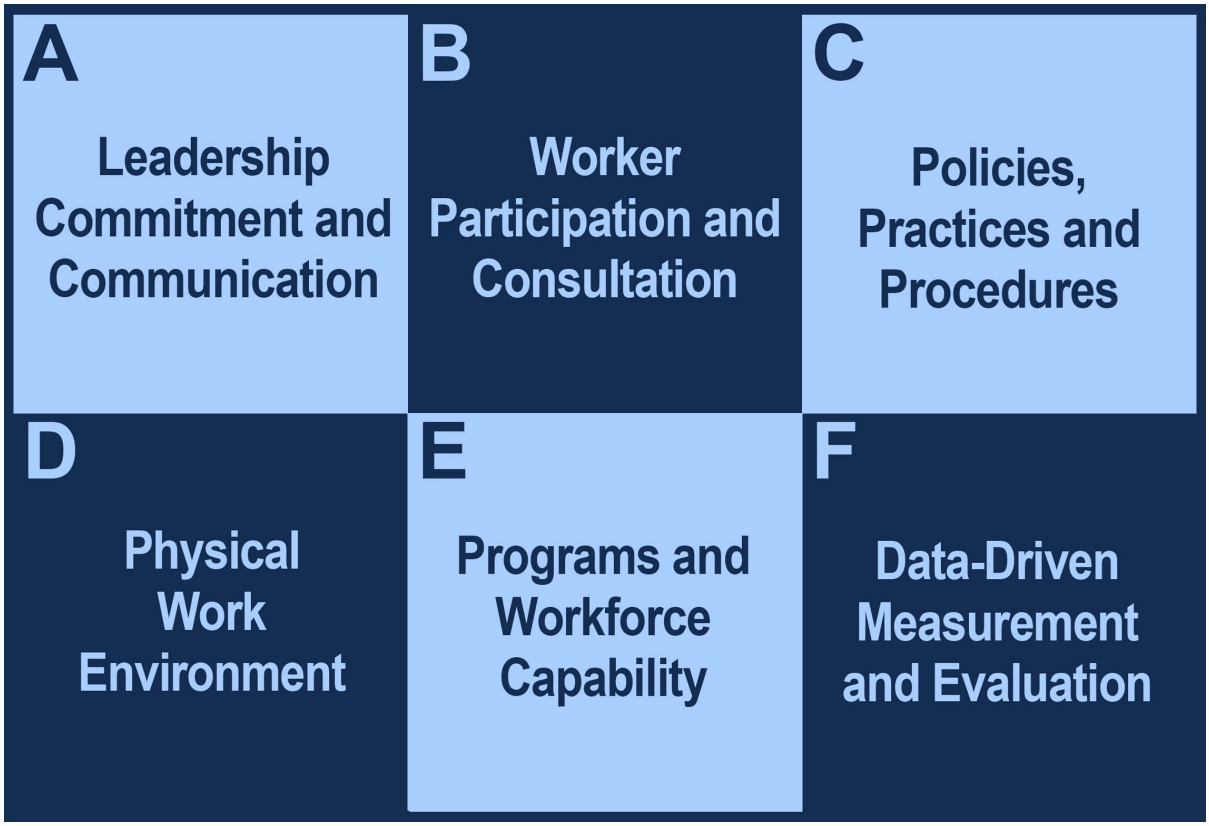
Because the HWC tool is designed to support SA businesses and organisations, business leaders and organisational managers were viewed to be instrumental for achieving workplace health, safety and wellbeing. Therefore, the focus on business lead factors is essential. However, selection of organisational lead factors to build an effective healthy workplace assessment tool is not always straightforward. Based on the review of 50 similar tools that were developed around the world[9] and a close examination and comparison of key domains and items used in five organisation-level health assessment tools (see Appendix 1), six domains (Domains A-F) with a total of 51 items were chosen for evaluation and validation in this current study (Figure 1). In addition, the HWC also included PSC-4 items for the purpose of testing the convergent validity.

The quality of evidence affirming the inclusion of the first six domains were further informed by the following, which have been used extensively in assessing empirical studies to provide evidence of including constructs for examination:

- Navigation Guide[22, 23, 24];
- Office of Health Assessment and Translation (OHAT) methods[25, 26, 27];
- Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach[28, 29, 30];
- Cochrane[31];
- Quality of Evidence in Studies estimating Prevalence of Exposure to Occupational risk factors (QoE-SPEO)[32]; and
- Appraisal of Guidelines for Research & Evaluation Instrument (AGREE II)[33].

The definition of each domain and level of evidence derived from assessing a total of 35 empirical studies (see Appendix 1 – Table 2) examining the relationships between domains and health, safety and wellbeing outcomes are briefly presented below.

Figure 1 – Six domains included in the HWC Tool for evaluation



'*Leadership commitment and communication'* (Domain A) in this research project is defined as the degree to which a business owner/manager or workplace leader makes health, safety and wellbeing a clear priority. Prioritisation includes clear communication through its organisational vision or mission statement or strategic planning documents as well as other marketing and promotional materials. Promotion and protection of worker health, safety and wellbeing require both top-down and bottom-up approaches[34]. A strong leadership commitment from the top and clearly communicated commitment to workplace health and wellbeing encourage workforce participation and engagement in health promotion activities. Several empirical studies[35,36,37,38,39] demonstrate a moderate relationship between leadership commitment and communication, and employee wellbeing.

'Worker participation and consultation' (Domain B) is defined here as the effort made by a workplace owner, leader or managers to consult and involve workers at every level in planning and decision-making regarding health, safety and wellbeing. Workforce participation and consultation was found to also be moderately related to employee health, safety and wellbeing in the existing literature. Findings from a

study of 3755 employees in Finland illustrate that high involvement management practices with worker consultation and involvement in decision-making improve employee wellbeing through increased job satisfaction, non-tiredness, lower rates of workplace accidents and decreased absenteeism[40]. A further six selected studies exhibit relationships between participation/consultation and wellbeing, including two large randomly selected cross-sectional population samples, three longitudinal studies and two studies comprising 17 industries and 1500 companies respectively.

'***Policies, practices and procedures***' (Domain C) refer to specific workplace-based rules and regulations that guide the development and design of various human resource management policies and practices, and clear procedures to promote and protect worker health, safety and wellbeing. In both management and psychology fields, some evidence[41, 42, 43] was found to support the use of clear organisational policy guidelines, wellbeing-related practices and various training programs in generating better worker health and wellbeing outcomes.

Six empirical studies mostly related to workplace procedures were examined to identify low to moderate evidence on their link to workplace wellbeing. For example, three meta-analyses[44, 45] identified evidence in procedures relating to organisational wellness programs and training. A large randomly selected population sample collected in Sweden identified a relationship between workplace health promotion procedures and employee health/sickness absence[46].

'***Physical work environment'*** (Domain D) refers to the safety of work conditions relating to equipment, materials and substances used for carrying out work, as well as vehicles, buildings and structures required for workers to do their jobs. While the tools developed in the US context (i.e., WISH, CDC and HERO) do not include a specific domain regarding 'physical work environment', all existing Australian tools (e.g., the QLD Audit Tool) include it in assessing workplace health, safety and wellbeing.

The link between this domain and health outcomes was examined in several empirical studies[47, 48, 49, 50], yet low-quality evidence was found to confirm the relationship. These results might be due to the nature of the studies identified, as they mainly employed cross-sectional designs with small sample sizes, which may have been unable to capture long term effects, for example, of an ergonomic chair or the impact of green office space on individual health and wellbeing. Nonetheless, one cross sectional study with a reported sample of 2261 participants identified relationships between the physical work environment and headaches/mood[51].

'***Workforce capability and programs***' (Domain E) was defined as 'the beliefs, knowledge and skills related to worker health, safety and wellbeing, possessed by a workplace owner/leader or managers and workers and how these are developed through information, education, skill building and training programs on health, safety and wellbeing'. This domain was included in the QLD Healthy Workplace Audit Tool. The findings from six empirical studies (mostly with cross-sectional designs and small sample sizes) suggest that workforce health, safety, and wellbeing knowledge

and skills indeed flow on from the presence of information, education, and training programs.

However, the evidence of a link between workforce capability and programs and improving wellbeing and health outcomes is weak, again possibly due to the nature of the study design. Only one study used random allocation of participants to experimental/control groups, identifying a relationship between leader capability building and seeking out/using wellbeing resources. Nonetheless, overall study results tend to suggest that improved awareness and capacity by managers and workers to maintain a healthy and safe outlook increase their level of participation and engagement in promoting and protecting workplace health, safety, and wellbeing[52, 53, 54].

"Data-driven measurement and evaluation' (Domain F) is defined as 'the use of a range of data (e.g., surveys, audits, injury and incident data, absenteeism and turnover data) to prioritise, measure and review workplace health, safety and well-being activities'. This domain has been used by all three US tools (i.e., CDC; WISH & HERO), especially data used for "Strategic Planning" in the HERO Scorecard. However, this domain was not included in any Australian-developed tools. The concern could be that, with a spectrum of workforce sizes and resources, some smaller workplaces may not meaningfully be able to undertake or sustain a high level of data collection, or further be able to integrate the data into decision-making.

Five studies[55, 56, 57, 58, 59] examined in the current study mostly comprised small samples and focused on the effectiveness of data-driven risk analysis/complexities. Except for one longitudinal study (three waves of data) demonstrating that data-driven interventions improved wellbeing[58], the overall findings suggest low evidence linking data-driven measurement and evaluations to health and wellbeing.

Past research has tended to focus on using lag indicators (i.e., sick days, injury rates and costs) to assess organisational health and safety performance, which can be biased towards properly assessing health and safety outcomes at work[60]. Testing the effects of lead factors towards creating healthy workplaces that are included in the current six domains is an emerging important research field. This requires a continuous effort to collect data to verify the link of these domains to achieving healthy workplace outcomes. A generally low to moderate evidence linking each domain to healthy workplace outcomes discussed above does not mean that the selected domains in the HWC tool lack efficacy as predictors of healthy workplace outcomes. The weak relationship shown in the past studies may be largely due to the nature of the study design, selection of items used in the testing and research limitations in sampling and study context as pointed out earlier.

For the purpose of this current research project, it is recommended to conduct psychometric analysis of these six domains in the HWC tool to evaluate its reliability and validity for use by SA businesses and organisations.

3. METHODS OF PSYCHOMETRIC TESTING

This research project was conducted to evaluate the psychometric properties and effectiveness of the Wellbeing SA Healthy Workplace Check (HWC) tool that was designed to support SA businesses and organisations to develop their workplace best practices in protecting and promoting worker health, safety and wellbeing. This would be the first assessment of the questionnaire developed in a research study. Therefore, appropriate research subjects (such as SA business owners, chief executive officers – CEOs; human resource -HR managers; and occupational health and safety – OHS managers and officers) were first identified and invited to participate in a two-stage research study.

The UniSA Business Negligible Risk Ethics Research Committee's approval (Application ID: 016/2022) to collect both qualitative (face-to-face interview) and quantitative (i.e., online survey) data for this project was obtained. A participant information sheet was provided to research participants before obtaining consent to take part in this research project.

3.1. Evaluation and validation steps

To effectively validate the HWC tool, the following two studies were taken:

Study 1 aims to establish:

- content validity

Content validation refers to a process that aims to evaluate if an instrument represents the different aspects of a specific construct[61, 62]. In other words, we aimed to establish whether the HWC tool with six domains captured the lead factors for developing healthy workplaces. There are several ways to achieve content validity. In this current study, we consulted with a panel of subject matter experts regarding the importance of individual items within the instrument. Subject matter experts included two Wellbeing SA officials and four CWeX researchers who are experts in organisational psychology and human resource management. The DRAFT tool (Appendix 2) was first developed by Wellbeing SA staff and was then verified by four CWeX researchers. The prototype was also tested by 18 SA business owners, CEOs and HR/OHS managers during the interview process (see Appendix 4 for a brief report of findings from content validation).

Study 2 covers:

- exploratory factor analysis (EFA)
- confirmatory factor analysis (CFA)
- reliability testing
- convergent validity testing
- criterion validity testing

To assess the construct validity of the HWC, we used factor analysis, which is used to reduce many variables (i.e., items) into a smaller set of variables (also known as factors, or in this case, domains) to reveal the underlying dimensions[63]. Exploratory factor analysis is the initial exploration of the possible underlying factor structure of a set of variables, while confirmatory factor analysis is used to verify the factor structured of a set of observed variables[64]. We used EFA and CFA to determine how well the items in each domain represented the fundamental factors of healthy workplaces.

Reliability testing was also carried out by assessing the internal reliability of the HWC. Cronbach's coefficient alpha values above 0.70 were observed for strong internal consistency of each HWC domain.

The convergent and concurrent validity of the HWC were also assessed. Convergent validity was assessed by examining the relationship between HWC domains and conceptually related measures, while concurrent (or criteria) validity was establishing by examining the relationship between HWC domains and health outcomes.

Further details about how to interpret the results from the above testings are provided in Section 4 – Results. Explanation of sampling and analytical procedures are discussed next.

3.2. Sampling procedures

Study 1

Over 60 CEOs, HR/OHS managers were initially contacted via emails and/or phone calls. The final sample of eighteen people agreed to face-to-face interviews, which were conducted by trained research assistants in the period of 1-15 July 2022. Each interview participant first completed the HWC tool on an iPad provided. Participants then took part in a semi-structured interview with 13 open-ended questions. Each interview lasted about 30-60 minutes. The average time to complete the survey was about 11m 24s, with a range of the shortest 5m 58s to the longest 26m 06s. The survey response time was subsequently set for 15 minutes.

Study 2

The online survey questionnaire was posted initially via social media, forwarded to CWeX's network contacts as well as personal contacts of CWeX researchers in early August, but with a low response rate. This prompted a purchase of two external business databases and the use of Campaign Monitor, an online marketing software website used to distribute the survey link to approximately 5000 individuals working as business owners, HR managers and OHS managers of SA businesses and organisations.

Two business databases (i.e., Lead Express; Datajet) were used to reach out to people in leadership positions: business owners, CEOs; HR managers, OHS managers working for SA businesses and organisations. Campaign Monitor was utilised to distribute emails to the identified personnel, with two follow-up emails sent to potential participants to encourage stronger participation in the survey. Wellbeing SA also assisted with sending the survey link to their network to generate more responses. Staff who did not fit the aforementioned leadership categories were still permitted to complete a modified survey, which allowed them only to complete the PSC, health and demographic domains while skipping domains A - F.

After a 2-week campaign (15-26 August), 221 responses were received. However, 30 responses were removed due to their inconsistency in responses especially with reference to the selection criteria of those participants in filling up the questions in Domains A-F. After data cleaning, a total of 191 valid and usable responses, representing various industries in SA, were retained for subsequent analysis. Demographic information outlining survey participants can be found in Table 1. Missing demographic data was mostly due to participants failing to respond to questions or otherwise being forced to skip questions due to indicating they were not in the target managerial positions (i.e., as shown in Sample 3's large Job Title missing data). This also explains the inclusion of "Non-managerial Role" participants in the tool testing below, as they had begun the survey by indicating they were of a target with leadership and managerial position and thus could fill out the majority of the survey.

3.3. Initial analysis of survey responses to key domains in the Tool

The response format of each domain in the HWC tool ranges from 1=Strongly Disagree to 5=Strongly agree with the statement provided. Responses from research participants were used to evaluate the measurement properties of the HWC survey questionnaire. The distribution of scores for each of the 55 scale items was evaluated to identify potential floor/ceiling effects using a criterion of 15% of scores at scale minimum or maximum.

Heat maps (Appendix 5) were first produced providing a graphical representation of survey responses, either along the respective scales or based on numerical responses. Two colour schemes were used. Green to yellow to red indicated a progression from good or desirable answers to poor or negative answers. Otherwise, a white to red scheme was used to indicate frequencies of visits to medical practices. No answer is represented by clear, black or white boxes. Only managers, executives, business owners and HR/OHS managers were permitted to respond to Domains A to F in the survey, while all respondents could answer the PSC, health and demographic domains. The heatmaps therefore reflect these sample differences.

Columns represent single respondents, and their answers can be tracked vertically to see continuity (most strikingly with green or red columns) or outliers. Domain F, for example, reveals that several respondents gave the same score across all four questions, while one case's only negative score came on question B4.

Section I is arranged to allow self-reported health to be compared visually to the number of medical visits.

Mean Score for Each Domain

	Mean Score (1 = Strongly Disagree/Negative – 5 = Strongly Agree/Positive)
A: Leadership commitment and communication	3.81
B: Worker participation and consultation	4.01
C: Policies, practices and procedures	3.61
D: Physical work environment	3.77
E: Workforce capability and programs	3.52
F: Data-driven measurement and evaluation	3.37
G: PSC-4 Scale	3.44

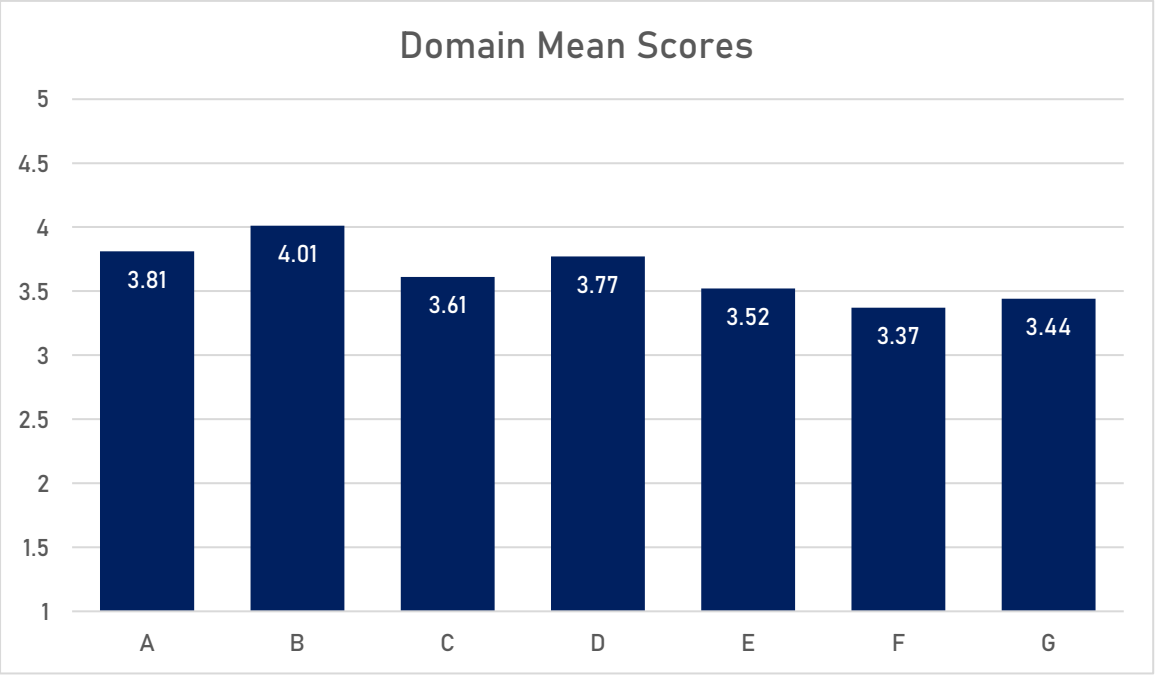


Table 1. Participant demographics

Demographics	Study-1	Study-2			
	Sample 1	Sample 2	Sample 2a	Sample 2b	Sample 3
	(*N* = 18)	(*n* = 96)	(*n* = 48)	(*N* = 48)	(*N* = 191)
Gender					
Females	10	50	22	28	121
Males	7	44	25	19	64
Non-binary	1	0		0	2
Preferred not to specify gender	0	2	1	1	4
Age					
25 and under	0	0	0	0	3
26-33	1	4	3	1	11
34-41	3	15	8	7	30
42-49	4	20	8	12	48
50-65	10	55	28	27	91
65+	0	2	1	1	8
Missing data	0	0	0	0	1
Job title					
Owner/Senior Manager role	5	22	10	12	22
Mid-level Manager Role	10	49	24	25	49
Non-Managerial Role	3	2	1	1	2
Missing data	0	23	13	10	118
Employment Contract					
Permanent full time	14	76	39	37	139
Permanent part time	4	11	3	8	35
Casual full time	0	1	1	0	1
Casual part time	0	0	0	0	5
Other	0	8	5	3	11
Missing data	0	0	0	0	2
Industry					
For Profit	9	55	28	27	93
Not for Profit	5	24	11	13	55
Government	4	17	9	8	43
Size of organisation					
Micro-enterprise (1-4 employees)	1	2	0	2	6
Small (5-19 employees)	6	14	6	8	19
Medium (20-199 employees)	5	39	21	18	65
Large (200+ employees)	6	41	21	20	101

3.4. Splitting the sample for EFA and CFA

It is recommended that exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) are undertaken on separate samples, as this indicates whether the initial factor solution identified in EFA can be reliability replicated in a different sample[65]. The simplest method for dividing a sample into two halves is to split it at random[66]. Accordingly, Sample 2 was randomly split into two independent subsets (Sample 2a, n= 48; Sample 2b, n=48) using the SPSS randomisation function.

3.5. Analytic Procedures

Data were screened for any duplicate responses, and these were removed from the dataset. Exploratory factor analysis (EFA) was conducted on a sub-sample of Sample 2 (i.e., Sample 2a; n=48). EFA was conducted using principal axis factoring – one of principal component analysis (PCA) methods, followed by direct oblimin rotation (factors were not assumed to be orthogonal (or unrelated)), with Kaiser normalization to determine whether the domains of the HWC could be meaningfully distinguished.

The PCA of factor estimation was used because it is less likely to suffer from factor indeterminacy than common factor methods, and it returns factor scores with negligible differences from those generated through common factor techniques[67]. During the EFA process, decisions about the number of factors to retain were based on the convergence of several different factor retention criteria[68], such as eigenvalues > 1.0, scree plot, and parallel analysis. Model fit was assessed using the Kaiser Meyer-Olkin (KMO) value (> 0.6) and Bartlett's test of sphericity ($p < 0.001$)[69]. Items with an eigenvalue > 1, no cross-loadings and factor loadings > .30 were retained[70, 71, 72].

Confirmatory Factor Analysis (CFA) was further completed to identify whether the factor structure could be reliably replicated in a new sample (i.e., Sample 2b; n=48). It was hypothesised that the six-factor model would fit the data best when compared to alternative models. The limited sample required separate one factor analyses compared to two-factor iterations (e.g., leadership commitment and communication (Domain A) combined with worker participation and consultation (Domain B). Scale robustness was not tested using invariance testing due to sample size limitation.

The reliability of the HWC tool and its domains were assessed in Study 2, using Cronbach's coefficient alpha. Coefficient alpha values above 0.70 were recommended for strong internal consistency of each HWC domain. These analyses were performed for participants who completed all questions included in the HWC (n=96; i.e., only those who identified as part of senior management within their organisation- business owners, organisation leaders/managers, CEOs, HR/OHS managers).

To test convergent validity, the relationship was examined between HWC Domains A-F and a conceptually related measure of climate for the protection of psychological health and safety (PSC-4)[14]. It was theorized that the HWC domains would be positively related to an equivalent measure of climate for the protection of psychological health and safety.

Lastly, to evaluate the concurrent (criterion) validity of the HWC instrument, the associations of domain item ratings and health outcomes rated by the survey respondents were assessed. There were insufficient responses from within the same organisation to match managers and non-managers for criterion validity assessment. Only 24 respondents shared an organisation with another, spread across seven organisations, and only five organisations had a mix of managers and non-manager respondents.

4. RESULTS

4.1. Findings from Study 1

A summary of the interview findings is shown in Appendix 4. Key positive comments include:

- the HWC tool is reasonable, helpful and useful;
- your survey is on our wish list to improve workplace health, safety and wellbeing;
- the survey has brought up aspects of health, safety and wellbeing that participants have not thought about or considered for their workplace;
- the length of the survey is just about right;
- the language is clear and each question was easy to understand;
- the name 'Healthy Workplace Check' for the tool is good;
- this is a good initiative, helpful, thorough, easy to complete, broad, encourages broader thinking around OHS/wellbeing and identifying gaps,

Key improvements suggested:

- addressing mental health issue more directly in the tool;
- adding aspects focusing on inclusion of people with disabilities;
- reducing repetitive statements;
- clarifying some terms (e.g., psychosocial risk factors; food and drink options);
- including a domain on culture on its own;
- providing space for further written comments.

Based on this feedback, the following four items were added to Domain A; C; D and E of the HWC tool:

A8. My workplace has a strong culture of promoting and protecting worker health, safety and wellbeing.

C12. My workplace has policies and practices to support workers with a disability.

D8. My workplace is designed to be accessible to workers with a disability.

E17. My workplace provides information about who to contact should workers need modifications to accommodate a disability.

To reflect interview feedback, a percentage completed bar was added to the survey, along with the option for respondents to write additional comments. To shorten the survey, non-managers were directed to only respond to the PSC-4, demographic and health items.

4.2. Findings from Study 2

Study 2 covers five testings generated from the survey data collected from 191 valid responses. Descriptive information regarding participants' demographics is provided in Table 1. Results of these testings and how to interpret the results are presented in this section.

Exploratory Factor Analysis (EFA) Results

A subset of participants from Sample 2 (Sample 2a) were used in the EFA. Sub-sample demographics are reported in Table 1. Due to the limited sample size, separate EFAs were conducted for each domain. Results are listed below.

Domain A – Leadership commitment and communication

There are seven items to measure the domain for 'Leadership commitment and communication'. The model fit was high (KMO= .88); and Bartlett's test of sphericity was significant (χ 2 = 214.00, df = 28, p < .001). One factor was identified explaining 53.84% of the variance. Item A6 = '***My workplace has a dedicated person responsible for managing worker health, safety and wellbeing'*** was removed from the sub-scale due to low factor loading (.063) (see Appendix 6), resulting in seven items included in this domain in the final version of the tool.

Domain B – Worker participation and consultation

Five items were used to measure the domain for 'Worker participation and consultation'. The model fit was high (KMO= .84) and Bartlett's test of sphericity was significant (χ2 = 100.065, df = 10, p < .001). One factor was identified explaining 55.85% of the variance. All five items displayed stable factor loadings (> .4)[73] and were included in the final version of the tool.

Domain C – Policies, practices and procedures

A total of twelve items were included to measure 'Policies, practices and procedures' related to protecting and promoting workplace health, safety and wellbeing. The model fit was high (KMO= .81) and Bartlett's test of sphericity was significant ($\chi 2$ = 429.67, df = 66, p < .001). Two factors were identified; Factor one (Eigenvalue = 6.77) contained all 12 items and explained 49.74% of the variance, while factor two (Eigenvalue= 1.28) contained six items, explaining 12.61% of the variance. However, it should be noted that of the six items identified for factor two, all of these-items were cross-loaded, and in each case, higher factor loadings were evident when these items were loaded onto Factor 1. Further exploration of these cross loadings could be completed with subsequent testing using a larger sample including potential deletion, alternative rotation methods and modification of the number of factors retained. Additionally, all twelve items displayed stable factor loadings (> .4), hence all 12 items were retained in the final version of the tool.

Domain D – Physical work environment

There were eight items included in the Domain to measure 'Physical work environment'. The model fit was again high (KMO= .83) and Bartlett's test of sphericity was significant ($\chi 2$ = 180.33, df = 28, p < .001). One factor was identified (Eigenvalue= 4.39) explaining 48.70% of the variance. All eight items displayed stable factor loadings (> .4) and were also retained in the final version of the HWC.

Domain E – Workforce capability and programs

A total of seventeen items were used to measure the domain for 'Workforce capability and programs'. The model fit indices such as a high value for KMO (= .83) and Bartlett's test of sphericity being significant ($\chi 2$ = 589.44, df = 136, p < .001) met the factor retention criteria. Four factors were identified explaining 63.71% of the variance. Factor one (Eigenvalue=8.69) contained 15 items and explained 30.55% of the variance. Factor two (Eigenvalue = 1.41) also contained 15 items and explained 23.08%. Factor three (Eigenvalue 1.14) contained 4 items and explained 5.55%, and factor four (Eigenvalue= 1.03) contained 4 items and explained 4.53%.

Of the 17 items included in this domain, item E4 ('***My workplace has access to external services (e.g., counselling services; employee assistance program; Quitline; 10,000 steps) that support worker health, safety and wellbeing.***') and item E11 ('***My workplace believes that worker health, safety and wellbeing is the responsibility of workers themselves***') were removed from the sub-scale due to low factor loadings (.25 and .15), leaving 15 items for Domain E in the final version of the HWC. It should be noted that of the remaining 15 items in this domain, 14 items were cross loaded potentially due to sample limitations.

Domain F – Data-driven measurement and evaluation

The last domain for 'Data-driven measurement and evaluation' contains 4 items. The model fit was high (KMO= .80) and Bartlett's test of sphericity was significant ($\chi 2$ = 254.80, df = 6, p < .001). One factor was identified (Eigenvalue = 3.63) explaining 87.79% of the variance. All four items displayed stable factor loadings (> .4) and were included in the final version of the tool.

Confirmatory Factor Analysis (CFA) Results

A subset of participants from Study 2 (Sample 2b; n = 48) were participants in the confirmatory factor analyses (see Table 1 for subset demographics). We examined whether the factor solution of the HWC can be reliably replicated in a new sample using confirmatory factor analysis.

Due to the limited sample size separate CFAs were conducted for each domain. It was hypothesised that the single-factor models for each domain would fit the data best when compared to alternative models combining multiple domains (e.g., Domain A & B, Domain C&D, and Domain E&F).

Confirmatory factor analysis via AMOS software was used to test individual and grouped domain solutions of the HWC. Model fit was assessed using: the chi-square/df ratio (χ^2/df), the Tucker-Lewis Index (TLI), the Comparative Fit Index (CFI) and the Incremental Fit Index (IFI). A χ^2/df ratio < 3 was taken to indicate a good model fit, while TLI, CFI and IFI values ≥ .90 were considered appropriate fit.

We tested nine models (Table 2). This included testing each domain individually, as well as testing two domains grouped together (i.e., A+B, C+D, E+F). Standardised regression weighting was used to test differences between individual and grouped (i.e., A+B, C+D, E+F) domain items. Grouping the domains did not improve model fit, for most measures decreasing the fit (see Table 2), providing support for distinct domains. Individual item factor loadings are presented in Appendix 7.

Table 2. Fit indices for Confirmatory Factor Analysis Models.

Model	NPAR	χ^2	*df*	P	χ^2/*df*	NFI	RFI	IFI	TLI	CFI
A	14	27.22	14	.02	1.94	.70	.56	.83	.72	.81
B	10	4.65	5	.46	.93	.95	.89	1.00	1.01	1.00
A+B	24	98.33	54	.00	1.82	.57	.48	.75	.67	.73
C	24	95.19	54	.00	1.76	.48	.37	.68	.57	.65
D	16	29.58	20	.08	1.48	.68	.55	.87	.79	.85
C+D	40	303.30	170	.00	1.78	.38	.31	.58	.50	.55
E	30	155.3	90	.00	1.73	.63	.57	.80	.76	.79
F	8	1.28	2	.523	.64	.99	.98	1.01	1.02	1.00
E+F	38	325.62	152	.00	2.14	.53	.48	.682	.63	.67

Reliability Testing

The reliability of the HWC tool and its domains were assessed using Cronbach's coefficient alpha. Coefficient alpha values above 0.70 were recommended for strong internal consistency reliability of each of the HWC domain. These analyses were performed for participants who completed all questions included in the HWC (n=96; i.e., only those to be part of senior management- business owners, organisation leaders/managers, CEOs, HR/OHS managers). Reliability analyses (Table 3) revealed excellent internal consistency for the total HWC score and for each of its domains (Cronbach's α > .80).

Table 3. Internal Reliability Results for the Total HWC and for each domain

Domain	Cronbach's alpha
A: Leadership Commitment and communication	.85
B: Participation and consultation	.84
C: Policies, practices and procedures	.89
D: Physical work environment	.83
E: Programs and workforce capability	.93
F: Data-driven measurement and evaluation	.95
Overall	.97

Convergent Validity

We examined the convergent validity of the HWC. Convergent validity testing was assessed using participants (n = 96; Sample 2) who completed all of the HWC domains in Study 2 (i.e., only employees considered to be part of senior management-business owners, organisation leaders/managers, CEOs, HR/OHS managers etc. to include in the study). Measures are documented in Appendix 8.

To test convergent validity, the relationship was examined between the HWC domains and a conceptually related measure the climate for psychological health (Psychosocial Safety Climate (PSC) as earlier discussed. It was assumed that workplaces with strong leadership commitment, employee participation, policies and procedures, a safe physical environment, strong workforce capability and the use of data to prioritise workplace health and safety would be related to strong perceptions by workers that their psychological health and safety is supported by senior management.

Therefore, it was proposed that each domain of the HWC would be related to the PSC-4 (Analysis 1). Correlations between HWC domains and the PSC-4 were completed. The correlational values for the HWC tool and PSC-4 are reported in Table 4. Low to moderate positive correlations were observed between the HWC domains and the PSC-4.

Table 4. Pearson Correlations Between HWC domains and Psychosocial Safety Climate.

	Domain A	Domain B	Domain C	Domain D	Domain E	Domain F	Psychosocial safety climate
Domain A	1.0						
Domain B	.68**	1.0					
Domain C	.79**	.62**	1.0				
Domain D	.64**	.56**	.70**	1.0			
Domain E	.80**	.58**	.87**	.75**	1.0		
Domain F	.62**	.54**	.69**	.57**	.81**	1.0	
Psychosocial safety climate	.67**	.52**	.65**	.62**	.71**	.47**	1.0

Note. *p < .05. ** p < .01

Criterion Validity

Criterion validity testing was assessed using participants (n = 96; Sample 2) who completed all the HWC domains in Study 2 (i.e., only employees considered to be part of senior management). Twenty measures of criterion validity were used. We proposed that the domains of the HWC would be related to greater workplace health, safety and wellbeing and lower burnout and psychological distress scores (Analysis 2). Correlations between the HWC domains and criterion variables are reported in Table 5.

Relationships Between the HWC Domains and General Health

All domains (with the exception of Domain F) were significantly related to a measure of general health. High scores in Domains C, D and E were significantly related to increased daily fruit consumption. Low scores in Domains A, C and D were significantly associated with increased visits to a general practitioner and medical specialist in the previous 12 months. Low scores in Domains C and D were significantly associated with increased visits to a hospital outpatient clinic and access of online/phone service for self-help in the previous 12 months. No significant relationships were seen between HWC domains and smoking, alcohol use, exercise, sleep and vegetable consumption although this is potentially due to the limited sample size.

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Relationships Between the HWC Domains, Burnout and Psychological Health

All six domains of the HWC were significantly associated with burnout (BAT) scores. In contrast, four Domains A, B, C and D of the HWC were significantly associated with psychological distress (K-10) scores. Low scores in Domains A, B, C, D and E were significantly related to visits to a psychologist and community mental health service in the previous 12 months, but not with visits to a psychiatrist.

Table 5. Pearson Correlations Between HWC Domains and Health Measures.

	Domain A	Domain B	Domain C	Domain D	Domain E	Domain F
General Health	-.26*	-.26*	-.29**	-.29**	-.24*	-.17
Smoking	-.12	-.11	-.05	-.05	-.09	-.14
Vegetables	.15	.08	.12	.12	.17	.23
Fruit	.18	.11	.24*	.24*	.26*	.15
Alcohol	-.17	-.11	-.06	-.06	-.16	.05
Exercise	.08	.08	.03	.03	-.01	-.02
Sleep	.08	.03	.01	.01	.05	.17
General Practitioner	-.21*	-.16	-.30**	-.30**	-.17	-.10
Specialist	-.21*	-.09	-.32**	-.32**	-.15	-.03
Dental	-.03	-.17	-.11	-.11	-.07	-.17
Other Health	-.10	-.17	-.19	-.19	-.16	-.06
Hospital	.01	.11	.02	.02	.14	.10
Outpatient	-.10	-.08	-.23*	-.23*	-.10	-.08
Emergency Department	-.06	-.02	-.10	-.10	-.08	-.06
Psychologist	-.22*	-.23*	-.41**	-.41**	-.36**	-.15
Psychiatrist	-.15	-.07	-.20	-.20	-.11	-.14
Community Mental	-.36**	-.26*	-.37**	-.37**	-.36**	-.19
Online Phone	-.20	-.14	-.34**	-.34**	-.17	-.15
BAT	-.43**	-.34**	-.43**	-.41**	-.38**	-.31**
K-10	-.24*	-.24*	-.27**	-.26*	-.17	-.11

Note. * $p < .05$. ** $p < .01$

4.3. Summary of Results

Exploratory factor analysis (EFA)

EFA results indicate that most items in the scale should be retained, while three items may need to be removed due to low factor loadings (<0.30):

Domain A6: My workplace has a dedicated person responsible for managing worker health, safety and wellbeing.

Domain E4: My workplace has access to external services (e.g., counselling services; employee assistance program; Quitline; 10,000 steps) that support worker health, safety and wellbeing.

Domain E11: My workplace believes that worker health, safety and wellbeing is the responsibility of workers themselves.

Confirmatory Factor Analysis (CFA)

Although the sample was limited, grouping the domains did not appear to improve the model fit. This indicates that the identified factor groupings with six domains were appropriate. Further testing on future samples is recommended.

Convergent Validity

Positive correlations between HWC domains and a similar measure of climate for psychological health (PSC-4) were demonstrated, indicating evidence of convergent validity.

Criterion validity

HWC domains were significantly associated with measures of general health, daily fruit consumption, visits to a general practitioner, medical hospital outpatient clinic and access of online/phone service for self-help in the previous 12 months. HWC domains were also associated with psychological distress (K-10) and burnout (BAT) scores. These results show evidence of criterion validity of HWC domains.

5. CONCLUSION & RECOMMENDATIONS

Based on the preliminary data analysis of responses by SA businesses and organisations, we recommend the following modifications to the tool:

5.1. Removal or modification of the following items

Domain A6: My workplace has a dedicated person responsible for managing worker health, safety and wellbeing.

Domain E4: My workplace has access to external services (e.g., counselling services; employee assistance program; Quitline; 10,000 steps) that support worker health, safety and wellbeing.

Domain E11: My workplace believes that worker health, safety and wellbeing is the responsibility of workers themselves.

5.2. Future further testing of the tool as more data becomes available

The sample sizes for these analyses were restricted, limiting the statistical analyses. Matching between managers and non-managers within organisations was not possible due to sampling limitations. Data analysis was based on cross sectional data, so we were unable to determine causal relationships for criterion validity testing. Further analysis is recommended with larger matched longitudinal samples to confirm these preliminary findings and extend the scope of analyses and results. To verify the effectiveness of the tool as a measure of HWC further research is required where management responses are data linked to the health and safety of employees from the same organisation to ensure that the results are not due to common method effects, and that managers do not respond in an overly positive way that does not reflect the organisational reality.

5.3. Checking Licencing Requirements for all Items in the HWC

It is important to ensure that relevant approvals are obtained for all items used in the tool including licencing arrangements with publishers as required.

5.4. Level of Confidence to Use the HWC tool

The preliminary testing and statistical analysis completed for the HWC domains suggests that the tool shows psychometric qualities that will enable it to demonstrate reliable and valid results for SA businesses and organisations to improve workplace health, safety and wellbeing. Further testing is recommended to review and evaluate the tool as it is implemented to contribute to further psychometric evidence.

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APPENDICS

EVALUATION OF THE DRAFT HEALTHY WORKPLACE SELF-ASSESSMENT TOOL – PHASE 1 SUMMARY REPORT

Prepared for SA Wellbeing

By

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PURPOSE

This summary report outlines the steps taken and methods used by a panel of experts from the Centre for Workplace Excellence (CWeX) of the University of South Australia (UniSA) to evaluate the DRAFT Healthy Workplace SAssessment Tool provided by Wellbeing SA (hereafter DRAFT Tool), and to illustrate three deliverables in Phase 1 as outlined in the Service Agreement between Wellbeing SA & CWeX, which are:

1) An 'evidence review report' in relation to each proposed survey 'domain', including an assessment of the strength of the evidence between the healthy workplace 'domain' and health and wellbeing outcomes for workers;
2) Final version of the Healthy Workplace Self-Assessment Tool that produces a summary report to the user upon completion submitted to and endorsed by Wellbeing SA;
3) Draft coding manual for data collection and analysis purpose.

STEPS FOR 'AN EVIDENCE REVIEW' & EVALUATION – DELIVERABLE # 1

The first step we took to evaluate the DRAFT Tool was to compare it with another eight existing tools relevant to assessing the health, safety, and wellbeing outcomes (see Table 1). The aims of this comparison were two-fold: firstly to identify and justify the lead domains included in the DRAFT Tool; and secondly to choose appropriate scale and measurement items.

When compared, the Draft Tool was found to have very similar lead domains as the other eight assessed tools, differing mainly in the region (e.g. American context; state of Queesland) - or survey-specific language within their respective jurisdiction. Further statement alterations for the DRAFT Tool are necessary to capture more specifically the particularities of the South Australian context.

Three of the eight existing tools (i.e., the CDC Worksite Health Scorecard; the HERO Scorecard; the People At Work Tool) were earlier recommended by the CWeX team (cf. the report by Zadow et al., 2020, p. 13) to measure healthy, safe, and thriving workplaces. The other five tools are:

1) SA Healthy People/Healthy Futures (HWHF) Tools;
2) QLD's Healthy Workplace Audit Tool;
3) WISH Tool by Harvard T Chan School of Public Health;
4) Workplace Support for Health (WSH) Scale;
5) SA Mentally Healthy Workplaces checklist.

(*Note: the first three tools were referenced earlier in the DRAFT tool*)

Since the focus of the DRAFT Tool is SA workplaces at the organisational level, three individually-focused assessment tools (i.e., the People at Work Tool 2007, SA Mentally Healthy Workplaces Checklist, and WSH Scale) lacked relevance and were excluded from further comparison and evaluation.

Out of five tools, only two (i.e., WISH & HERO) have statistically validated measurements of items included in the survey tools (see Sorensen et al., 2018; Imboden et al., 2020). The WISH Tool, based on the Total Worker Health initiative, included "policies, programs, and practices that integrate protection from work-related safety and health hazards with promotion of injury and

illness prevention efforts to advance worker well-being" (Sorensen et al., 2018, p. 430). The validation process, however, only covered content validity, without further reliability testing.

We recommend not to fully adopt the WISH tool for two reasons. One is that there is no presentation of any statistical data to validate the reliability of the tool (Sorensen et al., 2018); the second is that although the Delphi methods and cognitive testing were applied to confirm the validity of items included, those domain and items included (e.g., 'Adherence' domain; and 'Policies, programs & practices' domain) identified by the authors as 'particularly concerned' (Sorensen et al., 2018, p. 434) were not further tested since the publication of the paper, despite the authors' suggestion for further validation with multiple samples (Sorensen et al., 2018, p. 435).

In contrast, Imboden et al. (2020) did, in their study of the HERO Scorecard, include reliability tests via conducting confirmatory factor analysis. The conclusion of this validation was to identify four factors (i.e., organisational leadership & support; program comprehensiveness; program integration; and incentives) with 12 practices, as opposed to the original six domains (i.e. strategic planning; organizational and cultural support; programs; program integration; participation strategies; and measurement and evaluation) (see Table 1). These four factors serve as an important guide for refining the DRAFT Tool.

A recent empirical study (Grossmeier et al. 2020) applied the HERO Scorecard, however found that only organisational and leadership support was the strongest predictor of workplace wellbeing, while incentives were only partially related and the other two factors (i.e., program comprehensiveness and integration) were not significant in predicting workplace wellbeing (Grossmeier et al. 2020, p. 349).

The CDC (Centre for Disease Control, USA) Worksite Health Scorecard, though not statistically validated, was developed from comprehensive research evidence (with 536 references included to justify the development of the Scorecard). The focus of CDC Scorecard was on assessing individual health issues (e.g., tobacco use; high blood pressure etc.). It nonetheless has a section on 'organisatonal supports' that covers 5 domains (i.e., leadership commitment and support; measurement and evaluation; strategic communication; participation and engagement; and programs, policies and environment supports). These are similar to lead domains proposed in the DRAFT Tool, and overlapped with those domains included in WISH Tool and HERO Scorecard.

Extensive safety literature (e.g., Cox & Cheyne, 2000; Zohar & Luria, 2005; Dollard & Bakker, 2010; Lee et al., 2018; Dollard, 2019; Bamel et al., 2020) also defend the survey to include leadership support and management commitment as the key domain for assessing worker health and workplace psychological safety climate (PSC). The DRAFT tool appears capturing some of PSC-4 (Dollard, 2019), especially with reference to assessesing senior management's commitment and communication (PSC items 1 and 3) and safety management systems to prevent stress and promote health, safety and wellbeing across all levels of the organisation (PSC item 4). The PSC-4 is free to use and has been tested in the Australian context, thus can be integrated into refining the DRAFT Tool.

The two workplace assessment tools currently used in Australia and included in our comparison and evaluation are the Queensland Healthy Workplace Audit Tool, and the SA Health tool. The latter is based on the similar instruments used in ACT, Tasmania and Queensland that was originated from the Checklist of Health Promotion Environment at Worksite (CHEW) (Oldenburg et al., 2002). It is noted that both instruments have cherry-picked domains and associated items that somewhat overlap with the WISH Tool, but have also paraphrased statements suitable to each

jurisdictional context. Neither tool has clear definitions (see Table 2), nor been evaluated for their ease of use for respondents, and reliability/validity. Furthermore, the scales applied in these two assessment tools are either insufficient or non-justifiable, problematic especially in terms of establishing statistical validity. For example, no scale was used in the case of SA Health's Healthy Workers/Healthy Futures Audit Tool, with only benchmark date and follow-up date, and three tick boxes with "yes, no and w.t. (working towards)". The scale used in QLD's Audit Tool also included "yes and no", in addition to "partially and N/A". It is not clear how these responses were subsequently coded and analysed.

We also find that the CDC, HERO and WISH Tools, developed in the USA, not only require permission to use, but also contain contextual differences imperfect for an Australian setting (e.g., 'Aherence' Domain). Furthermore, the scales used in these three tools varied from a scale of 1-4 (1=not at all, 4= completely implemented) (see WISH Tool) to the use of multiple choice in the HERO Scorecard, and evidence-based versus impact-rating for the CDC Scorecard. Comparatively, the DRAFT Tool, using the scale of 1-6 (6=strongly agree; 5=agree; 4=unsure; 3=disagree; 2=strongly disagree; 1=not applicable), is better to check behavioural changes, though the behavioural-anchored scale of 1-7 is recommended in the Revised Tool.

The first step of evaluation therefore led to three conclusions:

1) The DRAFT Tool covers sufficient domains, but requires further refinement of the language used in addressing each statement for the items chosen in each domain;
2) A behavioural anchored scale of 1-7 may be required to replace the 1-6 scale currently used in the DRAFT Tool for the ease of reliability testing later;
3) A theoretically sound framework needs to be developed to confirm the utility of the DRAFT Tool (survey instrument).

Thus, the second step involves an extensive further literature review to justify the inclusion of six domains in the survey instrument modified by the CWeX research team.

LITERATURE REVIEW OF RELEVANT EMPIRICAL STUDIES

A rapid review of literature to identify tools measuring healthy, safe, and thriving workplaces for Wellbeing SA was conducted by the CWeX team in 2020 (see Zadow et al., 2020). Several lead indicators for building healthy, safe, and thriving workplaces (see Figure 1) were then identified, and matched with the key domains applied in the DRAFT Tool. The CWeX research assistants (RAs) helped map all statements used in each domain and compared the definitions of each domain, and sample items used by the DRAFT tool with that of other five tools evaluated (i.e., QLD's tool; the HWHF Tool; WISH; CDC; and HERO) (see Table 2 - a bigger table in spreadsheet covering all statements is available upon request).

Consistent with the literature search strategies used in Zadow et al. (2020), CWeX research team used three databases (i.e. Business Source Complete, PsychInfo, and Ovid Medline) to first search for papers published in the past 5 years that empirically tested the link between the domains chosen to workplace health, safety and wellbeing (WHSW) outcomes. When there were insufficient papers (min. 5 papers) to support each domain's link to WHSW outcomes, the search was extended to the past 10-15 years. As a result, 35 empirical papers published in high quality journals were collected. Brief notes on the key findings linking domains to WHSW outcomes were provided in Table 3, as required for Deliverable #1.

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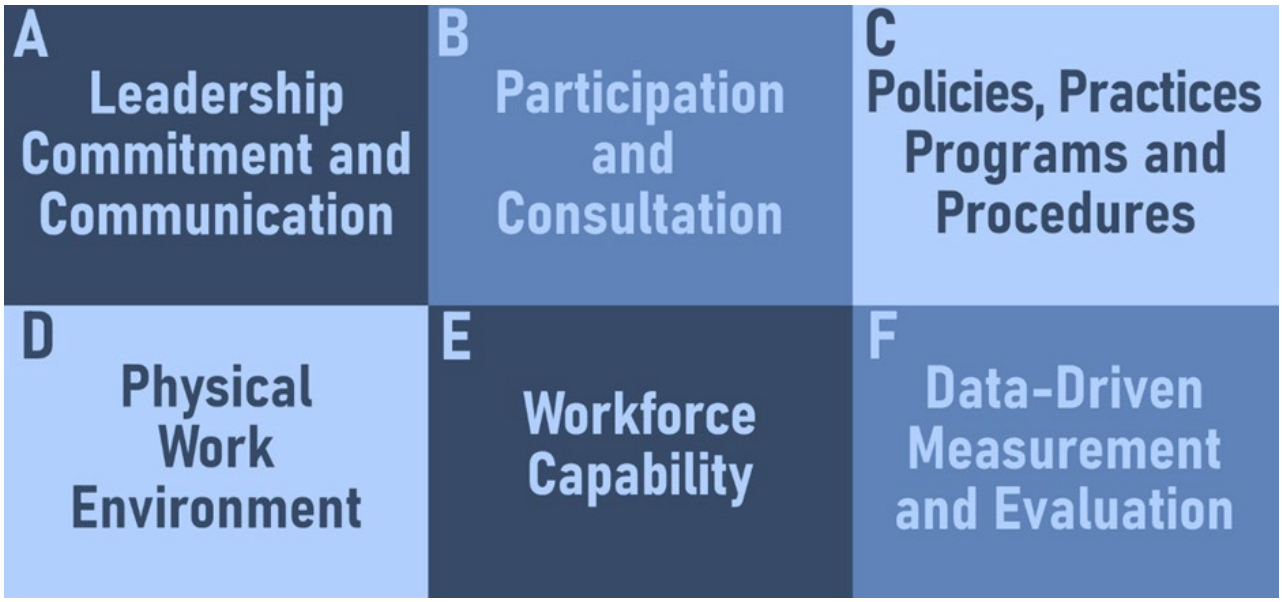
RE-ORDER AND REFINE HEALTHY WORKPLACE ASSESSMENT TOOL -DELIVERABLE # 2

Based on the above 2-step comparison and evaluation, and guided by the academic literature on the links between lead factors and WHSW outcomes, the CWeX panel applied research design concepts to reorder the DRAFT Tool's lead domains. As part of the process, items were added or changed within each domain to justify the design abd revision of the Healthy Workplace Assessment Survey Instrument (hereafter the Revised Tool) as enclosed.

The remaining report is to briefly justify the design of the Revised Tool.

The Revised Tool takes into the consideration of the purpose of 'prevention and intervention' strategy in line with Wellbeing SA's vision, expressed in the SA Workplace Health and Wellbeing Charter. The majority of items earlier included in the DRAFT Tool were included, but changed of the order for consistency, cohesiveness, readability, and flow. A different numbering system is used, easy for coding (Deliverable #3) and further analysis. Additional explanation and examples of the statement are now endnoted – this will be transferred and designed as call-out boxes for end-users to refer to when the online interactive pages are developed.

Six domains are created as boxes for ticking, ready for online survey (see below).



It is understood that organisational behavioural changes require both top-down and bottom-up approaches (Heyden et al., 2017). Domains such as 'Leadership commitment and communication' and 'Worker participation and consultation' strongly supported by research for creating healthy, safe, and thriving workplaces (eg., Kleine et al., 2019; Steffens et al., 2018) should be the first sets of statements inviting SA endusers (e.g., business owners, organisation leaders/managers, including CEOs, HR/OHS managers etc.) to respond.

In both the management and psychology fields, strong evidence (e.g. Potter et al., 2017; Cooper et al., 2019; Vonderlin et al., 2020) were found to support the use of clear organisational policy guidelines, wellbeing-related practices and various training programs in generating better worker health and wellbeing outcomes (see also the lead indicators provided in Zadow et al.,

2020). The outcomes from comparing the domains used in different tools as well as review of several empirical studies suggest many areas of overlapping between two domains of 'Program and support' and 'Systems, policies and practices'. For example, OHS training programs tend to be embedded in the safety management systems and guided by organisational human resource and compliance policies. Thus it is recommended combining these two domains into one as 'Policies, Practices, Programs and Procedures' – the key domain was also used in the WISH tool.

While the tools developed in the US context (i.e. WISH, CDC and HERO) have not integrated the domain of 'Physical Work Environment' into their design, all existing Australian tools (see the QLD Audit Tool; the HWHF Tool) include it in assessing workplace health, safety and wellbeing. The link between this domain and WHSW outcomes was supported by several empirical studies (e.g., Lamb & Kwok, 2016; Kim et al., 2016; Haapakangas et al., 2018; Sadatsafavi et al. 2015 – see brief notes in Table 3).

Workforce capability was included in the QLD Healthy Workplace Audit Tool as well as in the DRAFT Tool, albeit with different statements. There is also an item related to the levels of information made available regarding health, safety, and wellbeing. The findings from the literature review suggest that workforce health, safety, and wellbeing knowledge and skills indeed flow on from the presence of information, education, and training. Improved awareness and capacity by managers and workers to maintain a healthy and safe outlook helps increase the level of participation and engagement in promoting and protecting workplace health, safety, and wellbeing (e.g., Pignata et al., 2014; Valley & Stallones, 2017; Marquandt et a., 2021). This domain has some overlapping features with those in Domain A –'Leadership Commitment and Communication'; and Domain C – "Policies, Practices, Programs and Procedures'. The intention is to test whether leadership commitment to setting health-oriented policies and programs is materialised at the practice level and can be experienced by workers.

The domain regarding data-driven measurement and evaluation has been used by all three US tools, especially data used for "Strategic Planning" in the HERO-Mercer Scorecard. However, this domain was not included in any Australian-developed tools such as the HWHF and QLD Audit Tools. The concern could be that, with a spectrum of workforce sizes and resources, some smaller workplaces may not meaningfully be able to undertake or sustain a high level of data collection, or further still be able to integrate the data into decision-making.

However, earlier conversations with the SA Wellbeing team (esp. Katherine Pontifex – Manager, Evaluation Services) have confirmed that the assessment tool SA Wellbeing developed will be largely used by 1,500 medium- to large-sized organisations instead of all 149,404 businesses registered in SA (ABS, 2021). It is expected that these organisations should/would apply data-driven measurement and evaluation in their decision-making with reference to promoting and protecting workplace health, safety, and wellbeing. Therefore, it is logical to include this domain. Findings from several studies (e.g., Brynjolfsson & McEtheran, 2016; Guo et al., 2016; Sprang et al., 2021; Wang et al., 2021) also confirm the effectiveness of using 'Data-driven Measurement and Evaluation' to reduce workplace hazards and improve physical and psychological safety.

RECOMMENDATION FOR NEXT STEPS

- Submission of the Revised Tool to seek UniSA Business Ethics Committee's approval;
- Seeking feedback from Wellbeing SA's collaborative parnters and subsequent endorsement by Wellbeing SA on the Revised Tool.
- Creating the interactive survey tool.

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South Australian Businesses'

Healthy Workplace Assessment Tool

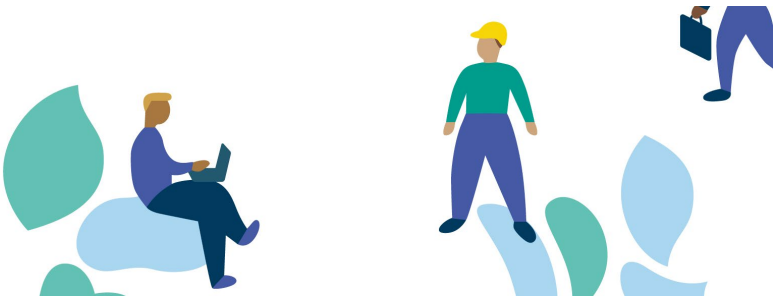
Healthy, safe and thriving businesses and organisations can have a profound positive impact on the people and economy of South Australia. Research evidence time and again show that workplace safety, employee health and wellbeing lead to increased productivity, reduced workforce injuries and illness, enhanced employee engagement & job satisfaction, and a stronger sense of community cohesion.

SA Wellbeing, in conjunction with Centre for Workplace Excellence at University of South Australia and other seven Collaborative Partners, aims to develop and implement a proactive state-wide strategy to assist SA businesses and organisations to build healthy workplaces across the state of South Australia, through both prevention and intervention approaches.

If your workplace is anywhere in SA, you can use our Healthy Workplace Assessment Tool to assess your business/organisation's strengths and weaknesses in creating a healthy and safe workplace. Our tool can also be used to develop specific prevention and intervention strategies for your circumstances, so you can benefit from the creation of safe and thriving workplaces.

The survey tool covers six domains relating to the promotion and protection of workplace health, safety and wellbeing:

You can click on each domain box to start the survey…….



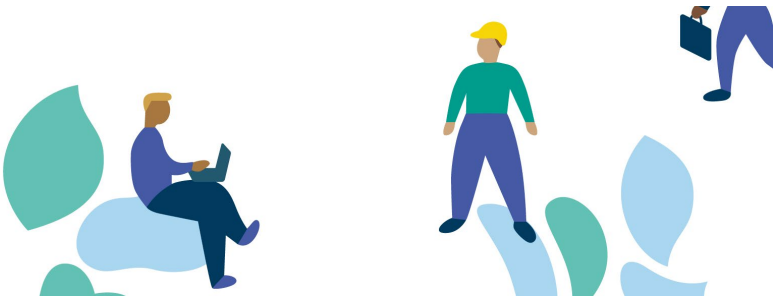
A Leadership Commitment and Communication	B Participation and Consultation	C Policies, Practices Programs and Procedures
D Physical Work Environment	E Workforce Capability	F Data-Driven Measurement and Evaluation

The survey is created for business owners, general managers, organisational health and safety representatives and human resource managers to reflect your understanding of policies, practices and programs currently existing in your business or organisation.

You can either conduct the assessment in one go, which may take about ??? minutes, or you can complete one section at the time and receive feedback on how you are doing in a particular domain. You can then come back to other sections when you have time to continue.

There is no right and wrong answer to this survey, simply answer to the best of your knowledge what reflects the policies and practices of your circumstances. The answers you provide show how much you agree with a particular statement (through a scale of 1 = strongly disagree to 7 = strongly agree).

Your responses will be collated with all other responses to provide a summary assessment of an overall picture of SA workplaces. The identification of specific organizations will be used for confidential data linkage, not be revealed publicly. This project has been approved by the UniSA Business Negligible Risk Ethics Committee (Application ID: xxx-xxxx). Please contact xxxxx if you have any concern with reference to this survey.



Section A: Leadership Commitment and Communication

Leadership commitment & communication is defined as the degree to which a business owner/manager or organisational leader makes **workplace health, safety and wellbeing a clear priority**, which is communicated through its organisational vision, mission statement or strategic planning documents as well as other marketing and promotional materials.

Thinking about your business manager and/or organisational leadership commitment to promoting and protecting workplace health, safety and wellbeing, please rate the following statements on a 1-7 scale (1 = strongly disagree; 7 = strongly agree).

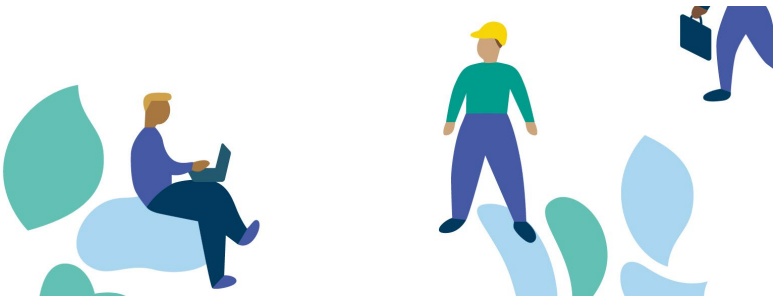
A. Leadership Commitment & Communication	1	2	3	4	5	6	7
A1. My organisation's managers show support for our workplace health, safety and wellbeing through involvement and commitment.	O	O	O	O	O	O	O
A2. My organisation's managers regularly communicate via emails/team meetings to ensure workplace health, safety and wellbeing included on all relevant meeting agendas.	O	O	O	O	O	O	O
A3. My organisation includes the promotion and protection of our workplace health, safety and wellbeing in the vision, mission or strategic planning document.	O	O	O	O	O	O	O
A4. My organisation includes elements of promoting and protecting workplace health, safety and wellbeing in managers' key performance indicators (KPIs), performance reviews, position descriptions and organisational reports.	O	O	O	O	O	O	O
A5. My organisation allocates budget for health promotion programs, workers[i]' time for skills building & training, and changes of physical environment to facilitate workplace health, safety and wellbeing.	O	O	O	O	O	O	O
A6. My organisation has a dedicated person responsible for managing workplace health, safety and wellbeing.	O	O	O	O	O	O	O

Section B: Participation and Consultation

The term *participation and consultation* is defined as the effort made by business owners and organisational managers to **consult and involve workers** at every level of an organisation **to participate in planning and decision-making** on matters relating to promoting and protecting workplace health, safety and wellbeing.

Based on your assessment of workforce participation and engagement in planning and carrying out all activities relevant to the promotion and protection of workplace health, safety and wellbeing, please rate the following statements on a 1-7 scale (1 = strongly disagree; 7 = strongly agree).

B. **Participation and Consultation**	1	2	3	4	5	6	7
B1. My organisation gives workers time to participate in our workplace health, safety and wellbeing training and skill building activities[ii].	O	O	O	O	O	O	O
B2. My organisation consults & involves workers in decision making in relation to our workplace health, safety and wellbeing[iii].	O	O	O	O	O	O	O
B3. My organisation encourages workers to raise concerns[iv] about workplace issues that affect their health, safety and wellbeing without fear of retaliation.	O	O	O	O	O	O	O
B4. My organization's managers and workers collaborate across work units[v] to prevent injury and work-related illness and promote our workplace health, safety and wellbeing.	O	O	O	O	O	O	O
B5. My organisation encourages managers and workers to work together in planning, implementing, and evaluating workplace health, safety and wellbeing policies, practices and programs.	O	O	O	O	O	O	O
B6. My organization makes workers aware of our expectations and organisational policies and procedures on promoting and protecting workplace health, safety and wellbeing[vi].	O	O	O	O	O	O	O



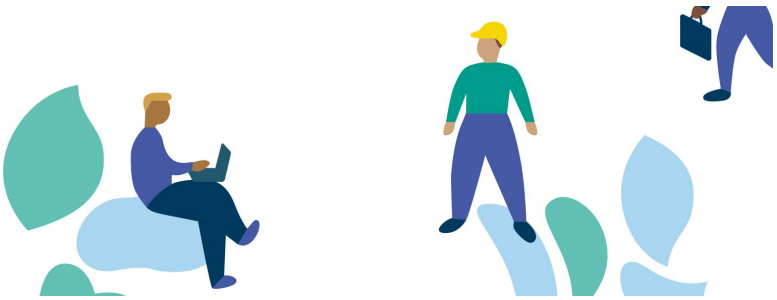
Section C: Policies, Practices, Programs and Procedures

Policies, practices, programs and procedures are referred to those specific **organisation-based rules and regulations** that guide the development and design of various **human resource management policies and practices**, which include skill development and training programs, and clear procedures to promote and protect workplace health, safety and wellbeing.

Based on your current knowledge of your organisational policies, practices, programs and procedures, please rate the following statements on a 1-7 scale (1 = strongly disagree; 7 = strongly agree).

C. **Policies, practices, programs and procedures**	1	2	3	4	5	6	7
C1. My organisation has clear workplace health, safety and wellbeing policies.	O	O	O	O	O	O	O
C2. My organisation has directive signs[vii] visible to all workers to promote healthy living with positive behaviours such as smoke-free workplace, healthy food options, or exercise facilities.	O	O	O	O	O	O	O
C3. My organisation's managers and supervisors put policies into practice, ensuring workers take their entitled leave and sufficient breaks[viii].	O	O	O	O	O	O	O
C4. My organisation recognises and rewards workers' achievements in promoting and protecting health, safety and wellbeing[ix].	O	O	O	O	O	O	O
C5. My organisation provides training programs to workers across all levels of the organisation to prevent harm from abuse, bullying, harassment, discrimination and violence.	O	O	O	O	O	O	O
C6. My organisation keeps workers aware of health, safety and wellbeing policies & procedures to minimise exposure to workplace hazards/risks[x].	O	O	O	O	O	O	O
C7. My organisation's managers are responsible for identifying and managing workplace health, safety and wellbeing risks[xi].	O	O	O	O	O	O	O
C8. My organisation promotes workplace diversity and inclusion and provides a safe workplace free from bullying and harassment.	O	O	O	O	O	O	O

C8. My organisation has policies and practices in place to support employees' work-life balance[xii].	O	O	O	O	O	O	O
C9. My organisation has policies and practices in place to deal with psychosocial risk factors that contribute to work-related stress[xiii].	O	O	O	O	O	O	O
C10. My organisation has policies and practices in place to support and promote physical activity and reduce sitting time[xiv].	O	O	O	O	O	O	O
C11. My organisation has policies and practices in place to address the influence of alcohol and other drugs used at workplace[xv].	O	O	O	O	O	O	O
C12. My organisation has policies and practices in place to provide healthier food and drink options in the workplace[xvi].	O	O	O	O	O	O	O
C13. My organisation provides workers with opportunities to engage in programs or services that encourage healthy eating[xvii].	O	O	O	O	O	O	O
C14. My organisation provides healthy lifestyle education and training programs[xviii]	O	O	O	O	O	O	O
C15. My organisation provides workers with opportunities to engage in external services to help improve their physical, mental, emotional health and wellbeing.	O	O	O	O	O	O	O

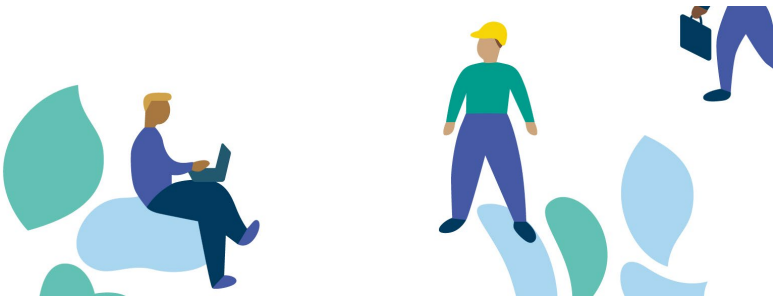


Section D: Physical Work Environment

Physical work environment is defined as plant, equipment, materials and substances used for carrying out work, as well as vehicles, buildings and structures required for workers to do their jobs. A well-designed and resourced physical work environment is identified as one of leading factors that influence healthy, safe and thriving workplaces.

Thinking about your business/organisational work environment, please rate the following statements on a 1-7 scale (1 = strongly disagree; 7 = strongly agree).

D. **Physical Work Environment**	1	2	3	4	5	6	7
D1. My organisation's workers have the resources, equipment, supervision and training to do their jobs in a safe and well-designed work environment.	O	O	O	O	O	O	O
D2. My workplace environment is designed to protect workers and minimise exposure to workplace hazards/risks[xix].	O	O	O	O	O	O	O
D3. My workplace physical environment is designed to promote employee health and wellbeing[xx].	O	O	O	O	O	O	O
D4. My organisation's workers have access to clean kitchen facilities and/or equipment to store, prepare and consume food[xxi].	O	O	O	O	O	O	O
D5. My organisation's workers have access to healthy food and drink options[xxii].	O	O	O	O	O	O	O
D6. My organisation provides workers with change room, shower facilities, and bike storage etc. to support active travel from home to workplace.	O	O	O	O	O	O	O
D7. My organisation promotes physical movement throughout the day[xxiii].	O	O	O	O	O	O	O
D8. My organisation's workers have access to areas that allow privacy and being quiet when required[xxiv].	O	O	O	O	O	O	O
D9. My organisation's workers can take breaks away from the direct work area[xxv].	O	O	O	O	O	O	O

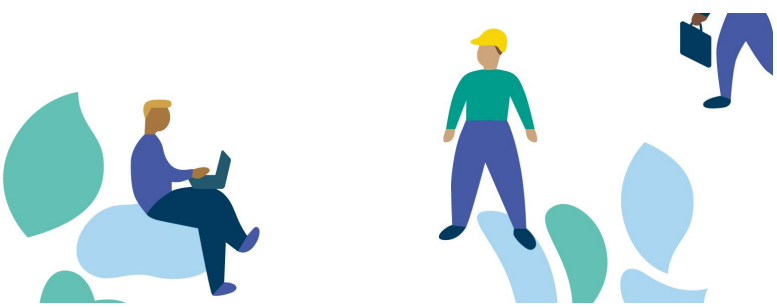


Section E: Workforce Capability

Workforce capability is defined as knowledge and skills, especially those relating to the promotion and protection of workplace health, safety and wellbeing, possessed by managers and workers of the organisation and developed through information, education and training on healthy living and safe work environments.

Has your organisation encouraged and built workforce capability in promoting and protecting workplace health, safety and wellbeing? Please rate the following statements on a 1-7 scale (1 = strongly disagree; 7 = strongly agree).

E. **Workforce Capability**	1	2	3	4	5	6	7
E1. My organisation provides workers with information (e.g., referrals to health professionals; newsletters) to promote workplace health, safety and wellbeing.	O	O	O	O	O	O	O
E2. My organisation provides ongoing education and training programs to workers to manage their health, safety and wellbeing[xxvi].	O	O	O	O	O	O	O
E3. My organisation's workers have access to community-based services[xxvii] that support their health, safety and wellbeing.	O	O	O	O	O	O	O
E4. My organisation makes managers and workers aware of workplace health and wellbeing risks and their impact on work[xxviii].	O	O	O	O	O	O	O
E5. My organisation encourages workers at all levels to be healthy at work[xxix].	O	O	O	O	O	O	O
E6. My organisation rewards and recognises managers and workers who are competent and achieve our workplace health, safety and wellbeing objectives.	O	O	O	O	O	O	O

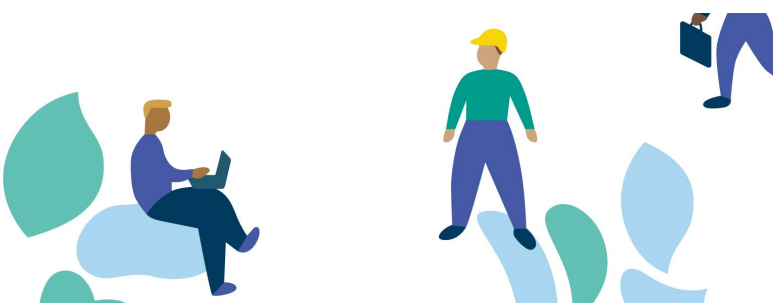


Section F: Data-driven Measurement and Evaluation

Data-driven measurement and evaluation is defined as an organisation that **uses a range of data[xxx] to regularly measure and evaluate its continuous improvement** of workplace health, safety and well-being policies, practices and programs, and applies the evaluation findings to set priorities and make decisions.

Based on your experience in this area, please rate the following statements on a 1-7 scale (1 = strongly disagree; 7 = strongly agree).

F. Data-driven Measurement and Evaluation	1	2	3	4	5	6	7
F1. My organisation collects data from a range of sources about workplace health, safety and wellbeing to make decisions.	O	O	O	O	O	O	O
F2. My organisation uses data from a range of sources about workplace health, safety and wellbeing to determine our priorities.	O	O	O	O	O	O	O
F3. My organisation applies data from multiple sources to measure the effects of policies and programs[xxxi] for promoting workplace health, safety, and wellbeing.	O	O	O	O	O	O	O
F4. My organisation regularly communicates data from a range of sources about workplace health, safety and wellbeing to senior management.	O	O	O	O	O	O	O
F5. My organisation uses data from a range of sources about workplace health, safety and wellbeing to review our policies, programs and practices.	O	O	O	O	O	O	O
F6. My organisation uses the outcomes from evaluating workplace health, safety and wellbeing policies, practices and programs to improve future efforts.	O	O	O	O	O	O	O
F7. My organisation integrates and coordinate data on workplace health, safety and wellbeing outcomes across all relevant business units.	O	O	O	O	O	O	O



Section G: Your Organisation Details

G1. What industry is your workplace in? (Please tick the most relevant industry) – 19 ASICs

G2. What size is your workplace (in number of all types of workers, including casuals/contractors)?
Micro (1-4); Small (5-19); Medium (20-199); Large (200+)

G3. Please indicate the percent of male, female and other gender types of your workforce?
Male - %; Female - %; Other - %

G4. What is the postcode of your business office in South Australia?

G5. How long has your business/organisation been established?
1-100 years

G6. To your knowledge, what percentage of your workforce is provided with flexible work arrangements? (e.g. work from home; work remotely)

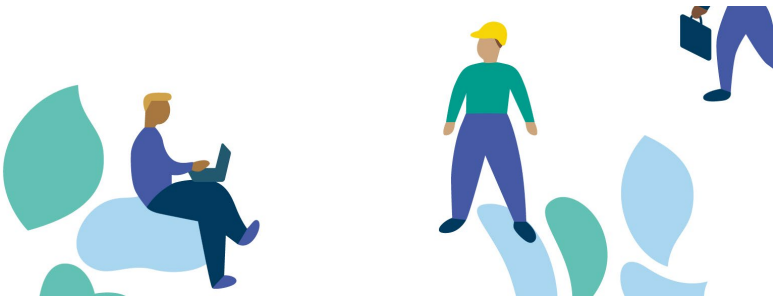
G7. For the past 12 months, what is the estimated percentage of employees who left your business/organisation?

G8. For the past 12 months, what is your workplace injury rate?

G9. For the past 12 months, how successful has your business/organisation been relative to others in your industry? Scale 1-7

G10. What is your role in your organisation?

- CEO
- GM
- Human Resource (HR) Manager
- HR Generalist
- HR Business Partner
- Operational/Line/Departmental Manager
- OHS (Occupational Health & Safety) Manager
- OHS Officer
- Other – please specify:



Endnotes:

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[i] The term 'workers' in this survey is defined as 'all permanent and casual employees and contractors on site'.

[ii] E.g., sufficient time or leave is allowed for workers to participate in health, safety and wellbeing skill development and training programs, and to take breaks for sufficient rest and renewal.

[iii] E.g., workers are invited to join management meetings, as well as health, safety and wellbeing committees, and contribute to strategic planning on promoting and protecting workplace health, safety and wellbeing.

[iv] E.g., one-on-one meetings with workers and line managers, consultative committees and forums, workplace incident investigations are completed with a 'no-blame' philosophy.

[v] E.g., managers initiate discussion with employees to identify hazards; participate in joint health, safety and wellbeing committees; reward and recognise of champions in promoting and protecting workplace health, safety and wellbeing; ensure agenda items at management meetings.

[vi] E.g., workplace health, safety and wellbeing expectations are explicitly emphasised to visitors (e.g. contract workers) and promoted at employee induction; easy access to policies and procedures; agenda included on staff meetings.

[vii] E.g., visibility of 'smoke free' sign, exercise facilities such as a swimming pool, and/or a gym, and accessibility of healthy food options displayed in the common areas (e.g., kitchen and lounge) of an organisation.

[viii] E.g., leave includes those stipulated in Australian legislation such as recreation leave, parental leave, sick leave, compassionate leave; breaks include morning/afternoon tea breaks as well as lunch breaks.

[ix] E.g., achievements in health, safety and wellbeing are acknowledged by senior executives, or via staff awards ceremonies and recognition certificates.

[x] E.g., necessary programs and procedures about, but not limited to, sun or UV exposure, excessive heat/cold/dust, chemicals, noise, slips and trips, ergonomic, pathogenic and psychosocial risks are included at induction; access to related policies and procedures is ensured, including on the agenda at staff meetings.

[xi] E.g., using a holistic risk management approach, applying hierarchy of controls and recognising both mental and physical risks.

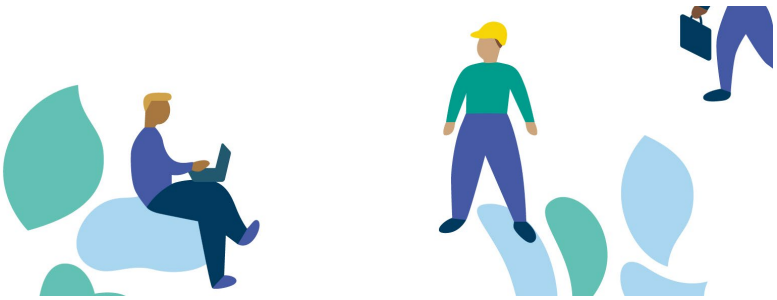
[xii] E.g., encouraging employees to apply for *parental and carers' leave or flexible work arrangements; encouragement from management for employees to take annual leave and entitled breaks; utilising work time for stress management activities*

[xiii] E.g., psychosocial risk factors include *heavy workloads, fatigue, poor workplace relationships, incivility, poor organisation of work and job design.*

[xiv] E.g., *flexible working arrangements, provision of standing workstations, stretch breaks, walking meetings, walking groups; ergonomic workplace assessments; team challenges/sports, subsidised fitness facility memberships.*

[xv] *E.g., responsible service of alcohol policies for work functions, fit for work guidelines.*

[xvi] *E.g., catering, vending machines, onsite catering, functions and fundraisers.*



[xvii] *(e.g. lunchbox challenges, cooking demonstrations, online or phone health coaching)*

[xviii] *E.g., education and training about cessation of smoking and risky alcohol consumption, nutrition, physical activity, sleep, mental health), general stress management courses, healthy lifestyle 'challenges'; as well as workplace safety – e.g. toolbox talks*

[xix] *E.g., sun or UV exposure, excessive heat, excessive cold, dust, chemicals, noise, slips and trips, ergonomic hazards, and pathogens.*

[xx] *E.g., smoke free environment (*including work vehicles*), kitchen facilities, access to healthy food options, promotion of physical movement, adequate natural light, ventilation and rooms to take breaks*

[xxi] E.g., kettle, microwave, fridge/esky, and clean drinking water.

[xxii] *E.g., canteen, vending machines, food vans, local shops, events and meeting include healthy options.*

[xxiii] E.g. workers have access to adjustable sit-stand workstations, free access to stairwells, onsite gym facilities)

[xxiv] E.g., Meeting rooms, breakout rooms, separate space for 'down time'

[xxv] E.g., separate space for 'down time' or group interaction and recreation activities such as playing games.

[xxvi] *E.g. education/information seminars, toolbox talks, referrals to health professionals, initiatives to promote healthy lifestyle behaviours, employee assistance programs.*

[xxvii] *E.g., Get healthy at work, Quitline, 10,000 steps, BeUpstanding*

[xxviii] *E.g. education, toolbox talks, referrals to health professionals, newsletters, return-to-work procedures, shift work, poor nutrition, low physical activity, smoking.*

[xxix] *E.g. physical activity opportunities, low/no alcohol consumption, sun protection, healthy eating opportunities, quitting smoking.*

[xxx] E.g., surveys, audits, injury and incident data, absenteeism and turnover data, management and worker consultation and feedback, strategic documents, committee minutes, case studies.

[xxxi] E.g., injury data, employee surveys, training data and absence data.

Figure 1

Government of South Australia | Healthy Workplaces SA

Indicators of healthy, safe and thriving workplaces

Healthy vision and culture

These are **workplace organisational factors** influencing healthy, safe and thriving workplaces.

Lead indicators include:

- Policies, practices and procedures to support physical health (e.g. health climate) and psychological health (e.g. flexible work arrangements policy).
- Leadership commitment and engagement.
- Involvement and engagement from workers.
- Organisational communication/ethics and values reflect health and wellbeing.
- Allocation of sufficient resources committed to workplace health and wellbeing (financial and/or other, e.g. staff time).
- Psychosocial Safety Climate.
- Organisation of work/work design including:
  - Job demands (e.g. work pressure, emotional demands, bullying rates, work-family conflict)
  - Job resources (e.g. social support, job control, rewards, procedural justice).
- Workplace diversity.

Policy and community context

These are **external indicators** influencing healthy, safe and thriving workplaces.

Lead indicators include:

- Statewide resources, support tools and business advisory services.
- Capacity building activities, e.g. training workshops.
- Strategic partnerships and policy, legislative and regulatory factors.

Healthy places

These are **physical work environment factors** that influence healthy, safe and thriving workplaces.

Lead indicators include:

- Physical work environment (e.g. facilities and equipment, such as bike racks and healthy food providers, local services, ergonomics, safety).
- Work conditions (e.g. controlled and safe exposure to physical hazards such as noise, hazardous chemicals, availability of adequate space, light, clear air etc).
- Equipment: availability, suitability and maintenance.

Healthy people

These are **individual factors** influencing healthy, safe and thriving workplaces.

Lead indicators include:

- Worker health knowledge/skills.
- Worker perceptions of policies, practices, and procedures to support physical and psychological health and wellbeing (e.g. psychosocial safety climate).

Lag indicators

These indicators result from the lead indicators that influence healthy, safe and thriving workplaces.

Lag indicators include:

- Organisational performance metrics (e.g. sickness absence, injury rates, presenteeism, productivity) and worker's compensation data.
- Worker behaviour (e.g. rates of smoking, healthy eating, alcohol use, physical activity, healthy weight)
- Worker sleep and fatigue, mental stress (e.g. emotional exhaustion, psychological distress).
- Corporate social responsibility actions (eg. organisations supporting community health and wellbeing; mentoring small business, etc)

Evidence based model developed in collaboration with the Centre for Workplace Excellence, UniSA.

Table 1 – Comparison of key domains, Number of Items & Validation Of Eight Well-Known Healthy Workplace Assessment Tools

Domains and Number of Items	Validation Outcomes	Notes
WELLBEING SA – DRAFT HEALTHY WORKPLACE SELF-ASSESSMENT TOOL		
7 Domains (47 Items) 1) Leadership commitment (6 items) 2) Participation & consultation; (3 items) 3) Data-driven; (3 items) 4) Physical work environment; (8 items) 5) Programs and supports; (9 items) 6) Systems, policies and practices (14 items) 7) Workplace capability (4 items)	Not Validated yet Scale under review (Likert 1-5) Desired Measured Outcomes 1) Better mental health 2) Work-life balance 3) Productivity 4) Low absenteeism 5) Low turnover 6) High engagement/low presentism 7) Injury Rate	Some definitions of the domains were copied from WISH tool (sourced from the website, as well as in a paper by Sorensen et al., 2018).
HEALTHY PEOPLE/HEALTHY FUTURES (SA HEALTH)		
6 Domains (35 Items) (Organisational Level) 1) Communication; (2 items) 2) Participation and programs (3 items) 3) Workers' access to (Positive working conditions??); (7 items) 4) Facilities and infrastructure = Physical work environment?? (10 items) 5) (Leadership) Commitment and Resourcing (7 items) 6) Policy/procedure/documentation = policy/practices? (6 items)	No. No scale used, but with Benchmark date and follow-up date	Taken from QLD Healthy Places Audit Tool. U of San Diego & U of Sydney's CHEW (Oldenburg 2002); ACT & Tassie's Healthy workplaces Resources Kit.
8 Domains (28 Items) (Employee Self-Assessment) 1) Health beliefs (2 items) 2) Smoking (2 items) 3) Eating and drinking (6 items) 4) Physical activity/active level (3 items) 5) Height and weight (6 items) 6) Alcohol (3 items) 7) Workplace health programs (4 items – this could be relevant to ees' perception of programs at work) 8) Other (2 items)	Individual assessment used a range of scales – required of different coding manual accordingly	Employees' self-assessment seems similar to CDC Worksite Health Scorecard
QLD'S HEALTHY WORKPLACE AUDIT TOOL		
6 Domains (42 Items) 1) Work health and wellbeing systems (6 items); 2) Leadership commitment (5 items); 3) Policies and procedures (e.g. related to physical activity; alcohol; smoking etc. similar to govern ees' own health assessment (2 sections covering 16 areas similar to CDC tools' a total of 5 items); 4) Communication and consultation (8 items) 5) Physical work environment (13 items); 6) Workforce capability (5 items)	No, but refer to CHEW Scale as 'yes'; 'partially', and 'No', and 'NA'	It is related to QLD Mentally Healthy Workplaces Checklist & Toolkit (29 pages with extensive resources provided for small business also)

WISH TOOL – HARVARD (USA)		
6 Domains (40 Items) 1) Leadership commitment; (6 items) 2) Participation; (5 items) 3) Policies, programs and practices focused on positive working conditions; (14 items) 4) Comprehensive and collaborative strategies; (6 items) 5) Adherence; (5 items) 6) Data-driven change (4 items)	Yes (Sorensen et al. 2018) Scale used 1-4: not all; some of the time; most of the time and all of the time	We need permission to use the tool; Statements for items may need to change to suit the Australian context.
CDC WORKSITE HEALTH SCORECARD (US DEPT OF HEALTH AND HUMAN SERVICES) (2019)		
5 Domains (25 Items) (Organisational Level) 1) Leadership commitment and support; (6 items) 2) Measurement and evaluation – data-driven? (3 items) 3) Strategic communication; (2 items) 4) Participation and engagement; (6 items) 5) Programs, polices and environmental supports (8 items) 17 Domains (129 Items) (Employee Self-Assessment) Tobacco use (8 items); High blood pressure (6 items); High cholesterol (5 items); Physical activity (10 items); Weight management (4 items); Nutrition (14 items); Heart attack and stroke (12 items); Prediabetes and diabetes (6 items); Depression (7 items); Stress management (7 items); Alcohol and other substance use (6 items); Sleep and fatigue (6 items); Musculoskeletal disorders (7 items); Occupational health and safety (9 items); Vaccine-prevention diseases (7 items); Maternal health and lactation support (7 items); Cancer (8 items)	No yet but with evidence and citations of 536 references) to support the scorecard With evidence rating categories, as 1 = weak; 2= suggestive; 3= sufficient; 4 = strong	Need permission to use.
HERO-MERCER'S HEALTH AND WELLBEING BEST PRACTICES SCORECARD		
6 Domains (60 Items) with mostly multiple choices, instead of scale): 1) Strategic planning (8 items) 2) Organizational and cultural support (15 items) 3) Programs (8 items) 4) Program integration (5 items) 5) Participation strategies (11 items) 6) Measurement and evaluation (13 items) With subsequent identification of Top 12 best practices to drive org wellbeing, these are: ***Factor 1: Organizational and leadership support*** 1. Demonstrate organizational commitment to health and well-being 2. Engage employees at all levels of the organization 3. Develop a strategic plan and reporting for multiple stakeholders 4. Target communications to diverse groups ***Factor 2: Incentives*** 5. Offer financial incentives for specific activities 6. Allow benefit-eligible spouses/partners to earn incentives ***Factor 3: Comprehensive programs*** 7. Offer individualized, population-based programs in multiple channels 8. Offer lifestyle and disease management programs 9. Ensure programs include robust features (e.g., social connection 10. Provide tools to track health	Yes, Imboden et al. (2020) Outcomes on: 7) Participation/engagement 8) Impact on health risk and medical cost 9) Employee perception of organizational support	Need registration to access.

Factor 4: Program integration 11. Integrate programs, communications, data, and strategy 12. Integrate well-being programs with other employee benefits		
WSH (WORKPLACE SUPPORT FOR HEALTH) SCALE		
The WSH scale contains five statements answered on a 5-point Likert-type scale (1- strongly disagree to 5: strongly agree): (1) Overall, my workplace supports me living a healthier life; - Support (2) My supervisor supports me in living a healthier life; - Leadership commitment; (3) Most employees here have healthy habits; - Workforce awareness/education (4) At my workplace we have one or more leaders (e.g. CEOs or managers) who are wellness champions; - Leadership; At my workplace we have one or more employees who are wellness champions. – leadership commitment again?	Yes (Kava et al., 2021) Employees' perceived support for a healthy lifesyle Measures Job satisfaction	Freely available but items are too narrow
MENTALLY HEALTHY WORKPLACES CHECKLIST (SA)		
5 domains (47 items) 1) Critical success factors (7 items – related to leadership; communication, resourcing; strategic planning; data driven); 2) Raise awareness through training and skill development) (8 items); 3) Build the positives (13 items – relating to a range of factors such as org culture and climate; leadership again, management interaction and communication, role clarity; job demands/resources; policy on flexible work arrangement and programs, psychological safety climate etc.) 4) Prevent harm and manage risk (10 items – relating to system; psychosocial issues; ; cultural and HR systems etc.) 5) Intervention early and support recovery (9 items)	No, Use of scale of (0, 1, 2)	Many statements are not justified, and tend to confuse, with sub-questions hidden within the statement (e.g. item 42 about EAP)
PEOPLE AT WORK TOOL (2007)		
The survey tool has 7 parts: • A1-11 – for collecting info' from individual who fills up the form (e.g., age; gender; FIFO; work location etc.) • B1-10 – about the workplace on job control/demand/resources; supervisor/co-worker support; and other aspects of job such as relationship and conflict; • C1-6 – about conflict, esp. on workplace bully (4 questions); • D1-3 – further on workplace violence and aggression; • E – one item only on Sprain and strain on neck; shoulders, wrist hands, upper & lower back; • F – 2 items but cover 16 questions on individual psychological health and wellbeing • G – your intentions with 4 questions	a free and validated tool used from 2007 till 2015. The final report (2016) Data collected from 79 Australian organisations, with 11,890 survey responses No assessment of outcomes. May relate to burnout, bully etc. Psychological safety.	Need org registration to access the survey tool To register, it is required that 'you will need to be an Australia workplace with 20+ workers

Table 2: Comparison of Healthy Workplace Assessment Tools: Definition & Sample items

Domain	DRAFT (Revised)	WISH	HWHF	QLD HWA	CDC	HERO
LEADERSHIP COMMITMENT & COMMUNICATION	Leadership commitment & communication is defined as the degree to which a business owner/manager or organisational leader makes workplace health, safety and wellbeing a clear priority, which is communicated through its organisational vision, mission statement or strategic planning documents as well as other marketing and promotional materials.	Leadership Commitment We define the term "leadership commitment" to mean the following: An organization's leadership makes worker safety, health, and well-being a clear priority for the entire organization. They drive accountability and provide the necessary resources and environment to create positive working conditions.	Commitment, resourcing and culture No domain definition provided.	Leadership commitment An organisation's leadership makes work health, safety and wellbeing a clear priority for the entire organisation. They drive accountability and provide the necessary resources and environment to create positive working conditions.	Leadership Commitment and Support No domain definition provided	Organizational and Cultural Support In this section, we ask you about your company's efforts to create or maintain a healthy culture across your organization, including the level of leadership support. By "culture," we mean key values, assumptions, understandings, beliefs, and norms of behavior that are commonly shared by members of the organization.
SAMPLE ITEMS	My organisation's managers show support for our workplace health, safety and wellbeing through involvement and commitment.	The company's leadership, such as senior leaders and middle managers, communicate their commitment to a work environment that supports employee safety, health, and well-being.	Commitment to health and wellbeing is evidenced in business plans, values or strategic documents.	Work health and wellbeing is included as part of the organisation's mission, vision and business objectives.	During the past 12 months, did your worksite: Demonstrate organizational commitment and support of worksite health promotion at all levels of management?	Are mid-level managers and supervisors supported in their efforts to improve the health and well-being of employees within their work groups or teams?
PARTICIPATION AND CONSULTATION	The term 'participation and consultation' is defined as the effort made by business owners and organisational managers to consult and involve workers at every level of an organisation to participate in planning and decision-making on matters relating to promoting and protecting workplace health, safety and wellbeing.	Participation We define the term "participation" to mean the following: stakeholders at every level of an organization, including organized labor or other worker organizations if present, help plan and carry out efforts to protect and promote worker safety and health.	No relevant domain	Communication and consultation Communication and consultation is a critical part of management systems.	Participation and Engagement No domain definition provided	Participation Strategies In this section, we ask about a range of strategies, from communications to rewards, that are aimed to encourage employees to participate in health and well-being programs and become more engaged in caring for their health and well-being.

SAMPLE ITEMS	My organisation gives workers time to participate in our workplace health, safety and wellbeing training and skill building activities.	Managers and employees work together in planning, implementing, and evaluating comprehensive safety and health programs, policies, and practices for employees.		Data collected from a range of sources to determine work health and wellbeing priorities.	During the past 12 months, did your worksite: Have an employee champion or network of champions who actively publicize health promotion programs?	Does your engagement strategy intentionally include a focus on increasing employees' "intrinsic motivation" to improve or maintain their health?
POLICIES, PRACTICES, PROGRAMS AND PROCEDURES	Policies, practices, programs and procedures are referred to those specific organisation-based rules and regulations that guide the development and design of various human resource management policies and practices, which include skill development and training programs, and clear procedures to promote and protect workplace health, safety and wellbeing.	Policies, Programs and Practices The following questions refer to policies, programs, and practices focused on positive working conditions. We define "positive working conditions" to mean: the organization enhances worker safety, health, and well-being with policies and practices that improve working conditions.	Policy/ procedure/ documentation No domain definition provided	Policies and procedures Policies, programs, and practices that improve working conditions enhance work health, safety, and wellbeing.	Programs, Policies and Environmental Supports No domain definition provided	Program In this section, we ask about specific health and well-being programs that your organization makes available to employees. These may be offered through a health plan or specialty vendor, or by internal resources.
SAMPLE ITEMS	My organisation has clear workplace health, safety and wellbeing policies.	The workplace is routinely evaluated by staff trained to identify potential health and safety hazards.	Policy or procedures support mental wellbeing.	There are policies and procedures that support work-life balance.	During the past 12 months, did your worksite: Provide an employee assistance program (EAP)?	Does your organization provide health behavior change programs that are offered to all individuals eligible for EHM, regardless of their health status?
PHYSICAL WORK ENVIRONMENT	Physical work environment is defined as plant, equipment, materials and substances used for carrying out work, as well as vehicles, buildings and structures required for workers to do their jobs. A well-designed and resourced physical work environment is identified as one of leading factors that influence healthy, safe and thriving workplaces.	No relevant domain	Facilities and Infrastructure No domain definition provided	Physical Work Environment A well-designed physical work environment enables work health and wellbeing. Physical work environment includes plant, equipment, materials and substances used as well as vehicles, buildings and structures.	No relevant domain	No relevant domain

SAMPLE ITEMS	My organisation's workers have the resources, equipment, supervision and training to do their jobs in a safe and well-designed work environment.		Healthy food options are widely available for sale or catering purposes.	Workers have the resources, equipment, supervision and training to do their jobs safely and well.		
WORKFORCE CAPABILITY	Workforce capability is defined as knowledge and skills, especially those relating to the promotion and protection of workplace health, safety and wellbeing, possessed by workers of the organisation and developed through information, education and training on healthy living and safe work environments.	No relevant domain	Participation and Programs No domain definition provided	Worker Focused Education and training improve worker awareness and promote participation and social connectedness within the workplace	Strategic Communications No domain definition provided	No relevant domain
SAMPLE ITEMS	My organisation provides ongoing education and training programs to workers to manage their health, safety and wellbeing.		Workplace determines needs and interests of workers.	Workers are provided access to community-based services that support work health and wellbeing.	During the past 12 months, did your worksite: Promote and market health promotion programs to employees?	
DATA-DRIVEN MEASUREMENT AND EVALUATION	Data-driven measurement and evaluation is defined as an organisation that uses a range of data to regularly measure and evaluate its continuous improvement of workplace health, safety and well-being policies, practices and programs, and applies the evaluation findings to set priorities and make decisions.	Data-Driven Change The following questions refer to data-driven change. We define this term to mean the following: regular evaluation guides an organization's priority setting, decision making, and continuous improvement of worker safety, health, and well-being initiatives.	No relevant domain	No relevant domain	Measurement and Evaluation No domain definition provided	Measurement and Evaluation Measuring program performance is critical for continuous quality improvement and for demonstrating value. In this section, we ask about your organization's methods for evaluating the health and well-being initiative.
SAMPLE ITEMS	My organisation uses data from a range of sources about workplace health, safety and wellbeing to determine our business priorities.	The effects of policies and programs to promote worker safety and health are measured using data from multiple sources, such as injury			During the past 12 months, did your worksite: Conduct an employee needs and interest survey for	How often are program performance data communicated to senior leadership?

		data, employee feedback, and absence records.			planning health promotion activities?	
OTHER DOMAINS		Comprehensive and Collaborative Strategies The following questions refer to comprehensive and collaborative strategies. We define this term to mean the following: employees from across the organization work together to develop comprehensive health and safety initiatives.	Communication No domain definition provided	Work Organisation Embedding work health and wellbeing into organisational systems can benefit the health of workers, resulting in reduced absenteeism, workplace injuries and increased productivity.		Strategic Planning No domain definition provided
SAMPLE ITEMS		This company has a comprehensive approach to promote and protect worker safety and health	Messages promoting good health are displayed.	Work health and wellbeing is included and embedded in organisational systems		Which of the following data sources do you actively use in strategic planning for your company's EHM program?
OTHER DOMAINS		Adherence The following questions refer to adherence. We define the term "adherence" to mean the following: the organization adheres to federal and state regulations, as well as ethical norms, that advance worker safety, health, and well-being.				
SAMPLE ITEMS		This organization complies with standards for legal conduct.				

Table 3: Key Literature Supporting the Domains Chosen and Their Links to Workplace Health, Safety and Wellbeing (WHSW) Outcomes

Domain	WHSW Outcomes	Research Evidence
A. Leadership Commitment & Communication	No leadership commitment/communication (i.e., passive leadership) was found to directly generate poor work environment and to indirectly induce a higher level of psychological fatigue and poorer mental health.	Barling & Frone (2017)
	Supportive leadership behaviour was found to be positively associated with overall thriving at work including health, attitude, and performance.	Kleine et al. (2019)
	Transformational leadership and leader-follower interaction were found to be positively associated with occupational mental health.	Montano et al. (2017)
	Communication through creating and building a shared sense of identity among leaders and followers was found to help promote workplace mental health and well-being.	Steffens et al. (2018)
	Intervention programs targeting at health-oriented leadership were found to decrease mental distress and increase health-oriented self-care.	Vonderlin et al., (2021)
B. Worker Participation and Consultation	Employees exposed to high involvement management practices (overlapping with Domain C) were found to have higher subjective wellbeing.	Bockerman et al. (2012)
	Employees' participation & engagement in safety practices were found to significantly impact on organization's safety performance.	Curcuruto et al., (2015; 2020)
	High-involvement work processes (perceived level of power, information provision, rewards, knowledge and training, and teamwork) are associated with higher job satisfaction and lower job-induced stress, fatigue and work-life imbalance.	Riordan et al. (2005); Macky & Boxall (2008)
	Employee voice (overlapping with Domain A) was found to relate to increase organisational engagement.	Ruck et al. (2017)
	Employee participation in organisational decisions about workplace safety was found to increase workplace safety climate.	Widerszal-Bazyl & Warszewska-Makuch (2008)
C. Policies, Practices, Programs and Procedures	More engaging training programs (requiring active participation – overlapping with Domain B) were found to reduce accidents, illnesses, and injuries.	Burke et al. (2006)
	Wellbeing-oriented HR practices was found to positively relate with social climate and employee resilience.	Cooper et al. (2019)
	Health-promoting measures in the workplace are associated with better self-related health and lower sickness absence levels among employees.	Ljungblad et al. (2014)
	Participation in organizational wellness programs (overlapping with Domain B) was found to associate with decreased absenteeism and increased job satisfaction.	Parks & Steelman (2008)
	Standardisation of work health and safety policy intervention is associated with greater levels of psychosocial safety climate.	Potter et al. (2017)
	Mindfulness-based programs were found to effectively promote the health and well-being of employees across different occupational settings.	Vonderlin, et al. (2020)

Domain	WHSW Outcomes	Research Evidence
D. Physical Work Environment	Employees' evaluation of their physical work environment was found to significantly associate with lower rates of job-related anxiety, higher levels of job satisfaction, and increased rates of organisational commitment; greater productivity and well-being.	Haapakangas et al. (2018); Sadatsafavi et al. (2015)
	Employee health was found to associate with physical work characteristics (e.g. enclosed office space v. open-plan office).	Herbig et al. (2016)
	Long term environmental stressors were found to significantly reduce self-reported work performance and wellbeing.	Lamb & Kwok (2016)
	Office layout (esp. comfort of furnishing) was found to affect productivity and health. Improved indoor environmental quality (IEQ; indoor air quality, temperature, humidity, ventilation, lighting, acoustics and ergonomic design/safety) is associated with a reduction in perceived absenteeism and work hours affected by asthma, respiratory allergies, depression and stress.	Kim et al. (2016) Singh et al. (2010)
	Poor physical environment characteristics (such as extreme temperature, poor air quality, excessive noise, hazards) and inappropriate safety equipment were found to associate with emotional stress and injury rate	Leung, Chan & Yuen (2010)
E. Workforce Capability	Mental health awareness training (overlapping with Domains A and C) was found to have direct effect on leaders' knowledge and indirect effect on their attitudes and awareness of mental health literacy, subsequently seeking out resources.	Dimoff et al. (2016); Dimoff & Kelloway (2019);
	Safety training (overlapping with Domain C) was found to have a positive impact on employees' explicit attitudes (i.e., governing conscious, methodical action) towards safety.	Marquardt et al. (2021)
	Knowledge and awareness of an organization's stress-reduction interventions were found to improve well-being and reduce psychological strain.	Pignata et al. (2016)
	Mindfulness-based stress awareness courses (overlapping with Domain C) were found to decrease rates of cognitive failure and increase safety compliance.	Valley & Stallones (2017)
	Health-related leadership training (overlapping with Domains A and C) was found to link to Improved safety and sustained productivity.	von Thiele et al. (2016)
F. Data-driven measurement and evaluation	Data-driven decision making (DDD) approach was found to correlate with organisational performance in a wide range of operational settings, which can include safety, health and wellbeing outcomes, in addition to productivity enhancing.	Brynjolfsson & McElheran (2016)
	Systemic approaches to occupational health and safety management system (OH&S) were found to have more management demand for data-based feedback.	Ejdys & Lulewicz-Sas (2010)
	Combination of behavioural observation with big data observation was found to reduce incidences of unsafe behaviour in a construction project.	Guo et al. (2016)
	A data-driven change approach was found to improve an individual's perceived level of distress, esp. using organisational efforts to address workers' secondary traumatic stress so as to improve physical and psychological safety.	Sprang et al. (2021)
	Data-driven approach was found to be highly efficient to identify potential hazards.	Wang et al. (2021)

Appendix 2

DRAFT Healthy Workplace Self-Assessment Tool

Part One: Workplace Demographics

How many employees in your organisation?

☐ 1-4 ☐ 5—19 ☐ 20-199 ☐ 200+ employees

What is the postcode of South Australian head office (or South Australian workplace if head office is interstate):

☐

Which category best describes the industry for your workplace? (*ANZIC classifications*)

☐

Part Two: Foundational Domains

Lead Domain = Leadership commitment

Description: The following questions refer to leadership commitment. We define "leadership commitment" to mean the following: An organisation's leadership makes worker health, safety and wellbeing **a clear priority** in the workplace culture, assume **accountability** and provide the **necessary resources** to create positive working conditions.

How much do you agree with the following statements with regard to your workplace: *(Strongly agree, agree, unsure, disagree, strongly disagree, not applicable)*

Count	Aspect of domain	Proposed question	Original source (often adapted)
1.	A clear priority	Workplace health, safety and wellbeing is included as part of the **organisation's mission, vision and/or business objectives.*** *E.g. evident in organisational mission, vision, business plans, strategic documents*	QLD (2.a) WISH (1.d)
2.	A clear priority	Managers **communicate** their commitment to a workplace that supports worker health, safety and wellbeing. *E.g. regular communication with workers via email/team meetings, shares the vision, ensures worker health, safety and wellbeing included on meeting agendas*	QLD (2.b) WISH (1.a)
3.	A clear priority	Managers **demonstrate** their commitment to a workplace that supports worker health, safety and wellbeing. *E.g. serve as a role model, 'walks the talk', participates in education, training and programs*	QLD (2.b) WISH (1.a)
4.	Accountability	Managers are held **accountable** for ensuring workplace health, safety and wellbeing. *E.g. workplace health and wellbeing elements included in leadership key performance indicators (KPI's), performance reviews, position descriptions and organisational reports*	QLD (2.c) WISH (1.c)
5.	Necessary resources (financial)	**Financial resources** are allocated for workplace health, safety and wellbeing. *E.g. allocated budget for programs, skills building, training or physical environment changes for in work health and wellbeing*	QLD (2.d) WISH (1.b)
6.	Necessary resources (human)	**Human resources** are allocated for workplace health, safety and wellbeing. *E.g. there is a person/people with responsibility for managing workplace health, safety and wellbeing in the organisation, workers are given time to participate in workplace health, safety and wellbeing activity*	QLD (2.e)

*Integrated approach to workplace health, safety and wellbeing. Note for Wellbeing SA.

Lead Domain = Participation and consultation

Description: The following questions refer to participation and consultation. We define "participation and consultation" to mean the following**: Stakeholders at every level** of an organisation help plan and carry out efforts to protect and promote worker health, safety and wellbeing. The organisation **involves workers in consultation** and **workers are encouraged to raise concerns.**

How much do you agree with the following statements with regard to your workplace: ***(Strongly agree, agree, unsure, disagree, strongly disagree, not applicable)***

Count	Aspect of domain	Proposed question	Original source (often adapted)
7.	Stakeholders at every level	**Managers and workers work together** to protect and promote worker health, safety and wellbeing* *E.g. health, safety and wellbeing committee, workplace champions, agenda item at management meetings*	QLD (4.f) WISH (2.a and 2.b)
8.	Involves workers in consultation	**Workers are consulted** and are involved in feedback and decision making in relation to workplace health, safety and wellbeing *E.g. workers contribute to workplace health, safety and wellbeing planning and activity*	QLD (4.4) WISH (2.c and 2.e)
9.	Workers are encouraged to raise concerns	**Workers are encouraged to raise concerns** about the workplace that affect worker health, safety and wellbeing without fear of retaliation *E.g. one on one meetings with workers and line managers, consultative committees and forums, workplace incident investigations are completed with a 'no blame' philosophy*	QLD (4.e) WISH (2.d)

Lead Domain = Data driven

Description: The following questions refer to data-driven change. We define "data driven" to mean the following: Data guides an organisation's **priority setting**, **decision making**, and **continuous improvement** of workplace health, safety and wellbeing activity.

How much do you agree with the following statements with regard to your workplace: ***(Strongly agree, agree, unsure, disagree, strongly disagree, not applicable)***

Count	Aspect of domain	Proposed question	Original source (often adapted)
10.	Priority setting	**Data from a range of sources** about workplace health, safety and wellbeing are used **to determine priorities** for the organisation *E.g. surveys, audits, injury and incident data, absenteeism and turnover data, management and worker consultation and feedback, strategic documents, committee minutes, case studies*	QLD (4.a)
11.	Decision making	**Data from a range of sources** about workplace health, safety and wellbeing are **communicated to senior management on a regular basis** *E.g. survey and audit results, injury and incident data, absenteeism and turnover data, management and worker consultation and feedback, strategic documents, committee minutes, case studies*	QLD (4.a) WISH (6.b)
12.	Continuous improvement	**Data from a range of sources** about workplace health, safety and wellbeing are used to **review policies, programs, and practices** *E.g. survey and audit results, injury and incident data, absenteeism and turnover data, management and worker consultation and feedback, strategic documents, committee minutes, case studies*	WISH (6a and c) HWHF (HV7)

Part Three: Workplace Strategies

Lead Domain = Physical work environment

Description: The following questions refer to the physical work environment. We define "physical work environment" to mean the following: A physical work environment for the workplace includes plant, equipment, materials and substances used, as well as vehicles, buildings and structures. A well-designed and resourced physical work environment **protects** and **promotes** worker health, safety and wellbeing.

How much do you agree with the following statements with regard to your workplace: *(Strongly agree, agree, unsure, disagree, strongly disagree, not applicable)*

Count	Aspect of domain	Proposed question	Original source (often adapted)
13.	Protection	The workplace environment is designed to **protect workers and minimise exposure to workplace hazards/risks** *E.g. Sun/UV, excessive heat, excessive cold, dust, chemicals, noise, slips and trips, ergonomic, and pathogens*	QLD (5.m)
14.	Promotion	The workplace environment is **designed to promote health and wellbeing**. *E.g. smoke free environment, kitchen facilities, access to healthy food options, promotes physical movement, adequate natural light, ventilation and rooms to take breaks*	
15.	Smoking	**Smoking**: Smoking is restricted on worksite (including work vehicles) *E.g., designated smoking areas are provided*	HWHF (HP3)
16.	Healthy Eating	**Nutrition**: Workers have access to clean kitchen facilities and/or equipment to store, prepare and consume food *E.g. kettle, microwave, fridge/esky, water, suitable equivalents for off-site work*	QLD 5.b HWHF (HP1)
17.	Healthy Eating	**Nutrition**: Workers have access to healthy food and drink options *E.g. canteen, vending machines, food vans, local shops, events and meeting include healthy options*	QLD (5.d) HWHF (HP2)
18.	Physical activity	**Physical activity:** Workers have access to end of trip facilities to support active travel. *E.g. change room facilities, shower facilities, bike storage facilities*	QLD 5.c HW (HF 6 and 7)
19.	Physical activity	**Physical activity:** The work environment promotes physical movement throughout the day *E.g. workers have access to adjustable sit-stand workstations, free access to stairwells, onsite gym facilities*	QLD (5.l)

20.	Mental health	**Mental Health:** Workers have access to areas which allow privacy, quiet and can take breaks away from the direct work area when required. *E.g. meeting rooms, breakout rooms, separate space for 'down time'*	QLD (5.g and 5.f)) HWHF HP11

Lead Domain = Programs and supports

Description: The following questions refer to programs and supports. We define "programs and supports" to mean the following: Workplace **information**, **education and training**, **programs** and **services** for workers that promote and protect worker health, safety and wellbeing**.**

How much do you agree with the following statements with regard to your workplace: ***(Strongly agree, agree, unsure, disagree, strongly disagree, not applicable)***

Count	Aspect of domain	Proposed question	Original source (often adapted)
21.	Information	**The workplace provides workers with information to promote** worker health, safety and wellbeing and the impact on work *E.g. referrals to health professionals, newsletters*	QLD (6b)
22.	Education and training	**The workplace provides workers with education and training** to manage their health, safety and wellbeing. *E.g. education or training sessions on healthy lifestyle topics (eg about cessation of smoking and risky alcohol consumption, nutrition, physical activity, sleep, mental health) as well as workplace safety – eg toolbox talks*	QLD (6c)
23.	Services	**The workplace provides workers with access to services** that support worker health and wellbeing. *E.g. Employee Assistance Program, Get Healthy information and coaching service, Quitline, 10,000 steps, BeUpstanding*	QLD (6a)
24.	Programs	**The workplace provides workers with opportunities to engage in programs** that support worker health and wellbeing**.** *E.g. physical activity opportunities, staff vaccinations, healthy eating opportunities, smoking cessation, stress management courses, healthy lifestyle 'challenges'*	QLD (6d)
25.	Smoking	The workplace provides workers with opportunities to engage in programs or services to support **smoking cessation.** *(e.g. Quitline, subsidised nicotine replacement therapy)*	HWHF HP8
26.	Healthy Eating	The workplace provides workers with opportunities to engage in programs or services that encourages **healthy eating**. *(e.g. lunchbox challenges, cooking demonstrations, online or phone health coaching)*	HWHF HP7

27.	Physical Activity	The workplace provides workers with opportunities to engage in programs or services to support increased **physical activity** and reduced sitting time**.** *(e.g. team challenges/sports, walking groups, subsidised fitness facility memberships)*	HWHF HP6
28.	Mental Health	The workplace provides workers with opportunities to engage in programs or services to maintain &/or improve **mental and emotional health and wellbeing**. *E.g. stress management workshops, promotion of online/phone counselling support, mindfulness, meditation, yoga, employee recognition schemes*	HWHF HP10
29.	Preventative health screening or immunisations	The workplace provides workers with opportunities to engage in programs or services to prevent the onset of **chronic disease or illness** *E.g. skin checks, hearing assessments, onsite or subsidised vaccinations*	HWHF HP11

Lead Domain = Systems, Policies and Practices

Description: The following questions refer to systems, policies and practices. We define "systems, policies and practices" to mean the following: The organisation **promotes** and **protects** worker health, safety and wellbeing through **systems**, **policies and practices** for the workplace.

How much do you agree with the following statements with regard to your workplace: ***(Strongly agree, agree, unsure, disagree, strongly disagree, not applicable)***

Count	Aspect of domain	Proposed question	Original source (often adapted)
30.	Promotion	The workplace has policies and practices to **promote health, safety and wellbeing**. *E.g positive health behaviours such as smoke-free policy, heathy food options, flexible work*	WISH (3.d)
31.	Protection	The workplace has policies and practices to **protect workers and minimise exposure to workplace hazards/risks** *E.g. Sun/UV, excessive heat, excessive cold, dust, chemicals, noise, slips and trips, ergonomic, and pathogens, psychosocial risk*	
32.	Systems	The workplace displays commitment to workplace health, safety and wellbeing **through either a strategy, action plan or organisational policy**. *E.g. health and wellbeing policy, health and wellbeing action plan or calendar of events*	QLD (3.a) ASES
33.	Systems	Workplace health, safety and wellbeing is **included and embedded into organisational systems.** * *E.g. staff inductions, toolbox talks, procurement, procedures and reporting systems*	QLD (1.a)
34.	Systems	There are **systems in place to identify and manage** workplace health, safety and wellbeing risks. * *E.g. holistic risk management approach, hierarchy of controls, recognise both mental and physical risk*	QLD (1.d)
35.	Policies and practices	Workers' health, safety and wellbeing **achievements are recognised and rewarded.** *E.g. staff awards, senior executive acknowledgement*	QLD (6e)
36.	Policies and practices	**Workers are aware** of health, safety and wellbeing policies and procedures. *E.g. promoted at induction, access to policies and procedures, agenda on staff meetings*	QLD (4.h)

37.	Policies and practices	Policies and practices are in place to support a smoke-free working environment. *(e.g. smoking banned on organisation grounds, in work vehicles and near vents)*	HWHF HV11 QLD 3.b
38.	Policies and practices	Policies and practices are in place to support the provision of healthier food and drink options in the workplace. *(e.g. catering, vending machines, onsite catering, functions and fundraisers)*	QLD 3.b HWHF HV8 NSW GHW
39.	Policies and practices	Policies and practices are in place to address the influence of alcohol and other drugs in the workplace. *(e.g. responsible service of alcohol policies for work functions, fit for work guidelines)*	QLD 3.b HWHF HV10
40.	Policies and practices	Policies and practices are in place to promote/support opportunities for physical activity and reduced sitting time. *E.g. flexible working arrangements, provision of standing workstations, stretch breaks, walking meetings, ergonomic workplace assessments*	QLD 3.b HWHF HV9 NSW GHW Hero
41.	Policies and practices	Policies and practices are in place to prevent harm to employees from abuse, harassment, discrimination, and domestic violence	QLD 3.b HWHF HV12 WISH 3.h, 3i
42.	Policies and practices	Policies and practices are in place to support work-life balance *(e.g. parental and carers leave, flexible work arrangements, managers make sure employees take annual leave, entitled breaks, use of work time for stress management activities)*	QLD 3.d WISH 3f,g
43.	Policies and practices	Policies and practices are in place to address psychosocial risk factors that contribute to work-related stress *(e.g. heavy workloads, fatigue, poor workplace relationships, civility, organisation of work)*	HERO WISH 3L SSTS 2

Part Four: Workplace Capability

How much do you agree with the following statements with regard to your workplace: *(Strongly agree, agree, unsure, disagree, strongly disagree, not applicable)*

44. The workplace **believes it is important** to promote and protect worker health, safety and wellbeing**.**

45. The workplace **knows where to access support and advice** to promote and protect worker health, safety and wellbeing.

46. The workplace **has the knowledge and skills to** promote and protect worker health, safety and wellbeing.

47. The workplace **is implementing strategies to** promote and protect worker health, safety and wellbeing.

South Australian Businesses'

Healthy Workplace Check (HWC)

Healthy, safe and thriving workplaces can have a profound positive impact on the people and economy of South Australia. Research evidence shows that workplace safety, employee health and wellbeing lead to increased productivity, reduced workforce injuries and illness, enhanced employee engagement and job satisfaction combined with a stronger sense of community cohesion.

If your workplace is anywhere in SA, you can use our Healthy Workplace Check to assess your strengths and weaknesses to create healthy and safe workplace. Our tool can also be used to develop specific prevention and intervention strategies for your circumstances so you can benefit from the creation of a safe and thriving workplace.

The Healthy Workplace Check tool covers seven domains relating to the promotion and protection of workplace health and wellbeing that include both physical health and mental wellbeing. The tool is created for business decision-makers such as owners, general managers, work health and safety representatives, and human resource managers to reflect your understanding of policies, practices and programs currently existing in your workplace.

The best person to complete this survey is the person who would be mainly, or at least partly, responsible for worker health, safety and wellbeing at your workplace.

This survey takes about 15 minutes. There is no right or wrong answers to these questions, simply answer to the best of your knowledge. The answers you provide show how much you agree with a particular statement (through a scale of 1 = strongly disagree to 5 = strongly agree). The data collected may be linked to future datasets however the data will be stored anonymously and only deidentified group data will be used.

This project has been approved by the UniSA Business Negligible Risk Ethics Committee (Application ID: 016/2022). Please contact UniSA Business Ethics Committee via Email: BIS-Research@unisa.edu.au if you have any concern with reference to this survey.

Is your workplace located in South Australia? Yes – Start the survey
No

Section A: Leadership Commitment and Communication

Leadership commitment & communication is defined as the degree to which a workplace owner, leader or managers make worker health, safety and wellbeing a clear priority and this is clear in communication, behaviour and accountability and also in the provision of resources. *Note: We define 'worker' in this survey as 'full-time, part-time and casual staff. It doesn't include contractors and subcontractors'.*

How much do you agree or disagree with the following statements that describe your workplace?

A. Leadership Commitment & Communication	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
A1. At my workplace, managers demonstrate their commitment to worker health, safety and wellbeing by 'walking the talk'.	O	O	O	O	O
A2. At my workplace, managers communicate their commitment to worker health, safety and wellbeing in discussions or meetings.	O	O	O	O	O
A3. My workplace includes worker health, safety and wellbeing in the vision, mission or strategic planning documents.	O	O	O	O	O
A4. At my workplace, managers are held accountable for worker health, safety and wellbeing through key performance indicators (KPIs), performance reviews, position descriptions or organisational reporting.	O	O	O	O	O
A5. My workplace allocates budget and resources for initiatives to support worker health, safety and wellbeing e.g., health promotion programs, skills building & training, and changes of physical environment.	O	O	O	O	O
A6. My workplace has a dedicated person responsible for managing worker health, safety and wellbeing.	O	O	O	O	O
A7. My workplace gives workers time to participate in health promotion programs or skill building & training in health, safety and wellbeing.	O	O	O	O	O
A8. My workplace has a strong culture of promoting and protecting worker health, safety and wellbeing.	O	O	O	O	O

Section B: Participation and Consultation

The term '*participation and consultation'* is defined as the effort made by a workplace owner, leader or managers to consult and involve workers at every level of an organisation to participate in planning and decision-making on matters relating to worker health, safety and wellbeing.

How much do you agree or disagree with the following statements that describe your workplace?

B. Participation and Consultation	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
B1. My workplace consults workers on decisions related to health, safety and wellbeing initiatives.	O	O	O	O	O
B2. My workplace encourages workers to raise concerns about workplace issues that affect their health, safety and wellbeing without fear of retaliation.	O	O	O	O	O
B3. My workplace makes it clear what is expected of workers to ensure health, safety and wellbeing of our workforce.	O	O	O	O	O

B4. My workplace encourages managers and workers to work together in planning, implementing, and evaluating worker health, safety and wellbeing activity.	O	O	O	O	O
B5. My workplace makes workers aware of health, safety and wellbeing activities.	O	O	O	O	O

Section C: Policies, Practices and Procedures

Policies, practices and procedures refer to those specific workplace-based rules and regulations that guide the development and design of various human resource management policies and practices, and clear procedures to promote and protect worker health, safety and wellbeing.

How much do you agree or disagree with the following statements that describe your workplace?

C. **Policies, Practices and Procedures**	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
C1. My workplace has clear health, safety and wellbeing policies and procedures.	O	O	O	O	O
C2. My workplace keeps workers aware of health, safety and wellbeing policies and procedures.	O	O	O	O	O
C3. My workplace puts health, safety and wellbeing policies and procedures into practice.	O	O	O	O	O
C4. My workplace recognises and rewards workers' achievements in promoting and protecting health, safety and wellbeing	O	O	O	O	O
C5. My workplace has policies and practices to deal with psychosocial risk factors that contribute to work-related stress and other mental health issues. (e.g., *heavy workloads, fatigue, poor workplace relationships, incivility)*	O	O	O	O	O
C6. My workplace has policies and procedures to promotes workplace diversity and inclusion.	O	O	O	O	O
C7. My workplace has policies and practices to support work-life balance.	O	O	O	O	O
C8. My workplace has policies and procedures to support a safe workplace, free from bullying and harassment.	O	O	O	O	O
C9. My workplace has policies and practices to promote physical activity and reduce sitting time.	O	O	O	O	O
C10. My workplace has policies and practices to address the influence of alcohol or other drugs used at workplace.	O	O	O	O	O
C11. My workplace has policies and practices to provide healthy food and drink options in the workplace. (e.g., Healthy food and drink policy, healthy food choices for social occasions)	O	O	O	O	O
C12. My workplace has policies and practices to support workers with a disability.	O O	O O	O O	O O	O O

Section D: Physical Work Environment

Physical work environment is defined as plant, equipment, materials and substances used for carrying out work, as well as vehicles, buildings and structures required for workers to do their jobs.

How much do you agree or disagree with the following statements that describe your workplace?

D. Physical Work Environment	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
D1. In my workplace, the physical environment is designed to promote worker health, safety and wellbeing.	O	O	O	O	O
D2. In my workplace, workers have access to clean kitchen facilities and/or equipment to store, prepare and consume food.	O	O	O	O	O
D3. In my workplace, workers have access to healthy food and drink options (e.g., canteen, vending machines, food vans, local shops, events, and meetings include healthy options).	O	O	O	O	O
D4. My workplace provides workers with change rooms, shower facilities, or bike storage etc. to support active travel from home to workplace.	O	O	O	O	O
D5. My workplace promotes physical movement throughout the day.	O	O	O	O	O
D6. In my workplace, workers have access to areas for privacy and opportunities to be quiet when required.	O	O	O	O	O
D7. In my workplace, the physical environment is designed to protect workers and minimise exposure to workplace hazards/risks.	O	O	O	O	O
D8. My workplace is designed to be accessible to workers with a disability.	O	O	O	O	O

Section E: Workforce Capability & Programs

Programs and workforce capability is defined as the beliefs, knowledge and skills related to worker health, safety and wellbeing, possessed by a workplace owner/leader or managers and workers and how these are developed through information, education, skill building and training programs on health, safety and wellbeing.

How much do you agree or disagree with the following statements that describe your workplace?

E. Workforce Capability & Programs	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
E1. My workplace provides workers with information (e.g., referrals to health professionals; newsletters) to promote and protect worker health, safety and wellbeing.	O	O	O	O	O
E2. My workplace has directive signs (e.g., 'Smoke free' sign; a gym or swimming pool) visible to all workers to promote healthy living with positive behaviours.	O	O	O	O	O
E3. My workplace provides ongoing education, skill building and training programs to workers to manage their health, safety and wellbeing.	O	O	O	O	O
E4. My workplace has access to external services (e.g., counselling service; employee assistance program; Quitline; 10,000 steps) that support worker health, safety and wellbeing.	O	O	O	O	O

E5. My workplace provides training programs to prevent harm from abuse, bullying, harassment, discrimination, and violence.	O	O	O	O	O
E6. My workplace provides workers access to programs and services to promote mental and emotional wellbeing.	O	O	O	O	O
E7. My workplace provides workers access to programs and services that encourage healthy eating.	O	O	O	O	O
E8. My workplace provides workers with opportunities to engage in programs or services to prevent the onset of chronic disease or illness, e.g., skin checks, hearing assessments, onsite vaccinations.	O	O	O	O	O
E9. My workplace provides workers with opportunities to engage in programs or services to support increased physical activity and reduced sitting time, e.g., team challenges/sports, walking groups, subsidised fitness facility memberships.	O	O	O	O	O
E10. My workplace believes it is important to promote and protect worker health, safety and wellbeing.	O	O	O	O	O
E11. My workplace believes that worker health, safety and wellbeing is the responsibility of workers themselves.	O	O	O	O	O
E12. My workplace incorporates a mix of workplace health and safety, human resources and organisational development, and workplace health promotion strategies when addressing worker health, safety and wellbeing.	O	O	O	O	O
E13. My workplace incorporates a mix of physical work environment, policies and programs and supports for workers in supporting our health, safety and wellbeing activities.	O	O	O	O	O
E14. My workplace knows where to access support and advice to promote and protect worker health, safety and wellbeing.	O	O	O	O	O
E15. My workplace has the knowledge and skills to promote and protect worker health, safety and wellbeing.	O	O	O	O	O
E16. My workplace is implementing strategies to promote and protect worker health, safety and wellbeing.	O	O	O	O	O
E17. My workplace provides information about who to contact should workers need modifications to accommodate a disability.	O	O	O	O	O

Section F: Data-driven Measurement and Evaluation

Data-driven measurement and evaluation is defined as the use of a range of data (e.g., surveys, audits, injury and incident data, absenteeism and turnover data) to prioritise, measure and review workplace health, safety and well-being activities.

How much do you agree or disagree with the following statements that describe your workplace?

F. **Data-driven Measurement and Evaluation**	**Strongly Disagree**	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
F1. My workplace collects data from a range of sources about worker health, safety and wellbeing to make decisions.	O	O	O	O	O
F2. My workplace uses data from a range of sources to determine our priorities for worker health, safety and wellbeing activity.	O	O	O	O	O
F3. My workplace regularly communicates data from a range of sources about worker health, safety and wellbeing to senior management.	O	O	O	O	O

F4. My workplace uses data from a range of sources about worker health, safety and wellbeing to review our policies, programs and practices.	O	O	O	O	O

Section G: Psychosocial Safety Climate

Psychosocial Safety Climate is defined as the extent to which management values and prioritises psychological wellbeing in the workplace.

How much do you agree or disagree with the following statements that describe your workplace?

1- *Strongly disagree; 2= Disagree; 3= Neither Disagree nor Agree; 4=Agree; 5= Strongly agree*

G. **Psychosocial Safety Climate**	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
G1. Senior management show support for stress prevention through involvement and commitment.	O	O	O	O	O
G2. Senior management considers employee psychological health to be as important as productivity.	O	O	O	O	O
G3. There is good communication here about psychological safety issues which affect me.	O	O	O	O	O
G4. In my workplace, the prevention of stress involves all levels of the organization.	O	O	O	O	O

Section H: About Your Workplace

H1. How many workers does your business have in South Australia?

(This may include workers at different locations in South Australia. It includes part-time and casual staff. It doesn't include contractors and subcontractors. If staff numbers fluctuate due to seasonal factors, or Covid-19, please indicate the number of workers normally employed.)

1-4	5-19	20-199	200+
☐	☐	☐	☐

H2. What is the postcode of your workplace's South Australian head office (or South Australian office if the head office is interstate)?	_____

H3. Which category best describes the industry for your workplace?

☐	Accommodation and Food Services
☐	Administrative and Support Services
☐	Agricultural, Forestry and Fishing
☐	Arts and Recreation Services
☐	Construction
☐	Education and Training
☐	Electricity, Gas, Water and Waste Services

☐	Financial and Insurance Services
☐	Health Care and Social Assistance
☐	Information Media and Telecommunications
☐	Manufacturing
☐	Mining
☐	Professional, Scientific and Technical Services
☐	Public Administration and Safety
☐	Rental, Hiring and Real Estate Services
☐	Retail Trade
☐	Transport, Postal and Warehousing
☐	Wholesale Trade
☐	Other

H4. Which category best describes your workplace?

For Profit	Not for Profit	Government
☐	☐	☐

H5. Which category best describes your role in your workplace?	
Owner/Senior Manager Roles	☐ Business owner
	☐ Chief Executive Officer
	☐ Senior Manager/Executive
	☐ Other senior manager role, please specify _____
Mid-level Manager Role	☐ Human Resources (HR) Director / Manager or People and Culture Director
	☐ Occupational Health & Safety (OH&S) / Work Health & Safety (WH&S) Manager
	☐ Other Director / Manager / Team Leader role
	☐ Other mid-level manager role, please specify _____
Non-managerial Roles	☐ Administrative / Clerical / Secretarial
	☐ Manual / trade roles (e.g. tradesperson / labourer)
	☐ Professional (e.g. doctor, lawyer, accountant)
	☐ Other non-managerial role, please specify _____

H6. Please estimate the proportion (%) of the gender types for your workers.

Male	Female	Non-binary	Other
__%	__%	__%	__%

H7: Your gender: Female, Male

H8: Your age:

H9: Your status of employment: Full-time; Part-time; Casual etc.

Section I: About Your Health

Below you will find a series of statements asking how work affects your health. Please select the most relevant response for you.

I1. In general, would you say that your health is: (Single Response)
1. Excellent
2. Very good
3. Good
4. Fair
5. Poor

I2. In the last 12 months, how many times have you used these health services in South Australia? (Enter number of times for each category below)
1. General Practitioner (GP) _____(times)
2. Specialist Doctor _____(times)
3. Dentist _____(times)
4. Other health professional (Note: allied health, nursing, Aboriginal health worker) _____(times)
5. Hospital admission (in-patient) _____(times)
6. Hospital Outpatient Clinic _____(times)
7. Hospital Emergency/casualty department 8. Prefer not to say _____(times)

I3. In the last 12 months, how many times have you used these health services in South Australia? (Answer for each – please enter '0' if you have not used any)
1. ___ Psychologist
2. ___ Psychiatrist
3. ___ Other community mental health services
4. ___ Online/phone services (self-help)
5. Prefer not to say

I4. At work, I feel exhausted:
1=Never; 2=Occasionally; 3=Sometime; 4=Often; 5=Always

I5. After a day at work, I find it hard to recover my energy.
1=Never; 2=Occasionally; 3=Sometime; 4=Often; 5=Always

I6. When I get up in the morning, I lack the energy to start a new day at work.
1=Never; 2=Occasionally; 3=Sometime; 4=Often; 5=Always

I7. The next questions are about how you have been feeling in the last 4 weeks. Some of the questions might make you feel uncomfortable so you don't have to answer them if you don't want to.
(Single response) 1. None of the time 2. A little of the time 3. Some of the time 4. Most of the time 5. All of the time

I7a. In the past four weeks, about how often did you feel tired out for no good reason
I7b. In the past four weeks, about how often did you feel nervous
I7c. In the past four weeks, about how often did you feel so nervous that nothing could calm you down

I7d. In the past four weeks, about how often did you feel hopeless
I7e. In the past four weeks, about how often did you feel restless or fidgety
I7f. In the past four weeks, about how often did you feel so restless you could not sit still
I7g. In the past four weeks, about how often did you feel depressed
I7h. In the past four weeks, about how often did you feel everything was an effort
I7i. In the past four weeks, about how often did you feel so sad that nothing could cheer you up
I7j. In the past four weeks, about how often did you feel worthless
You may also tick below two options:
Don't know; Prefer not to say

I8. Lifestyle Behaviour Risk Factors

I8a. Do you currently smoke cigarettes, cigars, pipes, vapes or any other tobacco products (Single response) 1. Daily 2. At least weekly (not daily) 3. Less often than weekly 4. Not at all

I8b. How many serves of vegetables do you usually eat each day? A 'serve' is ½ cup cooked vegetables or 1 cup of salad. (Single response) 1. None (don't eat vegetables) 2. Less than one serve 3. Enter number of serves 4. Don't know 5. Prefer not to say

I8c. Includes fresh, dried, frozen and tinned fruit. How many serves of fruit do you usually eat each day? A 'serve' is 1 medium piece or 2 small pieces of fruit, 1 cup diced pieces or 1 tablespoon of dried fruit (Single response) 1. None (don't eat fruit) 2. Less than one serve 3. Enter number of serves 4. Don't know 5. Prefer not to say

I8d. In the last 12 months, how often did you have an alcoholic drink of any kind (Single response) 1. Every day 2. 5-6 days a week 3. 3-4 days a week 4. 1-2 days a week 5. 2-3 days a month 6. About 1 day a month 7. Less often 8. Not in the last 12 months

I8e. What do you estimate was the total time that you spent doing moderate activity in the last week? This could include brisk walking, golf, dancing, or garden work and household chores. (Single response) 1. ___ hours 2. ___ minutes 3. None 4. Don't know 5. Prefer not to say

I8f. On average, how many hours per day do you spend sleeping? (Single response) 1. ___ hours 2. ___ minutes

Please provide any specific comments you have with reference to this survey:

Thank you for completing the survey!

Make sure you leave your details below and we can send you the final brief report via email or text about the survey results. This information will be stored separately to your data. Your data will be stored anonymously and only deidentified group data will be used in the report.

Your organisation or ABN/ACN #: _____

Email or mobile phone contact number: _____

Sign up to the Healthy Workplaces mailing list to keep up to date with our quarterly newsletter, which features emerging research, resources, training and events, and opportunities to be involved in the work of the Collaborative Partnership for Workplace Health and Wellbeing in SA. Click here to subscribe.

A BRIEF REPORT ON FINDINGS FROM CONTENT VALIDATION OF THE HWC TOOL AND JUSTIFICATION FOR CHANGES

Prepared for SA Wellbeing

By

A/Prof. Connie Zheng, Dr. Sanjee Perera, Dr. Amy Zadow, Prof. Maureen Dollard, Ashkan Hayati, Daniel Neser, Isabella Dong, Sophie Richter & Raman Voranau

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PURPOSE

This briefing provides a summary of key findings from the content validation of the Healthy Workplace Check (HWC) tool. The validation process has led to the justification of some minor changes in the tool for the next stage of data collection.

Content validation procedure

As reported (cf. SA Wellbeing Project Phase 2 – Progress report by CWeX), the field work (i.e., interviews of 15 SA businesses) by RAs (research assistants) for content validation of the HWC tool started on 29 June 2022, and 18 interviews (exceeding the expected 15) were completed by 8 July 2022 (Note: ethics approval for a one week extension was obtained from UniSA Business Dean of Research – see Appendix 1).

The interviews were transcribed, using a web-based transcription tool (https://otter.ai), and saved in a password protected folder shared to the CWeX research team for analysis.

The profile of 18 interviewees is attached in Appendix 2. The ten women, seven men and one non-binary person participating in the interview are mostly business owners, senior managers and managers responsible for HR/OHS issues. They represent organisations from small (7), medium (5) to large (6) sizes and in different industries.

Key findings from content validation

Each participant first completed the HWC tool on an iPad provided by an RA. Then they participated in a semi-structured interview (see Appendix 4 for interview protocol) that lasted about 30-60 minutes. Positive comments and concerns about the tool and subsequent changes suggested are summarised in Appendix 3. A heatmap of 18 responses is presented in Appendix 5. The average time to complete the survey was about 11m 24s, with a range of the shortest 5m 58s to the longest 26m 06s.

Key positive comments:

- the tool is reasonable, helpful and useful;
- your survey is our wishlist to improve workplace health, safety and wellbeing;
- the survey has brought up aspects of health, safety and wellbeing that participants have not thought about or considered for their workplace;
- the length of the survey is just about right;
- the language is clear and each question was easy to understand;
- the name of 'Healthy Workplace Check' for the tool is good;
- this is a good initiative, helpful, thorough, easy to complete, broad, encourages broader thinking around OHS/wellbeing and identifying gaps,

Key improvements suggested:

- addressing mental health issue more directly in the tool;
- adding aspects focusing on inclusion of people with disabilities;
- reducing repetitive statements;
- clarifying some terms: e.g., psychosocial risk factors; food and drink options;
- including a domain on culture on its own;
- providing space for further written comments.

University of South Australia

Suggested changes to the HWC Tool

Based on the positive comments and suggestions for improvement expressed by the participants in the interviews, we suggest the following changes to the tool:

- rephrasing the introduction to explicitly include the intent to address the mental health and wellbeing, especially with inclusion of PSC-4 in the next stage of data collection, the issue of addressing more mental concerns can be addressed;
- adding a few items to specifically address the need to include people with disability. Items A8, D8 and D9 are added and highlighted for Wellbeing SA to note;
- rearranging items for consistency. We argue that despite some items appearing repetitive, they address different aspects of policy, practice and program (e.g., C11; D3; and E7). However, following the advice from the interview participants, we suggest moving two items from Domain E to Domains A, and B, to keep the balance of the number of items in each domain (see highlights of changes in the revised HWC survey dated 28 July 2022).

With reference to three specific questions (i.e., employee participating in the survey; tool's name; and the organisation's willingness to provide ABN to Wellbeing SA at the end of the survey), a further thematic analysis (see Appendix 6) was generated using NVivo (a qualitative data analyses software program). It was found that businesses were generally happy to ask their employees to complete the survey, but this step would require additional ethics approval, and processes to gain the organisational leadership support, communication and commitment. This would go beyond the project timelines and both Wellbeing SA and CWeX agree not to take this step.

Organisations have two major concerns about providing their ABN:

1) how and in what channel outcomes of the survey are communicated;

2) risks of exposure of such information and reputational issues if the tool scores them poorly.

Thus, it is recommended to not collect ABN at the end of the survey, but instead provide a comment box with an invitation to provide names and contact details if survey participants would like to receive a brief report of the survey in general.

NEXT STEPS

- Seek Wellbeing SA's approval for the above suggested changes;
- Ashkan to update the online tool with the agreed upon changes;
- Continue campaigns to generate more survey responses (200) for an exploratory factor analysis, reliability test and criteria validation tests.

A LIST OF APPENDICS TO NOTE

Appendix 1- RE_ Your COVIDSafe Research Activities request has been approved

Appendix 2 - Profile of Interviewees

Appendix 3 - Summary findings of Interviews & suggested changes

Appendix 4 - Interview Protocol.pdf

Appendix 5 - Responses heatmap

Appendix 6 - Themes & Quotes generated from NVivo

From: Nancy Arthur
To: Connie Zheng; BIS-Executive Services
Cc: Sanjee Perera; Amy Zadow; Daniel Neser
Subject: RE: Your COVIDSafe Research Activities request has been approved
Date: Wednesday, 29 June 2022 5:41:53 AM
Attachments: image001.png
image002.png

Dear Connie,

Please consider this e-mail as approval to extend the interviews to 8 July, 2022.

Kind regards,
Nancy

Nancy Arthur, PhD., R.Psych. (AB Canada)
Dean Research
University of South Australia
UniSA Business
E-mail: nancy.arthur@unisa.edu.au
Professor Emeritus
University of Calgary

I respectfully acknowledge the Kaurna, Boandik and Barngarla First Nations Peoples and their Elders past and present, who are the First Nations' traditional owners of the land of University of South Australia's campuses in Adelaide, Mount Gambier and Whyalla.

From: Connie Zheng <Connie.Zheng@unisa.edu.au>
Sent: Tuesday, 28 June 2022 1:47 PM
To: BIS-Executive Services <BIS-ExecutiveServices@unisa.edu.au>
Cc: Nancy Arthur <Nancy.Arthur@unisa.edu.au>; Sanjee Perera <Sanjee.Perera@unisa.edu.au>; Amy Zadow <Amy.Zadow@unisa.edu.au>; Daniel Neser <Daniel.Neser@unisa.edu.au>
Subject: FW: Your COVIDSafe Research Activities request has been approved
Importance: High

Dear Nancy,

I am writing to ask whether the period of interviews stated from 20/06/2022 to 01/07/2022 can be extended to 8 July 2022, as our RAs have set up some interviews next week, and it is important that

we can receive as much feedback from varieties of SA businesses on the survey tool as possible.

Note: The project completion date on 31 August has been approved – Approval $: 016/2022.

No change in any activities outlined in the earlier application.

Many thanks in advance,
Best regards
Connie

From: Microsoft Power Apps and Power Automate <microsoft@powerapps.com>
Sent: Tuesday, 21 June 2022 4:58 AM
To: zhengcs@unisa.edu.au
Cc: BIS-Executive Services < >
Subject: Your COVIDSafe Research Activities request has been approved

Dear Connie Zheng

Thank you for submitting an application to undertake COVIDSafe Fieldwork activities.

Professor Nancy Arthur, Dean Of Research, has reviewed your application and approved the following request:

Application no: 48
Project: Evaluating Wellbeing SA Healthy Workplace Assessment Tool
Project no: 016/2022
Project description: The project is aimed at developing the heathy workplace assessment tool to assist SA businesses in achieving their workplace health, safety, and wellbeing.
Brief description of field trip and activities to be undertaken: The project team has employed three Research Asssistants (RAs) who will be conducting 5 face-to-face interviews per person. The project lead will train RAs how to conduct interviews, with all protocal and scripts written to guide the interview process. The UniSA Covid-safe protocal has also been sent to RAs to read. All interviewees so far are located in Adelaide CBD. If any study participant is affected by COVID, face-to-face interviews will be cancelled and supplemented by zoom meetings.
For the period from 2022-06-20 to 2022-07-01

If you wish to undertake activities not outlined in this application, a new application will need to be submitted via the online form.

Should you have any questions, please email BIS-ExecutiveServices@unisa.edu.au

Kind regards

BIS Exec Services

Appendix 2 - Profile of Interview participants- demographics

Variables	*N*	Percent
Gender		
Female	10	55.6%
Male	7	38.9%
Non-binary	1	5.6%
Other	0	0%
Prefer not to say	0	0%
Age		
25 and under	0	0%
26-33	1	5.6%
34-41	3	16.7%
42-49	4	22.2%
50-65	10	55.6%
65+	0	0%
Job title		
Owner/Senior Manager Roles	5	27.8%
Mid-Level Manager Role	10	55.6%
Non-Managerial Roles	3	16.7%
Years of work in the current role		
<1 year	4	22.2%
1-3 years	6	33.3%
4-6 years	3	16.7%
7-10 years	3	16.7%
10+ years	2	11.1%
Employment status		
Permanent Full Time	14	77.8%
Permanent Part Time	4	22.2%
Casual Full Time	0	0%
Casual Part Time	0	0%
Industry		
For Profit	9	50.0%
Not for Profit	5	27.8%
Government	4	22.2%
Sector		
Accommodation and Food Services	1	5.6%
Administrative and Support Services	1	5.6%
Agricultural, Forestry and Fishing	0	0%
Arts and Recreation Services	0	0%
Construction	0	0%
Education and Training	1	5.6%
Electricity, Gas, Water and Waste Services	0	0%
Financial and Insurance Services	2	11.1%
Health Care and Social Assistance	6	33.3%
Information Media and Telecommunications	0	0%
Manufacturing	0	0%
Mining	0	0%

Professional, Scientific and Technical Services	1	5.6%
Public Administration and Safety	0	0%
Rental, Hiring and Real Estate Services	0	0%
Retail Trade	0	0%
Transport, Postal and Warehousing	0	0%
Wholesale Trade	1	5.6%
Other	5	27.8%
Size (i.e., total employees of the organisation)		
Micro-enterprise (<10 employees)	1	5.6%
Small (10-49 employees)	6	33.3%
Medium (50-249 employees)	5	27.8%
Large (250+ employees)	6	33.3%
Number of worksites in SA		
1	8	44.4%
2-5	2	11.1%
5-10	0	0%
10-100	4	22.2%
>100	4	22.2%

Appendix 3

Question	Key Notes and Concerns	Suggested changes in the HWC Tool
1 *Is it helpful?*	DN: Consensus is that the tool is helpful, comments ranging from simple agreement to appreciating the variety of questions asked. More extensive answers said it was useful in terms of **bringing up aspects of HSW that they hadn't thought about or considered for their workplace.** RV: The general feedback is that the tool is reasonable. **Smaller organisations find it less relevant or irrelevant.** The same feedback is from a large governmental organisation with 30,000+ employees (Org00099). They say it is too holistic for them and they would like more detailed survey both in terms of themes and **targeted groups of workers**. The most positive overall evaluation comes from managers in middle-sized organisations: **"Your survey is our wishlist"** (Org00099)**.** The quote illustrates the above mentioned by DN idea of HSW aspects to consider for the workplaces.	***These are some positive comments that suggest the HWC tool is useful.*** ***To note both small and large organisations' concerns – either not doing anything (oblivious small firms) or have done work in this area so the tool is not considered as important as it appears to large firms.***
2 *The seven domains*	DN: General agreement that the domains capture most of the aspects. One addition suggested was mental health, which tended to be brought up at various points during the interview. There seems to be an automatic **association between wellbeing and mental health**. Others mentioned accessibility and disability support, and culture (that could address the gap between organisational policy and actual practice). DN: One suggested some kind of domain or some other mechanism capturing the differences between frontline workers (as opposed to office workers in their case). This matched some other brief comments about the diversity of work environments within companies, and sometimes highly individualised workplaces such as in the care sector. RV: General agreement that the sections capture most of the aspects. **Mental health,** psychological health, and depression were suggested. RV: Sometimes it looked that it was **not easy to judge** whether the list of domains is exhaustive as domains looked new or non-conventional (?). E.g., we had the opposite feedback on Data-Driven Measurement domain: It was particularly important (org 00110) vs. Organisations' wellbeing programs are driven by the programs provided by WorkSafe SA and other institutions, rather than by their own data (org00099).	***To address mental health issue, we suggest upfront in the intro to add a phrase:*** ***"The Healthy Workplace Check tool covers seven domains relating to the promotion and protection of workplace health that include both physical and mental health."*** ***We suggest adding a phrase in C5:*** "My workplace has policies and practices to deal with psychosocial risk factors (…….) that contribute to work-related stress and other mental health issues. ***We also have the PSC-4 items included in the survey at the next phase so that will address this feedback.***
3 *Tool length*	DN: **Consensus is the length is fine**. One noted the workforce programs and capability domain was too long. Another noted that it was too short because it missed a relevant domain in their opinion.	***To address the balance in length in each domain, we suggest adding a few items to domains with less items, e.g., domains A & B***

	RV: Mostly the feedback that **the length is just right**. Could be slightly longer to capture the additional items, e.g. work from home (org. 00099). A bit too long (org. 00033; 44).	***with additional items; and reduce some repetitive items from domains C and E.***
4 *Items hard to understand?*	DN: Consensus is there were **no comprehension problems**. One suggested that it's hard to summarise all worksites with the scale provided. RV: There is a **general consensus of no difficulties**. Several minor suggestions: 1. Easier language for broader cohort of workers beyond managerial staff could be required (00033). 2. Review terminology. What is "psychosocial" (Question C5) (00033)? Explain "healthy food" (00077), "data sources" (00099). 3. Some sentences are too long to understand, e.g. Question E5 (00077).	***Item C5 has changed to the following with added explanation on what constitutes 'psychological risk factors'*** "My workplace has policies and practices to deal with psychosocial risk factors (e.g., *heavy workloads, fatigue, poor workplace relationships, incivility, poor organization of work and job design)* that contribute to work-related stress and other mental health issues." ***We need Wellbeing SA to advise with examples on 'healthy food options' in Question C11 and D3.*** ***Data sources were already explained under Domain F: Data-driven Measurement and Evaluation – no change required.*** ***Item E5 has been edited down as:*** " My workplace provides ~~t~~raining programs to prevent harm from abuse, bullying, harassment, discrimination, and violence."
5 *Irrelevancies?*	DN: Consensus is there were **no irrelevancies.** RV: There is **no consistent criticism about relevance** of the question across the participants. Some particular suggestions: 1. The questions look irrelevant for the smallest businesses interviewed (Org00044; 55). 2. Some questions look repetitive and overlapping (Org00022; 33). 3. For the larger organisation may be not easier to consider what level of the organisation the question asks about (Org00077). 4. Some questions were claimed as "repetitive" and "overlapping" by the knowledgeable managers involved in research practices as a part of work.	***We have cross-checked several statements that may appear repetitive but address different aspects of policy, practice, and program, for example:*** "C11. My workplace has policies and practices to provide healthy food and drink options in the workplace." "D3. In my workplace, workers have access to healthy food and drink options." "E7. My workplace provides workers access to programs and services that encourage healthy eating."

		After much debate, we retain these items, and would validate these items further via an EFA of the pilot 50 datasets.
6 *Additions?*	DN: One suggested the ability for open-ended answering, specifically in terms of respondents being able to adequately reflect the diversity of their various different worksites. **A written response box at the end of each question or page was their idea.** A few respondents suggested more items on **mental health**. One mentioned items about **how easy it is to report problems within the organisation**, as well as the degree to which it was **everyone's responsibility of HSW** matters, not just individuals. One mentioned more items on **disability and diversity inclusion, including return to work**.	***Adding a comment box at the end of each domain and/or at the end of the tool is suggested.*** ***With reference to diversity and inclusion, we suggest a few items in Domain A8; and Domain D8 and D9*** A8. At my workplace, managers are aware of resources to support workers with disabilities. D8. My workplace is designed to be accessible to workers with a disability. D9. My workplace provides information about who to contact should workers need modifications to their jobs or workspace to accommodate a disability.
7 *Dedicated OHS person*	DN: Respondents thought either a dedicated OHS person, a safety committee or departmental OHS representatives. DN: Some respondents had trouble understanding this interview question, but in general respondents understand what a dedicated OHS person meant.	***No change for A6***
8 *Employee participation*	SR: Majority believed employees would happily participate given shift in promoting wellbeing at work. Would require communicating data security and privacy information and gaining approval from senior management. **QR codes not a problem (except possibly with older employees).**	***Positive responses from all about involving employees in further survey; but concerns were raised about time constraints and resources required, and ethics requirement to reach sufficient organisations with matched number of employees who would participate in the survey.***
9 *Tool name*	SR: Majority liked 'Healthy Workplace Check'. A few mentioned they didn't like acronyms and the use of 'assessment/checklist' (more geared towards HR).	***Healthy Workplace Check tool is a good name to stay as it is.***
10 *Further participation*	SR: Mixed responses. (1) Majority thought this would be fine but would require approval- if provided with the appropriate information regarding what the data will be used for, what information is being collected, confidentiality, anonymity, data security and storage information. (2) Others had concerns regarding their compliance, liability, legal concerns, divulging sensitive information, publishing negative results which could influence reputation & funding/external donations (for NFPs)	***To examine why SA businesses may have concern on providing their ABN number at the end of survey, we conducted additional analysis using NVivo to generate some themes and quotes (see Appendix 6) for results.***

11 *How can we encourage others?*	SR: **Three major techniques:** **Accessibility-** make it accessible, online, maybe on staff intranet page, marketing campaign. **Importance**- communicating importance of wellbeing and how this tool may benefit their workplace as well as others. **How will it benefit them?** Emphasise that they can get key resources/guides/evidence-based information/feedback at the end. Could develop individualized/targeted responses based on the specific responses of the organization (e.g., an interactive results page).	***CWeX has employed our CMK team to conduct social media campaign to help generate more responses to the survey for validation purposes. Wellbeing SA may need to do likewise.*** ***Report cards with additional support resources are necessary, and at the stage of building, with interactive features in place.***
12 *`Would you act on a report?*	DN: Benchmarking document relative to other organisations would be helpful and would encourage action. Otherwise, general feedback was yes, they would act upon results from the tool, and again in general depending on how bad they were tracking. More detailed responses included stating they would integrate it in their other OHS mechanisms, have their dedicated OHS or HR team deal with the findings or otherwise be grateful to be receiving more OHS data.	
13 *Any other feedback*	SR: **Positive feedback:** good initiative, helpful, thorough, easy to complete, broad, encourages broader thinking around OHS/Wellbeing and identifying gaps, **Missing areas:** culture as own domain, more on psychological wellbeing, more on communication between workplaces/teams, area on actual implementation/application of policies **Shorten:** make 'programs/workforce capability' domain shorter as much longer than other domains **Response format:** possibly add N/A response as 'neither agree/disagree' doesn't always apply	***Include a comment box at the end of the tool.***

Appendix 4

Protocol for content validation of the Wellbeing SA's Healthy Workplaces Tool

Preamble

The Centre for Workplace Excellence (CWeX) is commissioned to help assess Wellbeing SA's Healthy Workplace Check (HWC) – an online assessment Tool. This Tool will eventually be used by SA workplaces to assess their worker health, safety and wellbeing. Our research information sheet provides more information about your participation in the project.

[Provide another copy of the research information sheet for the participant to read.]

I will first get you to complete the Healthy Workplace Check Tool on this iPad. I will then ask you some questions about your impressions of the Tool. At the end of that conversation, I will ask you to complete a brief demographic sheet so that we are able to describe our participants and the organisations where they are working.

[Ask whether the participant has any questions about their involvement.]

[After clarifying their role (if they have questions), ***give the participant the Consent Form*** *and obtain signature.]*

[Give the participant the iPad and ***ask them to complete the Tool****. Note the start and end times and take notes of your observations (e.g., the participant seems to spend longer in section X).]*

[Participant completes and submits the tool.]

I would now like to ask you a few questions about your experience completing the Tool.

1. In your role, can you tell me whether this tool effectively helps your workplace to assess and identify key factors associated with healthy workplaces?
    a. If yes, how?
    b. If not, why? How can the Tool be modified to be of greater use to you and your workplace?

2. Do you feel that the seven sections included in the Tool capture all the key elements in an organisational system that support worker safety, health and wellbeing?
    a. If yes, which sections are most relevant? Why?
    b. If not, what is missing?

3. What did you think the length of the Tool?
    a. Was the length too long; too short; or just right?
    b. If too long, any sections or items you think can be deleted?
    c. If too short, what should be included?

4. Were there any items that you found odd or difficult to understand?
    a. If yes, what are they? How can we modify these to make them clearer to understand?

5. Were there any items related to worker health, safety and wellbeing that you think were irrelevant in this survey?
    a. What items are they? Why are they not relevant?

6. Were there any items about worker health, safety and wellbeing that you feel should be added?
    a. If yes, what are they? Why are they relevant?

7. In Section A, there was an item 'My workplace has a dedicated person responsible for managing worker health, safety and wellbeing.' When you were completing the survey, did you think this item referred to someone being in a health, safety and wellbeing role on a full-time basis?
    a. If yes, what made you think about a full-time role in relation to this item?
    b. How can we modify that item so our participants will include someone who is in a health, safety and wellbeing role even though they are not full-time?

8. We will be conducting another pilot study after this interview study. In that pilot study, we will ask people in roles similar to yours to complete the Healthy Workplace Check tool online. Ideally, we would like to collect data both from managers and employees in a workplace. Do you think workplaces like yours will be open to inviting some of their employees to complete a brief survey as part of pilot testing? [If asked, say we are not aiming to survey all employees but only some].
    a. How can we encourage workplaces to collect data from some of their employees?
    b. Will providing a QR code to the survey that can be displayed at the workplace encourage employee participation?

I would now like to ask a few questions about SA workplaces participating in the survey.

9. What did you think of the Tool's name as 'Healthy Workplace Check'? We've also been discussing Workplace Health Assessment Checklist (the WHAC for short) and the Workplace Health Assessment Tool (the WHAT for short).
    a. Which name would you prefer? Why?
    b. Would either name make more sense to people in roles like yours? Could either encourage them to complete the Tool?
    c. Do you have any recommendations about another name?

10. Wellbeing SA would like to know which workplaces have completed this Tool and how well the workplace have achieved workplace health, safety and wellbeing goals pre- and post-survey. This means Wellbeing SA needs to be able to match the completed response before an intervention with a response after the intervention. This information will be strictly confidential and only used for Wellbeing SA to understand the general pattern of protecting and promoting workplace health, safety and wellbeing in SA.

    Do you think people in roles similar to yours will feel comfortable providing their ABN or organisation name at the end of the Tool for such a purpose?
    a. If not, why?
    b. What information can we provide or changes we can make to the Tool that will make participants more comfortable about sharing their ABN or organisation name with Wellbeing SA?

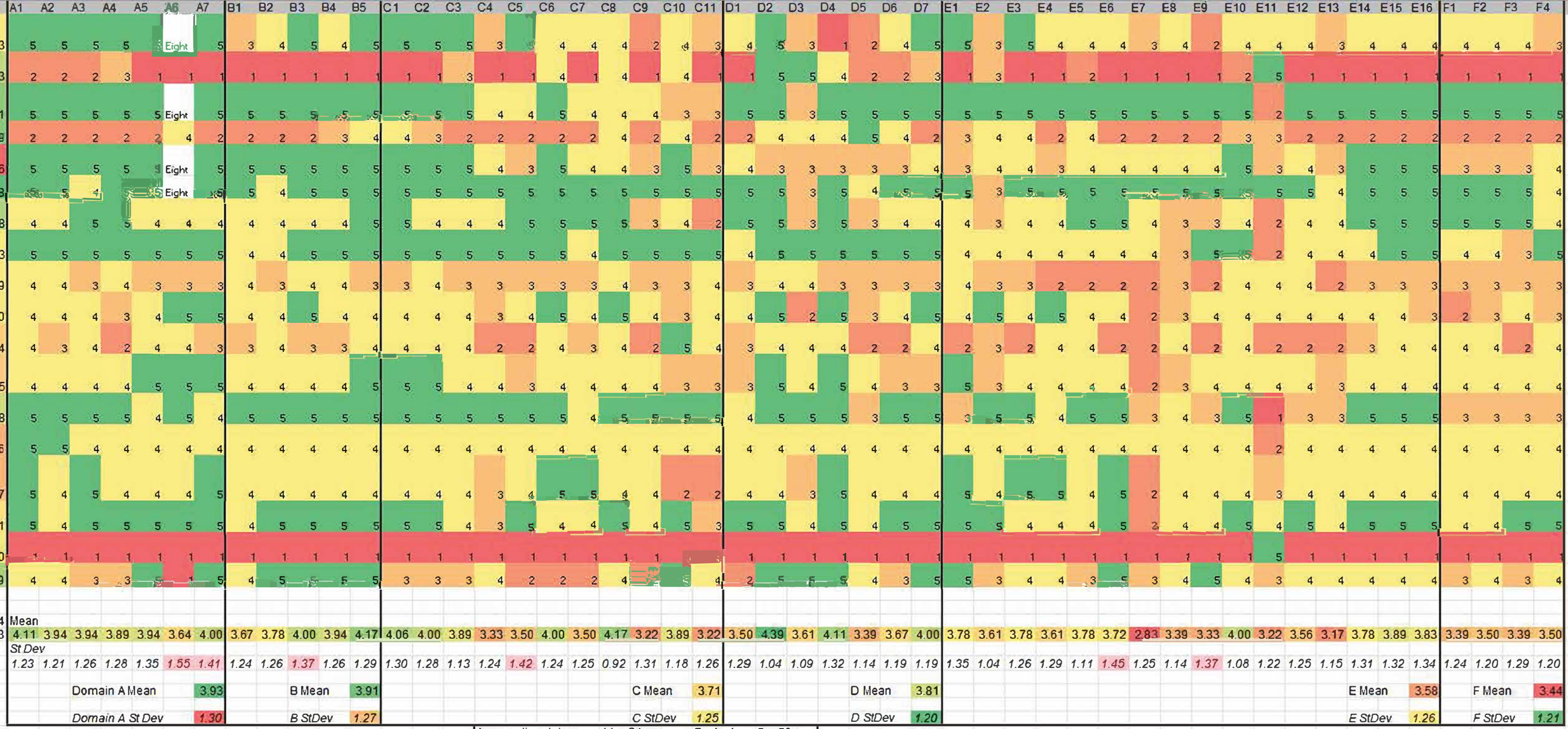
11. What can Wellbeing SA do to encourage SA workplaces to complete this survey?

12. Workplaces that complete the survey will get a customised feedback report immediately after completion. The feedback report will describe their workplace's strengths and weaknesses in supporting worker safety, health and wellbeing. If you were to receive such a report, what actions, if any, would you or your workplace take?

    a. If no action, why not?
    b. If yes/no, what resources will be useful to you when taking action based on your feedback report?

13. Was there any other feedback about this Healthy Workplace Check survey that you wanted to share with me today that we did not cover?

Thank you very much for your time. I would now like you to complete a brief demographic questionnaire.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0:10:43
0:08:33
0:07:11
0:06:59
0:26:06
0:05:58
0:08:08
0:10:23
0:10:39
0:10:00
0:13:34
0:14:25
0:08:48
0:17:26
0:16:47
0:11:31
0:10:00
0:07:59
Eight
0:11:24 Mean
0:04:53
St Dev
Domain A Mean 3.93
Domain A St Dev 1.30
B Mean 3.91
B StDev 1.27
C Mean 3.71
C StDev 1.25
D Mean 3.81
D StDev 1.20
E Mean 3.58
E StDev 1.26
F Mean 3.44
F StDev 1.21
Average time taken 11m 24s
St Dev 4m 53s
Fastest 5m 58s
Slowest 26m 6s

Appendix 6

Q10: What information can we provide or changes we can make to the Tool that will make participants feel more comfortable about sharing their ABN or organisation name with Wellbeing SA?

Aggregate dimension	Theme	Concept	Illustrative quotation
1. Communicating outcomes	Rationale of providing ABN	Being clear upfront about tailored report	Maybe being clear about that upfront, that at the end of the survey, you'll get a tailored report about how well your organization is. (00077) You're saying about giving us information on that results? Yeah, that would need to make a decision whether we were going to put our name to it and support it. (00110)
		Measuring up against other organisation	I'd hoped people would want to be transparent and want to be included in the study and want to know how they measure up against other organizations. Now, where do we fit in terms of best practice? (Org 0001)
		What are you going to use it for	As soon as they are told how it was going to be used there is no problem. [...] What are you going to use it for? Let us know. (Org 0007)
	Research institution reputation	Government is not doing enough [for promoting wellbeing]	Some industry may feel that the government is not doing enough and we can do much. (00011)
		External researcher has more chance	Might be a little bit of query about what's happening with the data, or if it's probably an external research provider, or a university, or even Wellbeing SA, probably got more chance. (00077)

2. Weighing risks and guarantees	Data security and usage guarantees	Adherence to the privacy and legislation	Privacy policy, making sure it adheres to all the relevant legislation, but also what they're gonna get out of it. (00077) As long as you know, it's kept confidential I can't say why not. (Org 0006)
		Clear indication about using and sharing	I think there was a clear indication that how long the data will be stored, for what purposes, […] whether it'd be passed on to third parties. (00022) Probably, it might have been covered in this, […] understanding how that information will be used and shared. (Org 0003)
		Guarantees of data storage security	Providing ABN can be sensitive to a lot of people. Especially if whoever is organizing the survey can guarantee that the data will be held in a secure database or can't be used for any other purposes. So, it opens to a lot of uncertainty. So, I don't think it's a good idea to ask people for their ABN. (00055)
	Governmental prosecution	It gives the intervene too much	You may not want to create this out trouble for my company, or it gives the intervene too much and then I'll be in trouble. (00011)
		The role of department is to prosecute	They do very little for promotion for worker health, but they do prosecute. […] Because the whole role of that department in government is to prosecute. (00033)
	Reputational risks	Concerned about result of the survey	I think the only reason why they wouldn't as if they were concerned about the result of their survey because you know… […] what if we [were] really crap? (Org 0004)
		It affects reputation [in face of jobseekers]	Because it affects your reputation […] It's a big thing for people when they're looking for jobs is work environment. (Org 0004)
		Outside of control in a large organisation	For a large or extra-large organizations, probably outside of the completers control. […] But for a large person, they would just be like, frightened. (Org 0002)

Encoraging employees to fill the survey

COMMUNICATING THE SURVEY

- **Story about data**
  - It's a bonus of data
  - Planning for the next 12 months
  - Report
  - Your answers to gauge where you at
  - Wanting to put their wellbeing strategy together
- **Survey design**
  - I want factual information prior the survey
  - No more than 10 mins
  - Made it purely health and wellbeing
  - Allow a reasonable timeframe for organisation
  - Questions need to be more specific

ORGANISATIONAL CULTURE

- **Cagey organizations**
  - Disability sector can be cagey
  - It is depending on what I would give you
- **Proactive in wellbeing**
  - We have a strong focus on wellbeing
  - Mental wellbeing is the big thing at the moment

ORGANISATIONAL SUPPORT

- **Championed by someone**
  - Involvment of the social committee
  - Mananger of safety is driving
  - Someone championing
- **Supported by leaders**
  - Approval from leadership
  - Leaders want feedback
  - Supported by the executives

REACHING EMPLOYEES

- **Allocating a team of respondents**
  - Getting a team to participate
  - How many workers you need
  - Looking within a corporate
- **Combining Emails and QR**
  - Communicate via email
  - Either way is fine
  - QR codes are convenient
- **QR codes are problematic**
  - Older employees are not proficient
  - Older volunteers and conspiracy
  - People are turned off QR Code
- **SMS via phone database**
  - We had all employees mobile numbers

SURVEYED OUT WORKERS

- Employees are surveyed out
- Numerous surveys
- Struggling to get people to do surveys

Tools name

ACRONYMS' AMBIGUITY

- **Acronyms are fine**
  - Acronym is intriguing
  - Fine acronyms
  - In our job acronyms are everywhere
- **Acronyms are problematic**
  - Acronyms are problematic
  - Acronyms are annoying in the industry

ALTERNATIVES

- **No difference**
  - Either name would work
  - It's all very close
- **Worker welless check**
  - It qualifies it is for workers

HEALTHY WORK-PLACE CHECK

- **Healthy workplace check +**
  - Check is for yourself
  - Health is a good banner
  - Idea of being healthy
- **Healthy workplace check –**
  - It's a tool. What are you checking?

WORKPLACE HEALTH ASSESSMENT CHECKLIST

- **Workplace health assessment checklist +**
  - The checklist sounds good
  - WHAC sounds good
- **Workplace health assessment checklist –**
  - As I go through every single one
  - It does not feel a checklist
  - WHAC is dangerous

WORKPLACE HEALTH ASSESSMENT TOOL

- **Workplace Health Asesment Tool +**
  - A tool you can use
  - Tool is not a test from the gvt agency
- **Workplace Health Asesment Tool –**
  - Mental health assessment, it's always clinical
  - It is survey not a tool
  - People are our tools
  - The word health is medical

Providing ABN or a name

COMMUNICATING OUTCOMES

- **Rationale of providing ABN**
  - Being clear upfront about tailored report
  - Measuring up against other organisation
  - What are you going to use it for
- **Research institution reputation**
  - Government does not promote wellbeing
  - University has more chances

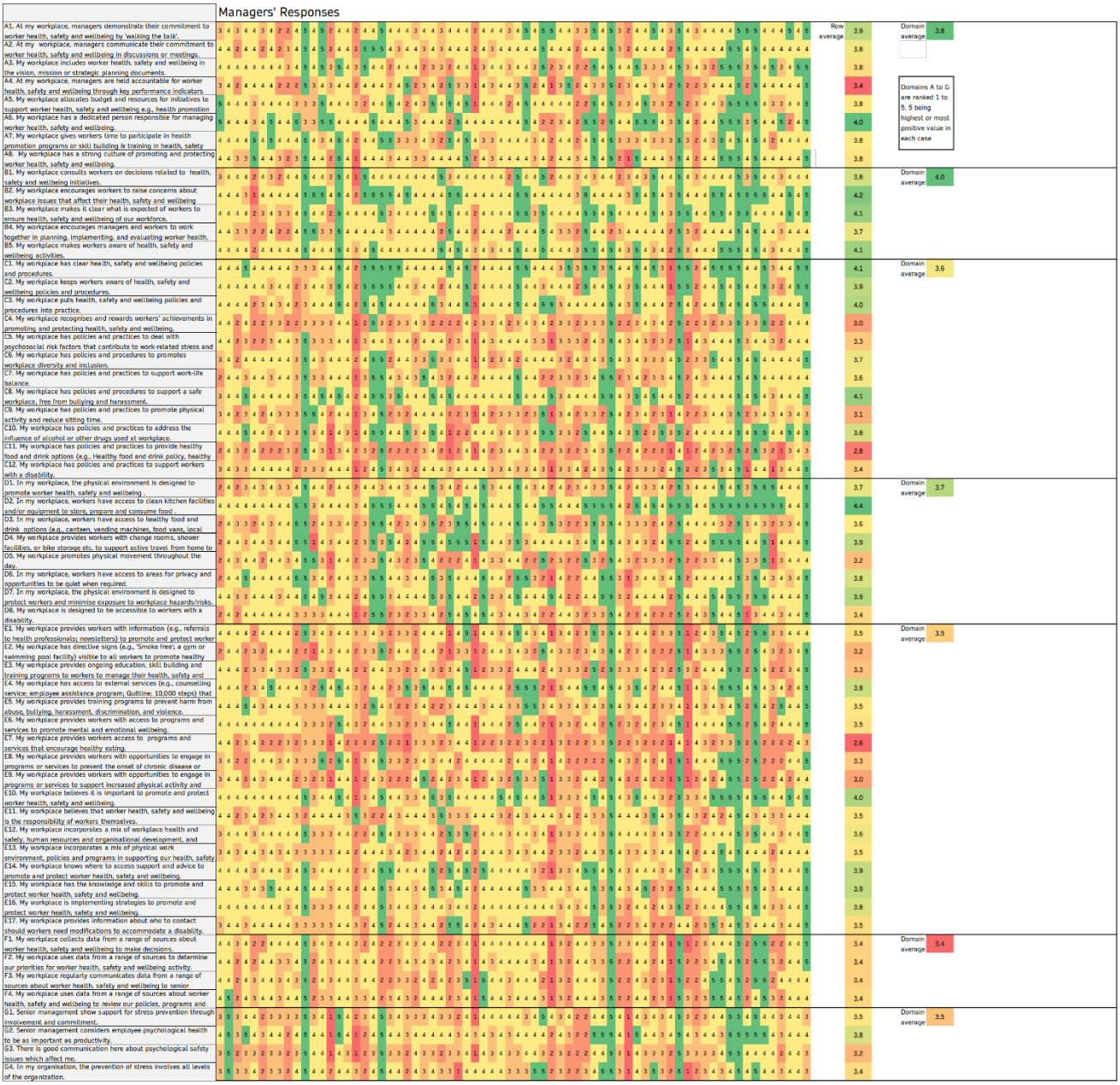
WEIGHING RISKS AND GUARANTEES

- **Data security and usage guarantees**
  - Making sure it adheres to all the relevant legislation
  - Clear indication about using and sharing
  - Guarantees of data storage security
- **Governmental prosecution**
  - It gives the intervene too much
  - The role of department is to prosecute
- **High ranked approval**
  - Our cheif officer has to pove it
  - He's the CEO of the business. I don't.
  - I will have to ask permission from the goup [of branches]
- **Reputational risks**
  - Concerned about result of the survey
  - It affects reputation [in front of jobseekers]
  - Outside of control in a large organisation

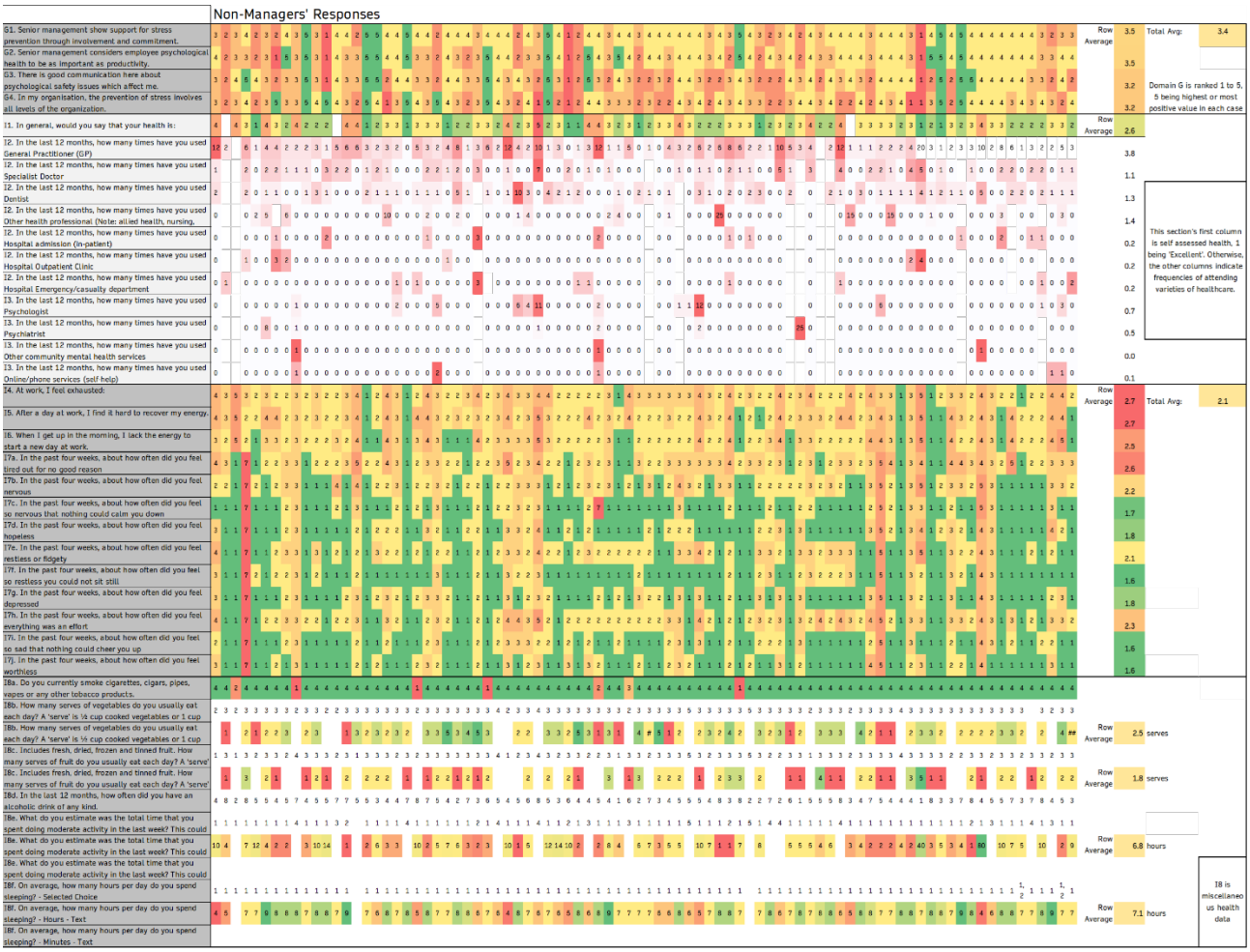
Preliminary interview analysis.

Thematic summaries of three questions related to survey participation.

Appendix 5 – Heat Maps for Managers' and Non-Managers' HWC Responses




Managers' Responses
I1. In general, would you say that your health is:
Row Average 2.6
I2. In the last 12 months, how many times have you used General Practitioner (GP) 3.0
I2. In the last 12 months, how many times have you used Specialist Doctor 1.1
I2. In the last 12 months, how many times have you used Dentist 1.3
I2. In the last 12 months, how many times have you used Other health professional (Note: allied health, nursing, Aboriginal health 2.3
I2. In the last 12 months, how many times have you used Hospital admission (in-patient) 0.1
I2. In the last 12 months, how many times have you used Hospital Outpatient Clinic 0.1
I2. In the last 12 months, how many times have you used Hospital Emergency/casualty department 0.2
I3. In the last 12 months, how many times have you used Psychologist 0.6
I3. In the last 12 months, how many times have you used Psychiatrist 0.1
I3. In the last 12 months, how many times have you used Other community mental health services 0.2
I3. In the last 12 months, how many times have you used OnLine/phone services (self-help) 0.8
This section's first column is self assessed health, 1 being 'Excellent'. Otherwise, the other columns indicate frequencies of attending varieties of healthcare.
I4. At work, I feel exhausted: 2.6
Domain average 1.9
I5. After a day at work, I find it hard to recover my energy. 2.6
I6. When I get up in the morning, I lack the energy to start a new day at work. 2.1
I7a. In the past four weeks, about how often did you feel tired out for no good reason 2.4
I7b. In the past four weeks, about how often did you feel nervous 2.1
I7c. In the past four weeks, about how often did you feel so nervous that nothing could calm you down 1.4
I7d. In the past four weeks, about how often did you feel hopeless 1.5
I7e. In the past four weeks, about how often did you feel restless or fidgety 1.9
I7f. In the past four weeks, about how often did you feel so restless you could not sit still 1.4
I7g. In the past four weeks, about how often did you feel depressed 1.6
I7h. In the past four weeks, about how often did you feel everything was an effort 1.9
I7i. In the past four weeks, about how often did you feel so sad that nothing could cheer you up 1.5
I7j. In the past four weeks, about how often did you feel worthless 1.4
This section of Domain I is ranked 1 to 7, 1 indicating the most desireable response.
I8a. Do you currently smoke cigarettes, cigars, pipes, vapes or any other tobacco products.
I8b. How many serves of vegetables do you usually eat each day? A 'serve' is ½ cup cooked vegetables or 1 cup of salad. - Selected
I8b. How many serves of vegetables do you usually eat each day? A 'serve' is ½ cup cooked vegetables or 1 cup of salad. - Enter 2.5 serves
I8c. Includes fresh, dried, frozen and tinned fruit. How many serves of fruit do you usually eat each day? A 'serve' is 1 medium piece or 1.6 serves
I8c. Includes fresh, dried, frozen and tinned fruit. How many serves of fruit do you usually eat each day? A 'serve' is 1 medium piece or
I8d. In the last 12 months, how often did you have an alcoholic drink of any kind.
I8e. What do you estimate was the total time that you spent doing moderate activity in the last week? This could include brisk walking, 5.3 hours
I8e. What do you estimate was the total time that you spent doing moderate activity in the last week? This could include brisk walking,
I8e. What do you estimate was the total time that you spent doing moderate activity in the last week? This could include brisk walking,
I8f. On average, how many hours per day do you spend sleeping? - Selected Choice
I8f. On average, how many hours per day do you spend sleeping? - Hours - Text 7.0 hours
I8f. On average, how many hours per day do you spend sleeping? - Minutes - Text
I8 is miscellaneous health data


Non-Managers' Responses
G1. Senior management show support for stress prevention through involvement and commitment.
G2. Senior management considers employee psychological health to be as important as productivity.
G3. There is good communication here about psychological safety issues which affect me.
G4. In my organisation, the prevention of stress involves all levels of the organization.
I1. In general, would you say that your health is:
I2. In the last 12 months, how many times have you used General Practitioner (GP)
I2. In the last 12 months, how many times have you used Specialist Doctor
I2. In the last 12 months, how many times have you used Dentist
I2. In the last 12 months, how many times have you used Other health professional (Note: allied health, nursing,
I2. In the last 12 months, how many times have you used Hospital admission (in-patient)
I2. In the last 12 months, how many times have you used Hospital Outpatient Clinic
I2. In the last 12 months, how many times have you used Hospital Emergency/casualty department
I3. In the last 12 months, how many times have you used Psychologist
I3. In the last 12 months, how many times have you used Psychiatrist
I3. In the last 12 months, how many times have you used Other community mental health services
I3. In the last 12 months, how many times have you used Online/phone services (self-help)
I4. At work, I feel exhausted:
I5. After a day at work, I find it hard to recover my energy.
I6. When I get up in the morning, I lack the energy to start a new day at work.
I7a. In the past four weeks, about how often did you feel tired out for no good reason
I7b. In the past four weeks, about how often did you feel nervous
I7c. In the past four weeks, about how often did you feel so nervous that nothing could calm you down
I7d. In the past four weeks, about how often did you feel hopeless
I7e. In the past four weeks, about how often did you feel restless or fidgety
I7f. In the past four weeks, about how often did you feel so restless you could not sit still
I7g. In the past four weeks, about how often did you feel depressed
I7h. In the past four weeks, about how often did you feel everything was an effort
I7i. In the past four weeks, about how often did you feel so sad that nothing could cheer you up
I7j. In the past four weeks, about how often did you feel worthless
I8a. Do you currently smoke cigarettes, cigars, pipes, vapes or any other tobacco products.
I8b. How many serves of vegetables do you usually eat each day? A 'serve' is ½ cup cooked vegetables or 1 cup
I8b. How many serves of vegetables do you usually eat each day? A 'serve' is ½ cup cooked vegetables or 1 cup
I8c. Includes fresh, dried, frozen and tinned fruit. How many serves of fruit do you usually eat each day? A 'serve'
I8c. Includes fresh, dried, frozen and tinned fruit. How many serves of fruit do you usually eat each day? A 'serve'
I8d. In the last 12 months, how often did you have an alcoholic drink of any kind.
I8e. What do you estimate was the total time that you spent doing moderate activity in the last week? This could
I8e. What do you estimate was the total time that you spent doing moderate activity in the last week? This could
I8e. What do you estimate was the total time that you spent doing moderate activity in the last week? This could
I8f. On average, how many hours per day do you spend sleeping? - Selected Choice
I8f. On average, how many hours per day do you spend sleeping? - Hours - Text
I8f. On average, how many hours per day do you spend sleeping? - Minutes - Text
Row Average
3.5
2.6
3.8
1.1
1.3
1.4
0.2
0.2
0.2
0.7
0.5
0.0
0.1
2.7
2.7
2.5
2.6
2.2
1.7
1.8
2.1
1.6
1.8
2.3
1.6
1.6
2.5 serves
1.8 serves
6.8 hours
7.1 hours
Total Avg:
3.4
Domain G is ranked 1 to 5, 5 being highest or most positive value in each case
This section's first column is self assessed health, 1 being 'Excellent'. Otherwise, the other columns indicate frequencies of attending varieties of healthcare.
Total Avg:
2.1
I8 is miscellaneous health data

Appendix 6 – All HWC items & Factor loadings

Item	*Factor loadings*
Domain A: Leadership Commitment and communication	
1. At my workplace, managers demonstrate their commitment to worker health, safety and wellbeing by 'walking the talk'.	.80
2. At my workplace, managers communicate their commitment to worker health, safety and wellbeing in discussions or meetings.	.77
3. My workplace includes worker health, safety and wellbeing in the vision, mission or strategic planning documents.	.52
4. At my workplace, managers are held accountable for worker health, safety and wellbeing through key performance indicators (KPIs), performance reviews, position descriptions or organisational reporting.	.60
5. My workplace allocates budget and resources for initiatives to support worker health, safety and wellbeing e.g., health promotion programs, skills building & training, changes of physical environment.	.35
*6. My workplace has a dedicated person responsible for managing worker health, safety and wellbeing.	.06
7. My workplace gives workers time to participate in health promotion programs or skill building & training in health, safety and wellbeing.	.48
8. My workplace has a strong culture of promoting and protecting worker health, safety and wellbeing.	.74
Domain B: Worker participation and consultation	
1. My workplace consults workers on decisions related to health, safety and wellbeing initiatives.	.54
2. My workplace encourages workers to raise concerns about workplace issues that affect their health, safety and wellbeing without fear of retaliation.	.77
3. My workplace makes it clear what is expected of workers to ensure health, safety and wellbeing of our workforce.	.53
4. My workplace encourages managers and workers to work together in planning, implementing, and evaluating worker health, safety and wellbeing activity.	.47
5. My workplace makes workers aware of health, safety and wellbeing activities.	.49
Domain C: Policies, practices and procedures	
1. My workplace has clear health, safety and wellbeing policies and procedures.	.92
2. My workplace keeps workers aware of health, safety and wellbeing policies and procedures.	.88
3. My workplace puts health, safety and wellbeing policies and procedures into practice.	.79
4. My workplace recognises and rewards workers' achievements in promoting and protecting health, safety and wellbeing.	.62
5. My workplace has policies and practices to deal with psychosocial risk factors that contribute to work-related stress and other mental health issues (e.g., heavy workloads, fatigue, poor workplace relationships, incivility).	.78

6. My workplace has policies and procedures to promotes workplace diversity and inclusion.	.64
7. My workplace has policies and practices to support work-life balance.	.60
8. My workplace has policies and procedures to support a safe workplace, free from bullying and harassment.	.44
9. My workplace has policies and practices to promote physical activity and reduce sitting time.	.40
10. My workplace has policies and practices to address the influence of alcohol or other drugs used at workplace.	.47
11. My workplace has policies and practices to provide healthy food and drink options (e.g., Healthy food and drink policy, healthy food choices for social occasions) in the workplace.	.52
12. My workplace has policies and practices to support workers with a disability.	.42
Domain D: Physical work environment	
1. In my workplace, the physical environment is designed to promote worker health, safety and wellbeing.	.66
2. In my workplace, workers have access to clean kitchen facilities and/or equipment to store, prepare and consume food.	.38
3. In my workplace, workers have access to healthy food and drink options (e.g., canteen, vending machines, food vans, local shops, events and meetings include healthy options).	.51
4. My workplace provides workers with change rooms, shower facilities, or bike storage etc. to support active travel from home to workplace.	.31
5. My workplace promotes physical movement throughout the day.	.34
6. In my workplace, workers have access to areas for privacy and opportunities to be quiet when required.	.49
7. In my workplace, the physical environment is designed to protect workers and minimise exposure to workplace hazards/risks.	.82
8. My workplace is designed to be accessible to workers with a disability.	.40
Domain E: Programs and workforce capability	
1. My workplace provides workers with information (e.g., referrals to health professionals; newsletters) to promote and protect worker health, safety and wellbeing.	.68
2. My workplace has directive signs (e.g., 'Smoke free'; a gym or swimming pool facility) visible to all workers to promote healthy living with positive behaviours.	.55
3. My workplace provides ongoing education, skill building and training programs to workers to manage their health, safety and wellbeing.	.70
*4. My workplace has access to external services (e.g., counselling service; employee assistance program; Quitline; 10,000 steps) that support worker health, safety and wellbeing.	.25
5. My workplace provides training programs to prevent harm from abuse, bullying, harassment, discrimination, and violence.	.38
6. My workplace provides workers with access to programs and services to promote mental and emotional wellbeing.	.62

7. My workplace provides workers access to programs and services that encourage healthy eating.	.92
8. My workplace provides workers with opportunities to engage in programs or services to prevent the onset of chronic disease or illness e.g., skin checks, hearing assessments, onsite or subsidised vaccinations	.44
9. My workplace provides workers with opportunities to engage in programs or services to support increased physical activity and reduced sitting time, e.g., team challenges/sports, walking groups, subsidised fitness facility memberships.	.74
10. My workplace believes it is important to promote and protect worker health, safety and wellbeing.	.61
*11. My workplace believes that worker health, safety and wellbeing is the responsibility of workers themselves.	.15
12. My workplace incorporates a mix of workplace health and safety, human resources and organisational development, and workplace health promotion strategies when addressing worker health, safety and wellbeing.	.74
13. My workplace incorporates a mix of physical work environment, policies and programs in supporting our health, safety and wellbeing activities.	1.00
14. My workplace knows where to access support and advice to promote and protect worker health, safety and wellbeing.	.88
15. My workplace has the knowledge and skills to promote and protect worker health, safety and wellbeing.	.78
16. My workplace is implementing strategies to promote and protect worker health, safety and wellbeing.	.87
17. My workplace provides information about who to contact should workers need modifications to accommodate a disability.	.53
Domain F: Data-driven measurement and evaluation	
1. My workplace collects data from a range of sources about worker health, safety and wellbeing to make decisions.	.85
2. My workplace uses data from a range of sources to determine our priorities for worker health, safety and wellbeing activity.	.96
3. My workplace regularly communicates data from a range of sources about worker health, safety and wellbeing to senior management.	.84
4. My workplace uses data from a range of sources about worker health, safety and wellbeing to review our policies, programs and practices.	.86

Appendix 7 - Individual item factor loadings

Domain	Item	Standardised Regression Weights (1 Domain)	Standardised Regression Weights (2 Domains Combined)
A	1	.50	.56
	2	.59	.66
	3	.31	.11
	4	.72	.56
	5	.07	.10
	6	.38	.18
	7	.91	.60
B	1	.64	.66
	2	.84	.69
	3	.69	.65
	4	.76	.80
	5	.55	.44
C	1	.38	.35
	2	.38	.36
	3	.46	.37
	4	.56	.47
	5	.77	.67
	6	.41	.42
	7	.61	.63
	8	.42	.42
	9	.43	.49
	10	.32	.38
	11	.39	.40
	12	.61	.69
D	1	.46	.39
	2	.36	.23
	3	.33	.35
	4	.53	.51
	5	.40	.48

	6	.85	.76
	7	.48	.50
	8	.64	.70
E	1	.71	.73
	2	.70	.60
	3	.62	.57
	5	.43	.37
	6	.76	.76
	7	.50	.34
	8	.65	.55
	9	.69	.61
	10	.68	.68
	12	.75	.76
	13	.51	.55
	14	.65	.63
	15	.61	.56
	16	.67	.66
	17	.55	.52
F	1	.95	.82
	2	.82	.77
	3	.86	.74
	4	.87	.73

Appendix 8 - Kessler Psychological Distress Scale (K-10)

1. In the past 4 weeks, about how often did you feel tired out for no good reason?
2. In the past 4 weeks, about how often did you feel nervous?
3. In the past 4 weeks, about how often did you feel so nervous that nothing could calm you down?
4. In the past 4 weeks, about how often did you feel hopeless?
5. In the past 4 weeks, about how often did you feel restless or fidgety?
6. In the past 4 weeks, about how often did you feel so restless you could not sit still?
7. In the past 4 weeks, about how often did you feel depressed?
8. In the past 4 weeks, about how often did you feel that everything was an effort?
9. In the past 4 weeks, about how often did you feel so sad that nothing could cheer you up?
10. In the past 4 weeks, about how often did you feel worthless?

Burnout Assessment tool (BAT)

1. At work, I feel mentally exhausted
3. After a day at work, I find it hard to recover my energy
5. When I get up in the morning, I lack the energy to start a new day at work

PSC-4

1. Senior management show support for stress prevention through involvement and commitment
2. Senior management considers employee psychological health to be as important as productivity
3. There is good communication here about psychological safety issues which affect me
4. In my organization, the prevention of stress involves all levels of the organization