

RESOURCES
AND ENERGY
INDUSTRY

Workforce & Leaders Mental Health Research

Phase 1
SUMMARY REPORT
DECEMBER 2021



AMMA
AUSTRALIAN
RESOURCES &
ENERGY GROUP

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Introduction

In 2021 AMMA partnered with specialist psychology research firm, Mindshape, to undertake an Australian first national and industry-specific research program, the *Resources and Energy Industry Workforce and Leaders Mental Health Research Program*.

Delivering meaningful findings and recommendations at both company and industry levels, the program saw Mindshape independently develop and conduct the first round of a National Industry Survey (National Survey) of participating AMMA members in the resources and energy industry.

The National Survey sought to investigate employees' mental health, well-being, service intervention usage and satisfaction, psychological safety, and coping mechanisms. The survey's goals were to identify areas of need, patterns of strength, and to aid in the development of focused interventions.

This document provides a snapshot of key findings, insights and recommendations at the industry level. AMMA has taken the findings and recommendations from the Mindshape Industry Report and made specific recommendations for company-led initiatives to improve mental health and wellbeing in the workplace at the enterprise level.

Aggregating company findings in this way will further inform the development of industry-tailored campaigns and interventions to maximise collaboration, improve the wellbeing of leaders and employees and assist in the management and recovery from the impacts of COVID-19 on mental health.

DISCLAIMER: This document is for general information only and not to be construed as advice. Resources and energy employers are undertaking many initiatives to improve workplace mental health and wellbeing. Given the differing maturity levels of these initiatives, organisations need to assess individually what the best next steps are for each business.

Executive Summary

The National Resources Industry Survey ('National Survey') was conducted with 1102 consenting participants, 72.8% of which were males and 26.3% female.

DEPRESSION

Almost 60% of National Survey participants scored 'normal' levels of depression, with 35% scoring 'mild' to 'moderate' depression and 5.7% 'severe/extremely severe' depression.

Higher depression scores were recorded for males and those in operations roles or working mixed day/night shifts, than females, managers, team leaders and those working day shifts exclusively.

ANXIETY & STRESS

The proportion of participants scoring 'severe' to 'extremely severe' in anxiety and stress (measured separately) was much lower than two comparative general population samples recorded during COVID-19.

1-in-13 National Survey participants (7.8%) scored 'severe/extremely severe' in anxiety; and 1-in-29 (3.4%) scored 'severe/extremely severe' in stress.

However, 'mild' scores in both anxiety (14.1%) and stress (42.3%) were higher amongst National Survey participants than the two comparative general population samples.

It is recommended employers provide mental health education to staff, leaders and managers, to better recognise, understand and manage the signs and symptoms of depression, anxiety and stress.

ALCOHOL USE

Lower proportions of both male and female participants scored 'low' and higher proportions scored 'hazardous' in alcohol use than a pre-COVID general population sample.

Likely alcohol dependence was recorded only in 10.1% of males and 5.5% of females.

To combat alcohol use, targeted workshops or other education for demographics reporting higher alcohol use is recommended. This includes males, staff in operations and FIFO roles and those working mixed day/night shifts.

DISTRESS & RESILIENCE

Only 1-in-17 participants reported 'very high' distress scores (5.9%). Again, this was lower than comparative general population data recorded during COVID-19 (13.0%).

Participants in operations roles had higher distress scores than those in supervisor/team leader roles.

18.7% of participants scored 'high', 61.4% scored 'moderate' and 19.9% scored 'low' in resilience. Males, FIFO workers and managers / team leaders were all groups scoring high in resilience.

It is recommended employers investigate a potential role for resilience programs in the workplace.

IMPACT OF LIFE EVENTS

The 'impact of life events' in the workplace was reported by 64% of participants as neutral or non-existent, by 8% as positive and by 28% as negative.

Negative themes included disruption to FIFO practices and roster changes generally, more time spent away from family and greater workload due to less personnel. Positive themes included flexi-working, work/life balance and realisations of 'what's important'.

SERVICE USE & SATISFACTION

93% of participants were offered EAP services and 64% were offered industry counselling. Roughly 1-in-4 (23%) accessed support provided by their employer in the 12 months prior to the National Survey.

This is a much stronger uptake than the 5-10% reported in other research. Despite this, it is recommended employers address possible barriers to further EAP uptake revealed in this research, such as perceived lack of confidentiality, trust and privacy, stigma and quality issues.

OTHER FINDINGS

The National Survey also revealed insightful results regarding sleep, quality of life (QoL), coping approaches and decision-making styles in the industry.

The research highlights differences amongst several demographic groups. For instance, males reported higher depression and alcohol use scores than females; while FIFO workers had higher scores for anxiety, alcohol use and dependent decision-making style than non-FIFO workers.

Findings by operational interest and gender are explored further on pages 18-19, including recommendations for tailored interventions.

Findings and Recommendations by Research Area

DEPRESSION, ANXIETY, AND STRESS

National Survey participants recorded higher scores of 'mild' depression, anxiety and stress, but lower scores of 'severe' to 'extremely severe', than general population comparisons.

The Depression Anxiety Stress Scale (DASS; Lovibond & Lovibond, 1995) was used to assess negative emotional states via separate subscales:

- The Depression scale measures dysphoria (dissatisfaction with life), despair, life devaluation, self-deprecation, loss of interest, anhedonia (inability to enjoy pleasure), and lethargy (i.e., a tendency to do nothing).
- The Anxiety scale evaluates autonomic arousal, skeletal muscle reactions, situational anxiety, and subjective anxious experience.
- The Stress scale rates difficulties relaxing, nervous arousal, agitation, irritability, and impatience.

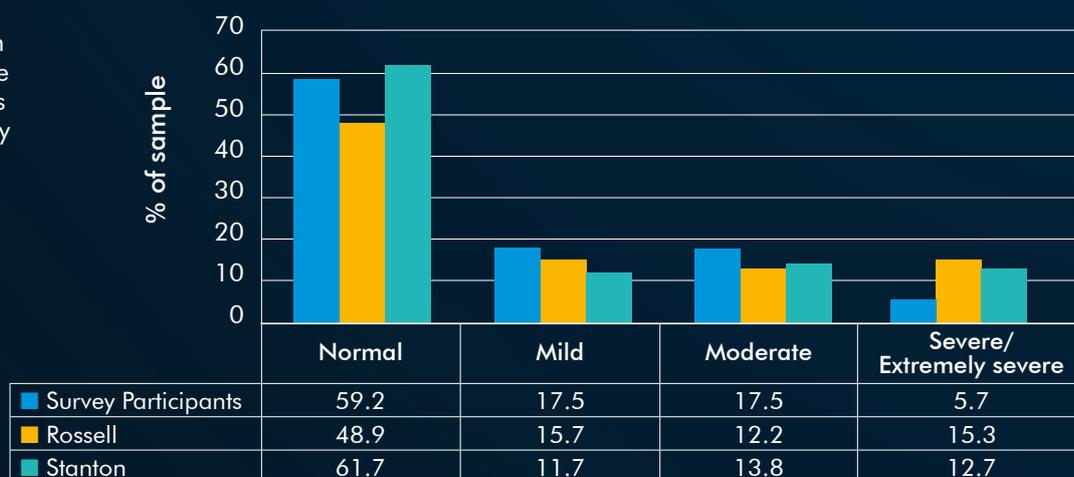
The DASS is not a clinical diagnostic tool, although it does assign a severity level to each scale (normal, mild, moderate, severe).

MINDSHAPE FINDINGS

The following figures show how depression, anxiety and stress scores of National Survey participants compared to normative COVID-19 population data from Rossell et al. (2021) and Stanton et al. (2020).

The proportion of participants with 'mild' or 'moderate' depression scores was higher, but the proportion of participants with 'severe' or 'extremely severe' depression scores was lower than comparative general population samples.

DEPRESSION: SURVEY PARTICIPANTS WITH COMPARATIVE NORMS



Male participants had significantly higher depression scores than females.



Participants in operations roles had significantly higher depression scores than those in executive/manager and supervisor/team leader roles.



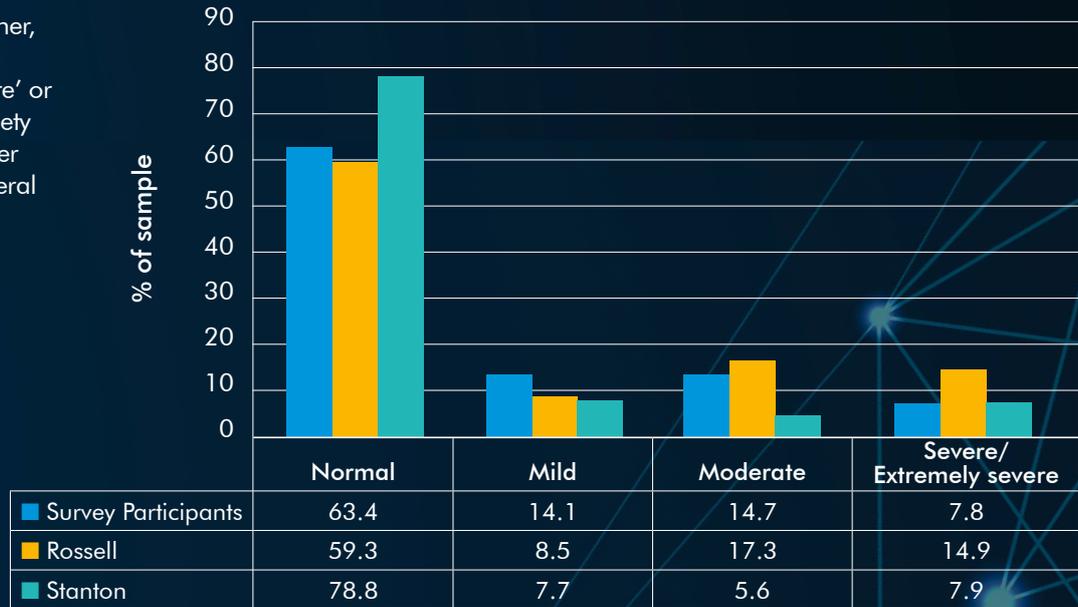
Participants working day shifts had significantly lower depression scores than those working mixed day/night shifts.

AMMA RECOMMENDATIONS

- Provide mental health education to your staff – especially to leaders and managers – to help recognise, understand, empathise with and manage the signs and symptoms of depression, anxiety and stress.
- Provide education materials which focus on signs such as substance use, anger, irritability, and risk-taking behaviour (which are often greater indicators of depression – especially in males – than withdrawal and introspection; Oliffe et al., 2019).
- Continue to work on reducing stigma – one of the biggest barriers to help-seeking – and initiate preventative actions to reduce depression and suicide.

The proportion of participants with 'mild' anxiety scores was higher, but the proportion of participants with 'severe' or 'extremely severe' anxiety scores was slightly lower than comparative general population samples.

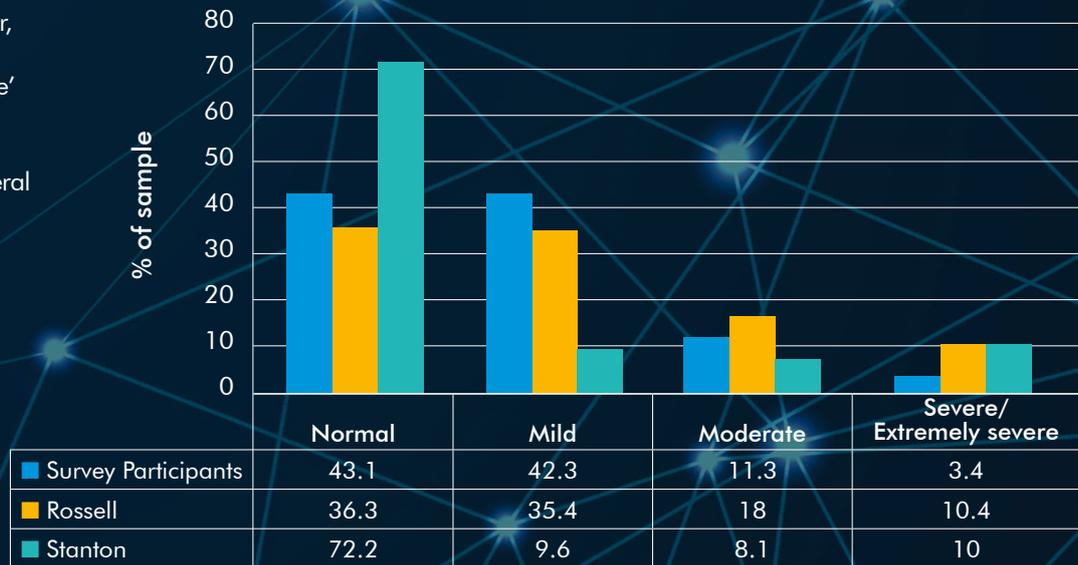
ANXIETY: SURVEY PARTICIPANTS WITH COMPARATIVE NORMS



Participants in FIFO roles reported significantly higher anxiety scores than those in non- FIFO roles.

The proportion of participants with 'mild' stress scores was higher, but the proportion of participants with 'severe' to 'extremely severe' stress scores was lower than comparative general population samples.

STRESS: SURVEY PARTICIPANTS WITH COMPARATIVE NORMS



- Provide social connectedness facilities that support targeted awareness and help seeking behaviour.
- Provide webinars/workshops for depression that teach coping skills, seeking helping and how to access treatment, specifically targeted for demographics with higher depression scores.
- Investigate the specific job factors that may be contributing to anxiety in your organisations, especially for FIFO roles (e.g., consider lack of job control, certainty and support network etc).

Findings and Recommendations by Research Area

ALCOHOL USE

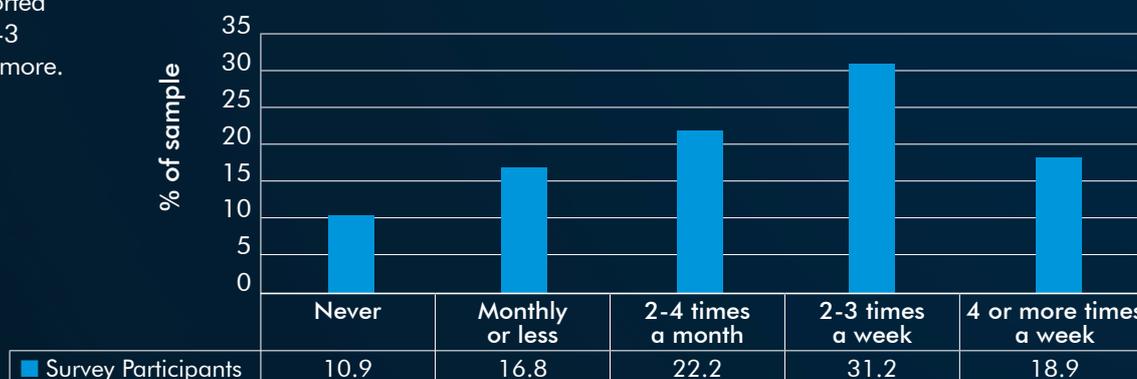
1 in 10 males (10.1%) and 1 in 18 females (5.5%) reported that alcohol dependence is likely. Lower proportions of both males and females scored 'low' and higher proportions scored 'hazardous', than general population data.

The Alcohol Use Disorders Identification Test (AUDIT), a 10-item self-report questionnaire developed by the World Health Organisation (Shields et al., 2004), was used to assess for hazardous and harmful alcohol consumption; it is divided into three subscales that assess hazardous alcohol use, dependency symptoms, and harmful alcohol use.

MINDSHAPE FINDINGS

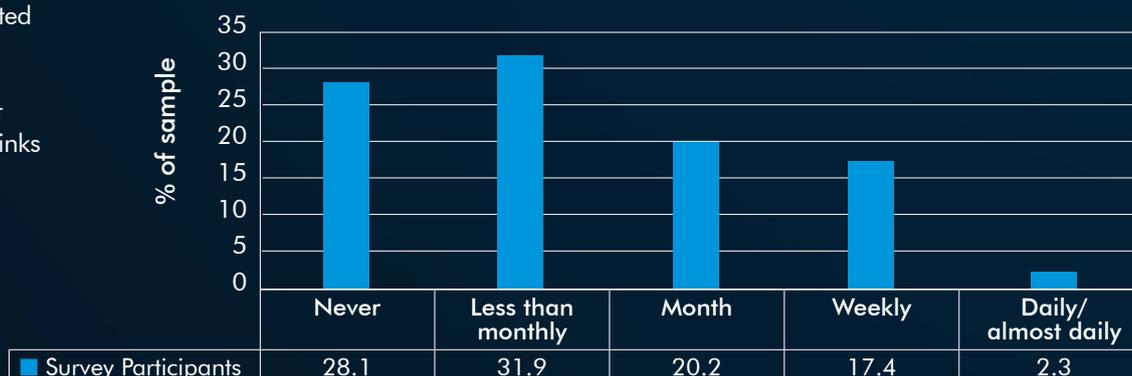
Over 50% of the participants reported alcohol use of 2-3 times a week or more.

ALCOHOL USE FREQUENCY BY SURVEY PARTICIPANTS



Nearly 20% of the participants reported weekly or more frequent binge drinking (i.e., 6 or more alcoholic drinks in one sitting).

BINGE DRINKING BY SURVEY PARTICIPANTS



- Males reported significantly higher alcohol use than females.
- Participants in operations roles reported significantly higher alcohol use than those in professional, administration and support and executive/manager roles.



- Participants working mixed day/night shifts reported significantly higher alcohol use than those working day shifts.



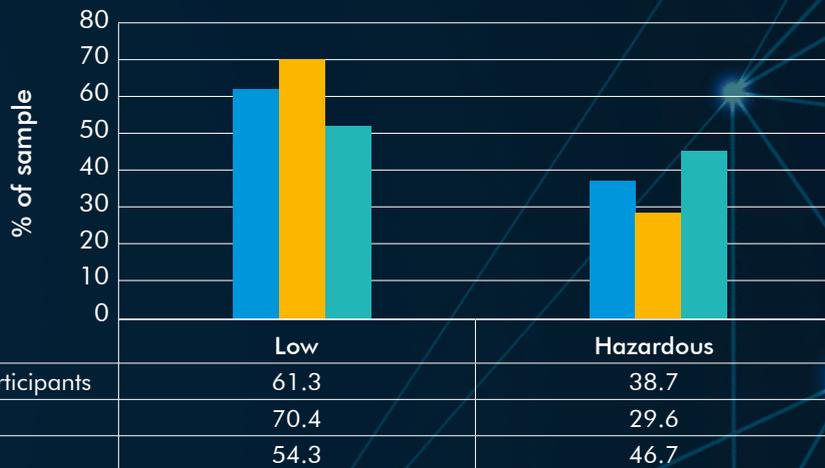
- Participants in FIFO roles reported significantly higher alcohol use than those in non-FIFO roles.

The following two figures show alcohol risk level for males and females in the National Survey and pre-COVID data from the general population (O'Brien et al., 2020) and from a coal mining industry study (Tynan et al., 2016).

Lower proportions of both male and female survey participants scored 'low' and higher proportions scored 'hazardous' than the pre-COVID general population sample.

A higher proportion of male survey participants scored 'low' and a lower proportion scored 'hazardous' than the comparative mining sample.

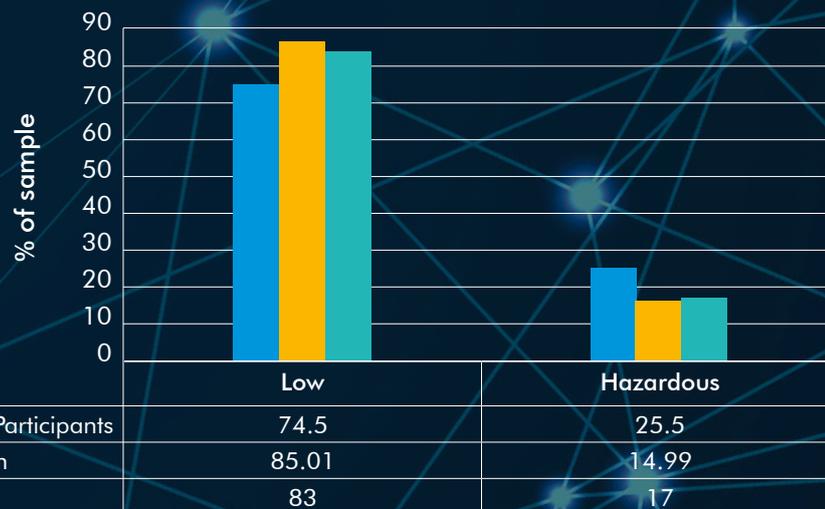
ALCOHOL RISK LEVEL: NATIONAL SURVEY WITH COMPARATIVE DATA FOR MALES



Note: 'Hazardous' includes both 'moderate' and 'high/dependency likely' drinking patterns captured in the National Survey and Tynan (coal industry) studies.

A lower proportion of female survey participants scored 'low' and a higher proportion scored 'hazardous' than the comparative mining sample.

ALCOHOL RISK LEVEL: NATIONAL SURVEY WITH COMPARATIVE DATA FOR FEMALES



Note: 'Hazardous' includes both 'moderate' and 'high/dependency likely' drinking patterns captured in the National Survey and Tynan (coal industry) studies.

AMMA RECOMMENDATIONS

Provide alcohol use education and/or workshops that are particularly targeted for males, staff in operations and FIFO roles and those working mixed day/night shifts.

Findings and Recommendations by Research Area

DISTRESS

1 in 17 National Survey participants reported 'very high' distress scores (5.9%), lower than comparative data compiled during COVID-19, which recorded 13% 'very high' distress levels in the general community.

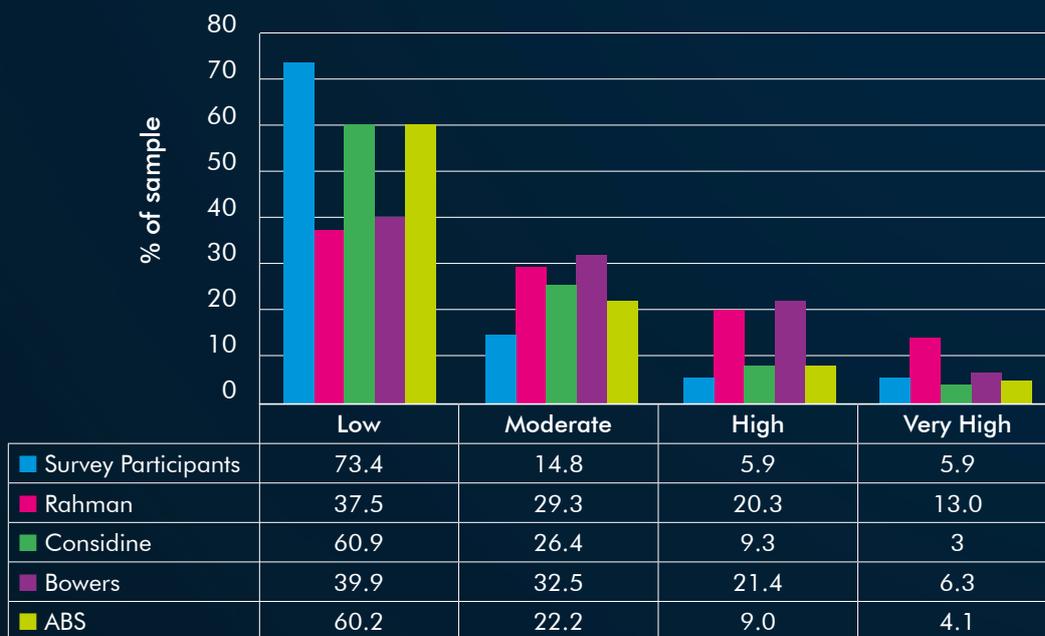
Psychological distress can be caused by a variety of reasons, including trauma, stress, adjustment issues, or other mental health conditions. The K10 scale (Kessler et al., 2003), a self-report questionnaire, was used to classify psychological distress as low, moderate, high, or extremely high.

MINDSHAPE FINDINGS

The graph below shows National Survey results alongside comparative normative population data collected during COVID-19 (Rahman et al., 2021), as well as comparative data from three pre-COVID cohorts: a mining sample (Considine et al., 2017); a remote mining and construction sample (Bowers et al., 2018) and a population sample (ABS, 2018).

Participants showed higher levels of "low" distress but lower levels of 'moderate', 'high' and 'very high' distress than comparative samples.

DISTRESS: SURVEY PARTICIPANTS WITH COMPARATIVE NORMS



- Participants in operations roles had significantly higher distress scores than those in supervisor/team leader roles.

AMMA RECOMMENDATIONS

- Provide mental health education to your staff – especially leaders – to recognise, understand, empathise with and manage the signs and symptoms of distress and build effective coping skills.
- Implement evidence-based interventions such as stress management, regular physical activity, onsite coaching and mentoring.
- Conduct investigations of job factors that may be contributing to higher distress levels in your organisation, in particular for employees in operations roles (e.g., consider job demands vs resources, role confusion etc.)

RESILIENCE

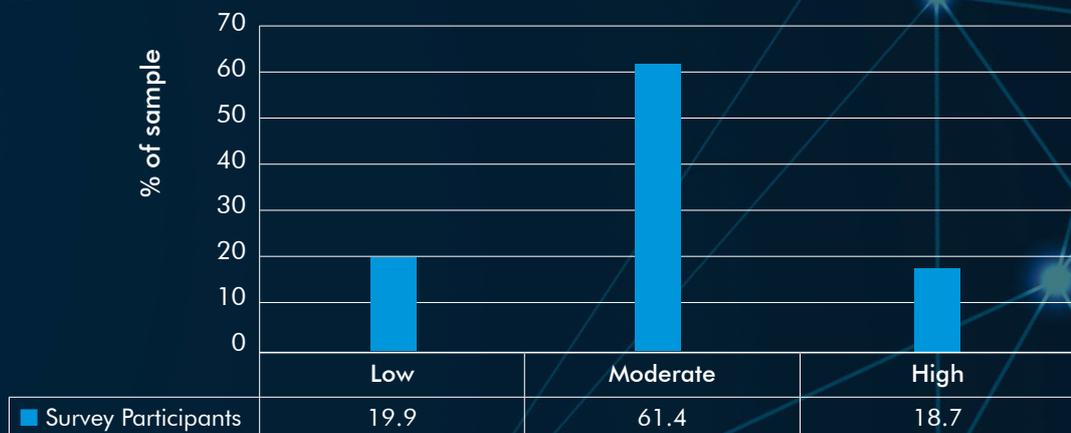
1 in 5 participants (19.9%) scored low in resilience; however, males, FIFO workers and managers / team leaders were all groups scoring high in resilience.

To assess resilience, the Brief Resilience Scale (BRS; Smith et al., 2008) was employed. The BRS categorises scores into three groups: poor resilience, normal resilience, and high resilience.

MINDSHAPE FINDINGS

Nearly 20% of the participants reported 'low' resilience.

RESILIENCE BY SURVEY PARTICIPANTS



- Males had significantly higher resilience scores than females.



- Participants in FIFO roles had significantly higher resilience scores than those in non-FIFO roles.



- Participants in operations and professional, administration and support roles had significantly lower resilience scores than those in supervisor/team leader and executive/manager roles.

AMMA RECOMMENDATIONS

- Provide mental health education for leaders and supervisors to promote early intervention and help seeking behaviour.
- Undertake initiatives to increase empathy amongst leaders for staff affected by mental health issues.
- Investigate a potential role for evidence-based resilience programs in the workplace and consider customising these for staff in operations roles, professional, administration and support employees and females.
- Conduct further industry research to monitor trends and patterns regarding resilience and role of resilience programs in the workplace.

Findings and Recommendations by Research Area

COPING APPROACHES

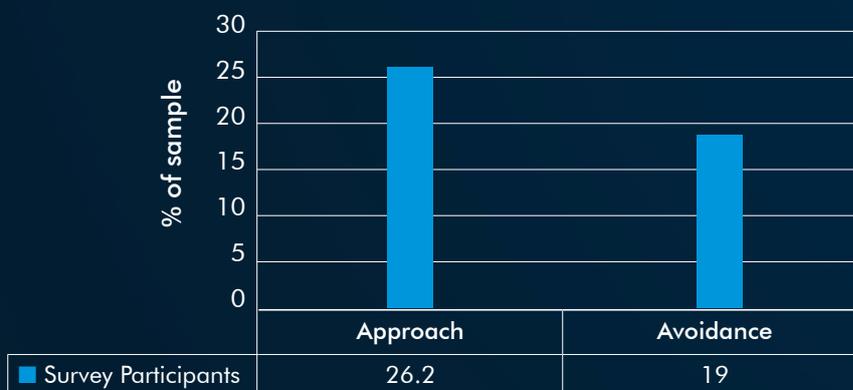
Over a quarter of National Survey participants scored in the approach coping style and nearly 1-in-5 in the avoidance coping style.

Coping was measured using the Brief-COPE (Carver, 1991), a self-report tool that assesses successful and ineffective coping strategies in the face of a stressful life event; the measure categorises major coping styles as approach or avoidant coping.

MINDSHAPE FINDINGS

26.2% of participants scored in the approach coping style category compared to 19% in the avoidant coping style category.

COPING STYLE BY SURVEY PARTICIPANTS



- Females had significantly higher avoidant coping scores than males.



- Participants in operations roles had significantly lower approach coping scores than those in executive/manager and professional, administration and support roles.



- Participants working mixed day/night shifts had significantly higher avoidant coping scores than those working day shifts.

Research (Gurvich et al. 2021) into coping styles and mental health in response to societal changes during COVID-19 found that approach coping styles are associated with positive mental health indicators; for instance, positive reframing was associated with lower depression scores and acceptance was associated with lower anxiety and stress scores.

Conversely, the researchers found that avoidant coping styles are associated with poorer mental health; for instance, self-blame was associated with higher levels of depression, anxiety and stress; behavioural disengagement was associated with higher levels of depression and anxiety; self-distraction was associated with higher levels of stress and depression; and venting was associated with higher levels of stress.

AMMA RECOMMENDATIONS

- Supplement your existing programs for supervisors/team leaders, managers and executives with knowledge of approach and avoidant coping styles.
- Design such training to include the associated impact on employee symptoms; help seeking behaviour; and how to manage employees displaying avoidant coping styles.
- Provide psychoeducation material for employees on coping styles to increase awareness and promote positive change.

DECISION-MAKING STYLES

National Survey participants scored highest on the rational (20%) and intuitive (17.7%) and lowest on the avoidant (11.2%) decision making style. Differences were found for gender, job role and FIFO status.

The General Decision-Making Style questionnaire (GDMS; Scott & Bruce, 1995), consisting of 25 questions, was used to examine how people handle decision-making circumstances; it assesses five decision-making styles: rational, avoidant, dependent, intuitive, and spontaneous.

MINDSHAPE FINDINGS

Participants were classed as having the following decision-making styles: 20% rational, 17.7% intuitive, 16.3% dependant, 12.6% spontaneous and 11.2% avoidant.

DECISION MAKING STYLES BY SURVEY PARTICIPANTS



- Participants in operations roles had significantly lower rational decision-making style scores than those in professional, administration and support roles.



- Participants in operations and professional, administration and support roles had significantly higher avoidant decision-making style scores than those in supervisor/team leader and executive/manger roles.



- Participants in supervisor/team leader roles had significantly lower dependent decision-making style scores than those in professional, administration and support roles.



- Participants in FIFO roles had significantly higher scores than non-FIFO in the dependent style of decision making.

The avoidant decision-making style was negatively, and the intuitive decision-making style positively associated with mental health indicators; whereas the rational, dependent and spontaneous decision-making styles were neither positively nor negatively associated with mental health indicators (Bavol'ar & Orosova, 2015).

AMMA RECOMMENDATIONS

- Create interactive education material (e.g., podcasts, workshops) that increase awareness of decision-making styles and how to promote positive styles of self and others, including the influence of mental health and wellbeing on such behaviour.
- Create material that is applicable to all employees but especially features advice for groups identified as more likely to adopt unhelpful decision-making styles (i.e., females, people in FIFO, operations and professional, administration and support roles).

Findings and Recommendations by Research Area

QUALITY OF LIFE

Participants scored in the mid sixty to mid seventy percent in the four Quality of Life (QoL) domains. Participants had slightly lower Quality of Life (QoL) scores across all categories than a comparative general population sample.

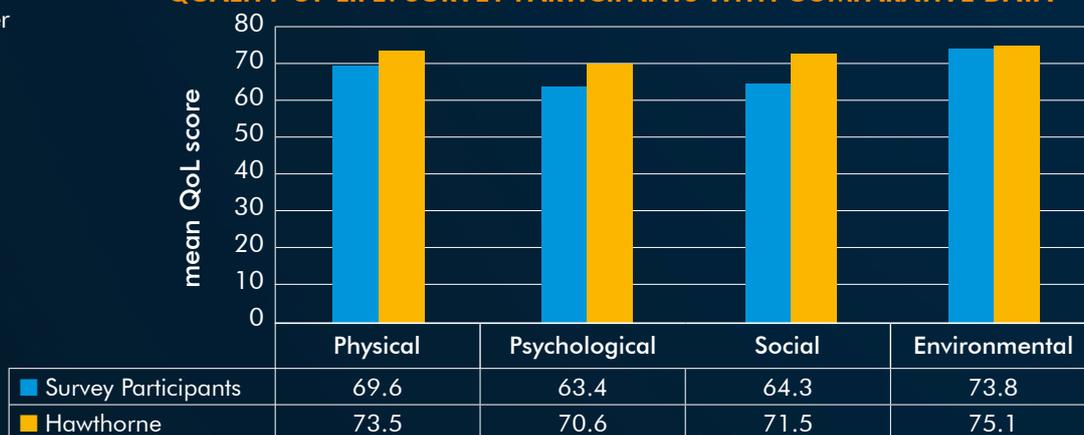
The World Health Organization Quality of Life Brief scale was used to assess quality of life (WHOQOL- BREF; 1996). Quality of life is defined by the WHO as an individual's view of their place in life in cultural, social, and environmental circumstances. The WHOQOL-BREF assesses four domains: physical health, psychological health, social connections, and the environment.

MINDSHAPE FINDINGS

The following figure shows QoL of survey participants and comparative normative data from a population study (Hawthorne et al., 2006).

Survey participants scored slightly lower than comparative normative data.

QUALITY OF LIFE: SURVEY PARTICIPANTS WITH COMPARATIVE DATA



- Females had significantly higher social and environmental QoL domain scores than males.



- Participants in operations and professional, administration and support roles had significantly lower QoL scores than those in executive/manager roles in the physical domain.



- Participants in operations roles had significantly lower QoL scores than those in supervisor/team leader and executive/manager roles in the psychological domain.



- Participants in operation roles had significantly lower QoL scores than those in professional, administration and support and executive/manager roles in the environmental domain.



- Participants in supervisor/team leader roles had significantly lower QoL scores than those in executive/manager roles in the environmental domain.

AMMA RECOMMENDATIONS

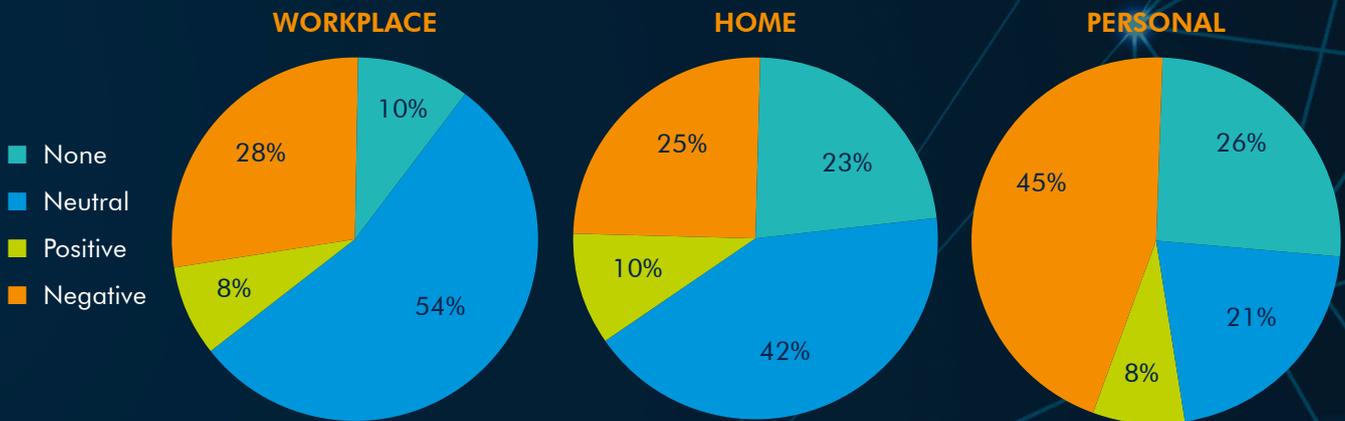
- Provide psychoeducation and workshops incorporating material specifically for males to increase social support, relaxation and caring for health.
- Provide peer and community programs to assist in social connectivity.
- Tailor your psychoeducation material specifically to the needs of different roles to manage fatigue, sleep and work balance.

IMPACT OF LIFE EVENTS (INCL. COVID-19)

Nearly half of the participants (45%) reported negative personal changes from COVID-19, whereas a quarter of respondents noted negative changes at work (28%) and at home (25%).

The National Survey examined the impact of the COVID-19 epidemic by asking participants, "Since the onset of COVID-19, what, if any, changes have happened for you at..." home, the workplace, and individually (Impact of Event Scale; Zilberg et al., 1982). The response rate for this question was high, with fewer than 10% opting not to submit a response to the questions. The replies were analysed qualitatively in terms of affect (i.e., a psychological word referring to the underlying experience of feeling, emotion, or mood) and classified as positive, negative or neutral.

MINDSHAPE FINDINGS



- The impact of life events in the workplace was reported by 64% of participants as neutral or non-existent, by 8% as positive and by 28% negative. The impact of life events at home was reported by 65% as neutral or non-existent, 10% as positive and 25% as negative. The impact of life events on personal life was reported by 47% as neutral/non-existent, 8% as positive and 45% as negative. Examples of negative and positive themes follow.

NEGATIVE WORKPLACE THEMES

- Huge roster changes/disruption to FIFO,

- more time offshore and more time away from family,
- isolation, frustration, fatigue and burnout,
- job, roster and crew instability,
- loss of morale and greater workload and time at work due to less personnel and
- management and HR team resentment.

POSITIVE WORKPLACE THEMES

- Work from home and flexi working.

NEGATIVE HOME AND PERSONAL THEMES

- Relationship breakdowns,

- separation from partner/family,
- stress on self & family due to relocation for work,
- stress and anxiety, issues with job role/work, loss of income,
- concern for family health overseas,
- more work demands and longer hours/quarantine and
- more isolation, loneliness and fatigue.

POSITIVE HOME AND PERSONAL THEMES

- Good relationships with family,
- realise what is important in life and
- work life balance.

AMMA RECOMMENDATIONS

Communicate mental health programs and initiatives, such as the findings of the National Survey, to employees to promote effective communication. This will reduce the perceived impression by employees that their wellbeing is not considered as a top priority by their employer and build a sense of trust, as identified by the qualitative analysis conducted in the National Survey.

Findings and Recommendations by Research Area

CORPORATE MENTAL HEALTH AND WELLBEING SERVICE USE AND SATISFACTION

93% of participants were offered EAP services and 64% were offered industry counselling. Roughly 1 in 4 (23%) accessed support provided by their employer in the 12 months prior to the National Survey.

Many employers in the resources and energy sector are making various interventions and employee assistance programs (EAP) available to their staff. The National Survey collected data on service intervention uptake, on preferred modes for interventions, and on barriers to utilising EAP.

MINDSHAPE FINDINGS

Participants preferred to receive services that were in person, by phone or video conference. This is in contrast to how services were provided: by phone call, email or in person.

SUPPORT SERVICE PROVISION

Delivery of Service	How they were provided		Preference for how they are provided	
	Response %	Rank	Response %	Rank
Chat	29.5	4	23.3	4
Text	9.5	6	14.3	6
Phone Call	50.8	1	43.8	2
Video Conferencing	24.5	5	23.7	3
In Person	41.0	3	70.3	1
Email	45.0	2	16.6	5

The top three services with the highest service ratings were EAPs, presentations and workshops.

RATINGS OF DELIVERY OF SERVICES

Delivery of Service	Service Rating		
	Not helpful	Somewhat helpful	Very helpful
Employee Assistance Programs	27	44	29
Mental health phone lines	51	40	8
Workshops	29	50	19
Online programs	33	49	18
Presentations	23	54	24
Online applications	46	39	15

AMMA RECOMMENDATIONS

- Tailor psychoeducation material to employee preferences (e.g., develop personalised podcasts that can be listened to anywhere, anytime and during exercise) to increase the uptake of material and the potential for greater help seeking behaviour.
- Address barriers to EAP uptake at an organisational level, including the perceived lack of confidentiality, trust and privacy, and the poor quality of the service.
- Develop long term strategies for reduction in stigma of EAP programs.

Participants were also asked what useful practices their employer had put in place to help support them during the COVID-19 pandemic. The following 4 main themes were found.

USEFUL PRACTICES TO SUPPORT EMPLOYEES DURING COVID-19

Theme/Components	Theme/Components
Working Arrangements	Mental Health (MH) and Wellness
Working from home	EAP * ¹
Flexible work/hours	Company apps and programs
Office Equipment	MH Links
Video Meetings	MH First Aid
Physical Safety	Communication
Better/Reinforced hygiene	Regular Updates
COVID-19 plans and procedures	Regular check-ins
	Regular team meetings

*¹ Includes comments that EAP had been available pre-COVID-19, but more reminders were provided about this practice.

The National Survey asked participants to identify some of the reasons that might stop them from accessing supports offered by their employer. The top barriers for service uptake reported were perceived lack of confidentiality/trust/privacy, lack of time, stigma associated with the use, and poor quality EAP.

REASONS FOR NOT ACCESSING EMPLOYER SUPPORTS

Key Barriers to Accessing Support (50% of Survey Participants sample, n=548)	
Barrier	Issues with:
Perceived lack of confidentiality, trust and privacy	EAP, HR and Managers
Lack of time	Rosters and greater workload
Stigma	Managers and peers
Poor quality EAP	EAP
Do not need support	Employee



POPULAR STRESS RELIEF ACTIVITIES

- Exercise (72.9%),
- listening to music (67.6%) and
- watching TV (63.7%).



UPTAKE OF PROFESSIONAL INTERVENTIONS

- 93% of participants were offered EAP access.
- 64% of participants were offered access to industry counselling.
- 23% accessed the offered support in the last 12 months.
- This is a stronger uptake than the 5-10% uptake reported in other research.

- Promotion and Survey Participants reinforcement by leaders/HR that privacy and confidentiality is paramount is critical to improve uptake of services. AMMA recommends employers conduct ongoing assessment of the efficacy of such communications.

- Investigate if employees prefer external treatment options over EAPs, given the perceived lack of confidentiality, privacy and trust noted in the results.

- Conduct further industry research to collect data on service usage (e.g., type, length, and financial cost of company and external services) and investigate if employees prefer external treatment options over EAPs.

Findings and Recommendations by Research Area

SLEEP ISSUES

Over 40% of the National Survey participants reported no sleep issues, comparable to non-industry data, while those scoring as 'moderate' and 'severe' were lower than general population.

Employees' sleep issues were assessed using the Insomnia Severity Index (Morin, et al., 2011), a seven-item self-report questionnaire that measures the intensity of participants' insomnia symptoms; higher scores indicating more sleep issues.

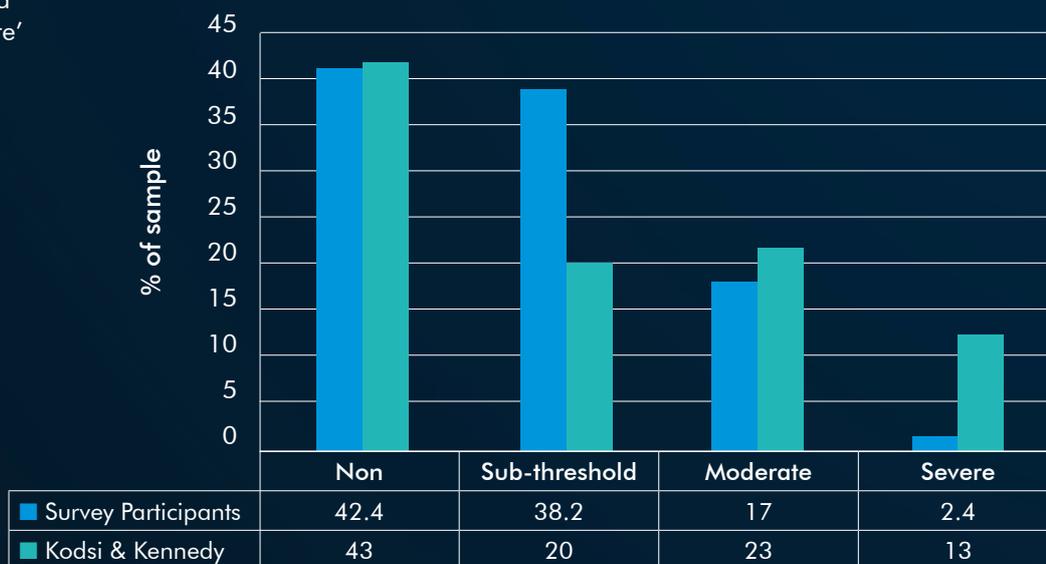
MINDSHAPE FINDINGS

The following figure shows sleep issues in the National Survey compared to data from a study at Victoria University (Kodsi & Kennedy, 2015).

Proportions of participants scoring as 'no' were roughly similar in both samples, proportions of survey participants scoring as 'sub-threshold' were higher but proportions of survey participants scoring as 'moderate' and 'severe' were lower than in the Kodsi & Kennedy sample.

Nearly 20% of the participants reported 'moderate' to 'severe' sleep issues.

SLEEP ISSUES BY SURVEY PARTICIPANTS



- Participants working mixed day/night shifts had significantly higher sleep issue scores than those working day shifts.

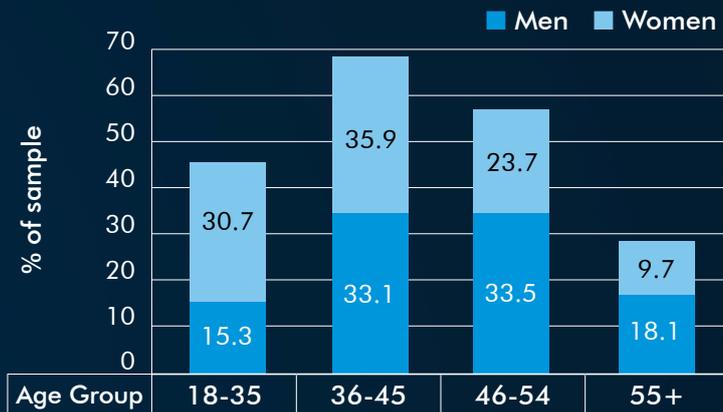
AMMA RECOMMENDATIONS

- Provide education for sleep issues to address sleep issues/insomnia. The aim is to increase awareness to enable greater help seeking behaviour leading to a medical diagnosis and potential treatment and help.
- Provide targeted sleep education and/or workshops, especially to those working mixed day/night shifts.
- Take a risk based approach to rostering to decrease sleep problems/insomnia and where possible take employee preferences into account.
- Conduct further industry research to investigate day/night shift work, identify patterns and trends, collect additional data on types of rosters, rotations and shift type and their relation to sleep issues/insomnia in a larger cohort.

Survey Demographics

Data was collected from 1102 consenting resources and energy employees from March to June 2021. A number of companies from various sub-sectors (mining, energy, contractors and service suppliers) participated.

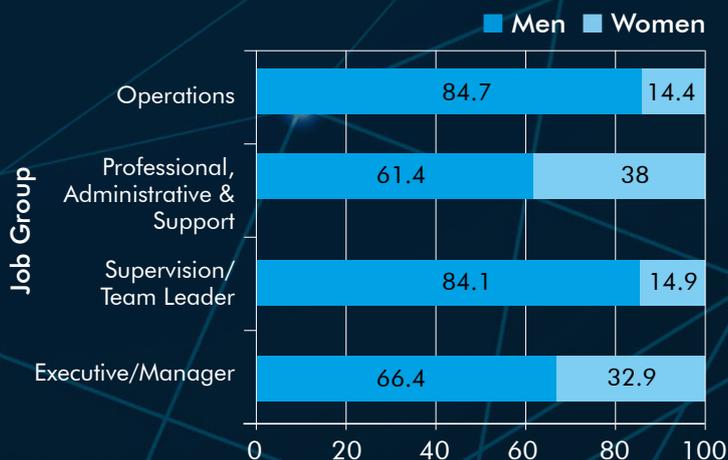
AGE GROUP BY GENDER



JOB GROUPING (% SURVEY RESPONDENTS)

Grouping	Example of Job Title	%
Executive/Manager	Manager, Director or Senior Vice President	14.6
Supervisor/Team Leader	Superintendent, Senior Leader or Supervisor	20.4
Professional, Administrative & Support	Specialist, Engineers, Analysts, Administration & office based roles	33
Operations	Coordinators, Technicians, Trades & Operations Technical Support	32

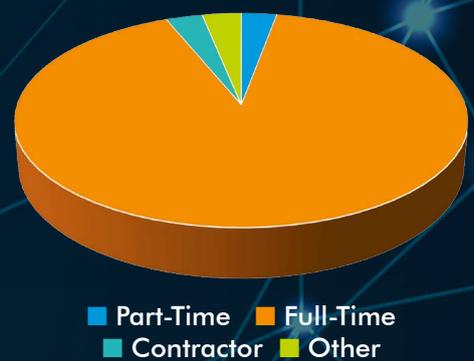
JOB GROUP BY GENDER (% OF EACH OCCUPATION)



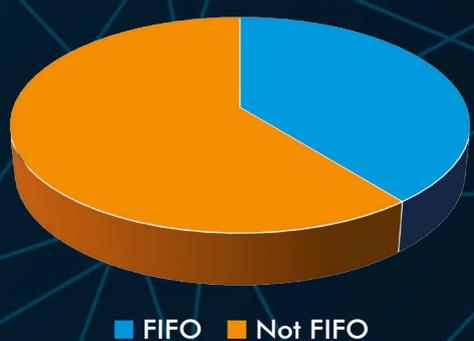
WORK ROSTER



EMPLOYMENT STATUS



FLY-IN FLY-OUT (FIFO) STATUS



Summary Findings and Recommendations by Operational Interest and Gender



Leaders reported less mental health problems, higher resilience and better coping skills than their workforce.

It is recommended employers increase leaders' knowledge of mental health issues and empathy for workers in distress by:

- providing mental health education for leaders and supervisors to recognise, understand and manage the signs and symptoms of stress in their workforce and to promote early intervention and help seeking behaviour;
- supplementing existing programs for supervisors/team leaders, managers and executives with knowledge of approach and avoidant coping styles; the associated impacts on employee symptoms; help seeking behaviour; and how to manage employees displaying avoidant coping styles; and
- communicating the findings of the NIS to employees to promote effective communication.



Operators reported higher depression, distress and alcohol use scores, lower Quality of Life and lower levels of resilience and helpful coping and decision-making skills than other groups.

It is recommended employers provide interventions specifically tailored to staff in operations roles and their needs, such as:

- webinars/workshops for depression including coping skills, seeking helping and how to access treatment.
- mental health education to recognise, understand and manage the signs and symptoms of distress and build effective coping skills
- evidenced-based interventions such as stress management, regular physical activity, onsite coaching and mentoring.
- alcohol use education and workshops.
- peer and community programs to assist in social connectivity.
- psychoeducation material to manage fatigue, sleep and work balance.
- interactive education materials that increase awareness of decision-making styles and how to promote positive styles of self and others, including the influence of mental health and wellbeing on such behaviour.



FIFO workers reported higher scores in anxiety, alcohol use and dependent style of decision making but also higher resilience than those in non-FIFO roles.

It is recommended employers provide interventions specifically tailored to staff in FIFO roles and their needs, such as:

- Provide targeted alcohol use education and workshops for males and staff in FIFO roles.
- Create interactive education material (e.g., podcasts, workshops) that increase awareness of decision-making styles and how to promote positive styles of self and others, including the influence of mental health and wellbeing on such behaviour. Material should focus on all employees but especially feature advice for groups identified as adopting more negative decision styles (i.e., here FIFO).



Males had higher depression and alcohol use scores, but lower social and environmental QoL domain scores than females.

It is recommended employers provide males with the following targeted interventions:

- mental health education to recognise, understand and manage the signs and symptoms of depression
- alcohol use education and workshops; and
- psychoeducation and workshops to incorporate materials to increase social support, relaxation and caring for health.

The above psychoeducation materials

should focus on signs such as substance use, anger, irritability, and risk-taking behaviour, which are often greater indicators of depression than withdrawal and introspection.

Additionally, employers should work to remove stigma, which has been found to be a barrier to help-seeking behaviour, and initiate preventative actions to reduce depression and suicide include the provision of social connectedness facilities that support targeted awareness and help seeking behaviour.



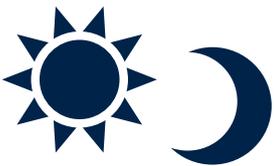
Females reported lower resilience scores and higher scores on avoidant coping styles, than males.

It is recommended employers provide psychoeducation material for employees on coping styles to increase awareness and promote positive change.

This could include interactive education material (e.g., podcasts, workshops) that increase awareness of decision-making styles and how

to promote positive styles of self and others, including the influence of mental health and wellbeing on such behaviour.

Material should focus on all employees but especially feature advice for groups identified as adopting more negative decision styles (i.e., females).



Mixed day/night shift workers reported higher levels of depression, sleep issues, alcohol use and avoidant coping style.

It is recommended employers conduct the following targeted interventions for staff in mixed day/night shift roles:

- mental health education to recognise, understand and manage the signs and symptoms of depression;

- sleep education/workshops;
- alcohol use education/workshops; and
- psychoeducation material for employees on coping styles to increase awareness and promote positive change.



COVID-19-related roster changes and instability negatively affected life at the workplace and at home.

It is recommended to take a risk based approach to rostering to decrease sleep problems/insomnia and where possible take employee preferences into account.

Further data collection in Phase II

National Resources Industry Survey is recommended to identify patterns and trends in a larger cohort and modification of survey to collect additional data on types of rosters, rotations and shift type.

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INTELLECTUAL PROPERTY & CONFIDENTIALITY

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ETHICS

The National Survey has Human Ethics and Research Committee (HREC) ethical approval by Bellberry Limited (HR 2021-01-007).

DATA ANALYSIS

Data was analysed using the SPSS (Version 27) statistical software package.

Quantitative and qualitative analyses were performed to provide insight into the mental health and wellbeing of the Phase I survey participants.

Evidence-based interventions were sourced from Australian Psychological Society (2018); Havey et al. (2014) and Black Dog Institute; and Kay-Lambkin et al. (2018) and Beyond Blue.



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