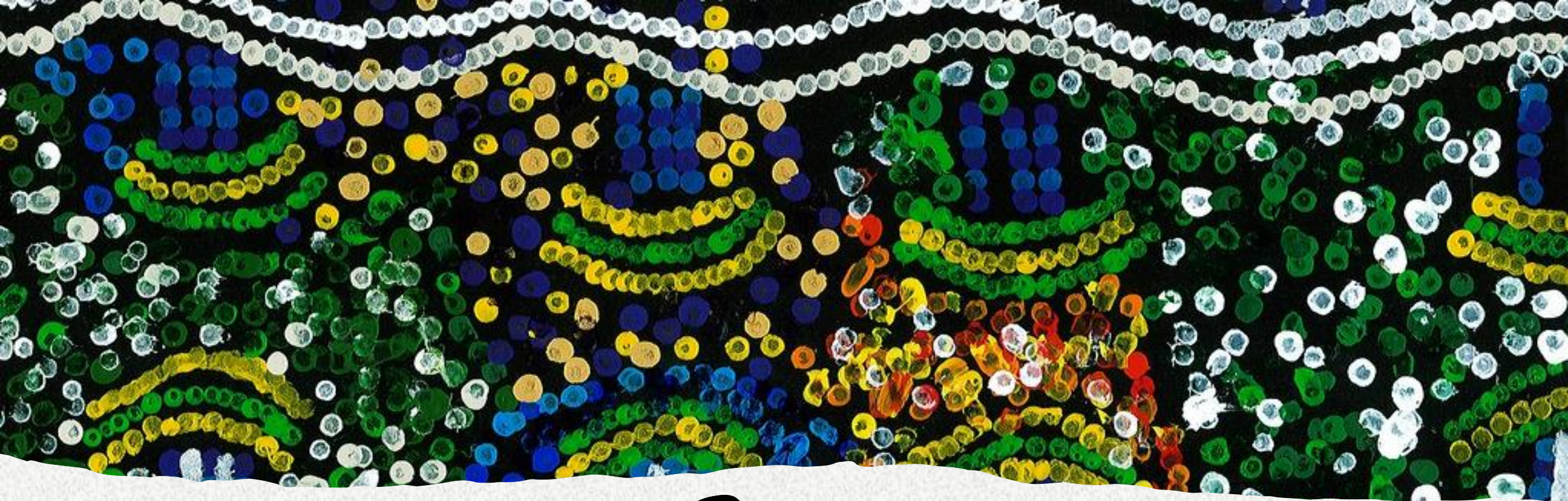# Emma D'Antoine Presentation:

Identifying Western Australian Offshore Oil and Gas Workers Mental Health Hazards and Risk Control Measures
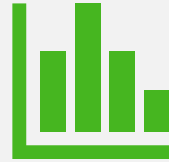
Acknowledgements

I'd like to begin by acknowledging the Traditional Owners of the land on which we meet today, and pay my respects to Elders past, present and emerging.

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Contents of the presentation

Research aim and background

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Research Aim

To find the effects of psychosocial stressors on Australian offshore oil and gas workers through in-depth one-on-one interviews

Research Objectives

- **Communicate** with offshore oil and gas employees to identify perceived work-related mental health hazards and causes and **assess** systems of work, employer provided mental health education and support, and other strategies used in the offshore oil and gas industry to support employee mental health

- **Identify** health and safety hazards regarding poor mental health and its impacts on offshore installations

- **Develop** a Mentally Healthy Workplaces Audit for use within the offshore oil and gas industry to provide companies with an opportunity to implement and assess mentally healthy work systems, workplaces, supportive management, mental health education, stigma free reporting and control emerging mental health risks, thereby reducing the risk of any associated negative economic effects

The Research

Background

+ **Poor mental health can increase accidents [1]**

+ **Unaddressed poor mental health affects workplace attendance and productivity [2]**

+ **Anxiety levels are significantly higher in offshore workers [3,4]**

+ **However, this population are much less likely to seek help for psychological distress [5]**

+ **Fatigue, isolation, regular absence from family and friends, close working proximity and long work hours all contribute towards low levels of psychological wellbeing [6]**

Background

+ Workers with **psychological claims** feel less supported, experience lower levels of job satisfaction and have lower return-to-work rates when they feel that their employer has not responded positively [7]

+ Extended work rosters and perceived threat to job uncertainty due to **COVID-19** compounded psychological risk factors [8]

+ Psychological stressors in the oil and gas industry **cost organisations a significant amount** in lost production and compensation [9] [10] [11]

+ It is in **everyone's interests** to address workplace psychological risk factors [12]

Four-phased Approach

📚	Literature review
💡	Focus Group
👥	Pilot study
🔍	Main study

Methodology

+ **Conducted a thorough literature review**

+ **Recruited the focus group members and developed interview questions**

+ **Organised and conducted interviews**

+ **Analysed qualitative data and wrote the research results**

+ **This study used an exploratory qualitative design** [13]

+ **The in-depth methods of qualitative research created the opportunity to provide new theories and models** [14]

+ **A phenomenological approach was used to ensure that lived experiences were heard** [15]

Call for offshore study participants
Research aims to reduce psychosocial risks for offshore workers

Emma D'Antoine at Curtin University is conducting research on mental health in the offshore oil and gas industry and is looking for potential participants to take part in this study.

Emma is a PhD student of the Department of Petroleum Engineering and is being supervised by Dr Christopher Lagat, Associate Professor Janis Jansz, Associate Professor Ahmed Barifcani, Professor Mark Harris and Dr Sherrilyn Mills. The research, which has the support of NOPSEMA and the Maritime Union of Australia, is looking at multiple stressors that Australian oil and gas workers face when working offshore, including environmental, interpersonal, situational, personal factors, work organisation and work management. The study also looks at the impact of COVID-19 on psychosocial issues for the offshore workforce.

It is anticipated that the study results will be used to identify mental health hazards and implement risk control measures for the offshore oil and gas industry through interviews that aim to determine the underlying causes of issues that can cause poor mental health.

Research findings will also identify best practices that can be shared to provide opportunities to improve workers' mental health industry-wide.
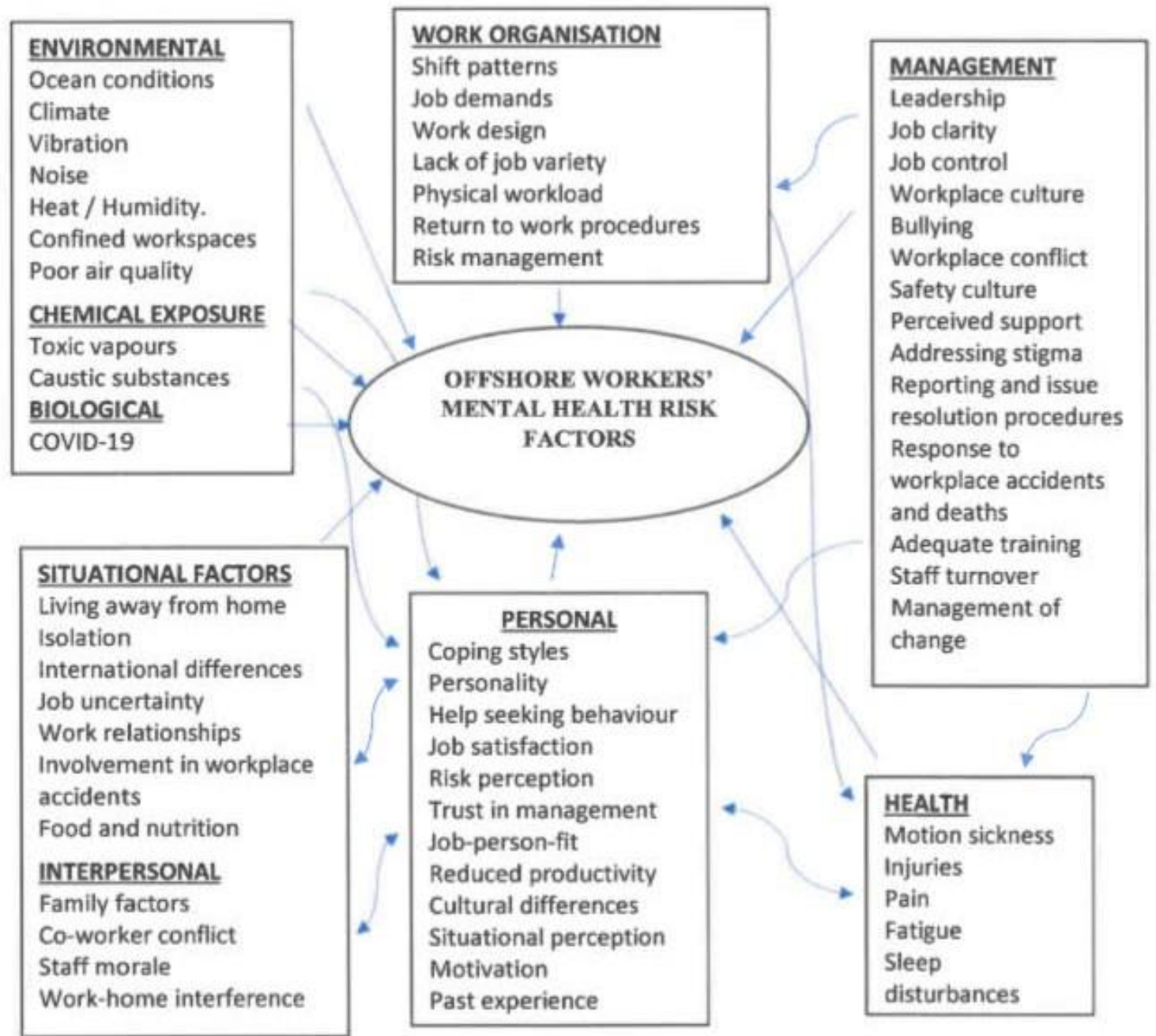
If you are an offshore oil and gas worker in Western Australia and are willing to take part in an online interview, please contact Emma at emma.dantoine@postgrad.curtin.edu.au or 0405 056624.

Interviews will be held through Microsoft Teams and it is anticipated that each interview will take between 15-45 minutes. The benefits of this research are that best practices in mental health management will be identified to share industry-wide and recommendations made where opportunities for improvements are identified.

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number 2021-0512).

Theory of mental health hazards for the offshore oil and gas industry workers developed from a review of the literature

ENVIRONMENTAL
Ocean conditions
Climate
Vibration
Noise
Heat / Humidity.
Confined workspaces
Poor air quality

CHEMICAL EXPOSURE
Toxic vapours
Caustic substances

BIOLOGICAL
COVID-19

WORK ORGANISATION
Shift patterns
Job demands
Work design
Lack of job variety
Physical workload
Return to work procedures
Risk management

MANAGEMENT
Leadership
Job clarity
Job control
Workplace culture
Bullying
Workplace conflict
Safety culture
Perceived support
Addressing stigma
Reporting and issue
resolution procedures
Response to
workplace accidents
and deaths
Adequate training
Staff turnover
Management of
change

OFFSHORE WORKERS'
MENTAL HEALTH RISK
FACTORS

SITUATIONAL FACTORS
Living away from home
Isolation
International differences
Job uncertainty
Work relationships
Involvement in workplace
accidents
Food and nutrition

INTERPERSONAL
Family factors
Co-worker conflict
Staff morale
Work-home interference

PERSONAL
Coping styles
Personality
Help seeking behaviour
Job satisfaction
Risk perception
Trust in management
Job-person-fit
Reduced productivity
Cultural differences
Situational perception
Motivation
Past experience

HEALTH
Motion sickness
Injuries
Pain
Fatigue
Sleep
disturbances

Methodology- The Focus Group

3 offshore oil and gas industry employees

One of whom was a Contractor Worker

2 offshore oil and gas management staff

One of whom was a Contractor Manager

1 NOPSEMA representative
Who had knowledge of the health and safety laws in Australian offshore working environments

1 Department of Mines, Industry Regulation & Safety Representative who had knowledge of management of mental health issues in mining facilities

Focus Group Findings

Major themes which emerged:

➢ **Rosters were affecting workers offshore (focus group conducted at the height of the COVID-19 pandemic).**

➢ **Longer hours and longer shifts resulted from the pandemic and last-minute changes and pressures to extend rosters and return early were particularly frustrating.**

➢ **Casualisation of the offshore oil and gas industry and lump-sum contracts put workers at risk of poor mental health, stress and uncertainty.**

➢ **Low levels of role clarity were contributing towards psychological distress**

➢ **Poor internet coverage impacted offshore workers and their communication with family.**

➢ **Fear of mistakes, injuries and reinjuries were common. good mental health would lower the likelihood of making mistakes, leading to less need for supervision**

➢ **Often accidents happen due to perceived (and very real) pressures to getting the job done.**

Focus Group Findings cont...

- Clear top-down messaging about mental health is vital.
- Stigma has been reduced through mental health literature and presentations, but there is sometimes still an "I'm OK, don't worry" attitude.
- Organisations should aim to select the right employees – some participants were pro-psychometric testing
- Strong employer-employer relationships are vital.
- Using Employee Assistance Programs (EAPs), having a psychologist or wellness coach on site, peer support, access to gyms and promotion of physical exercise are all useful approaches to achieve and maintain good mental health.
- Organisations should focus reducing stigma and on promoting self-awareness and understanding the source of stressors.
- One manager in the focus group felt there was a lack of resilience in some employees offshore today. Due to this, a question about resilience-building strategies was added for the pilot study.

Methodology- The pilot study and main study

Pilot study - 5 offshore oil and gas industry employees

* Developed research skills

* Provided validity and rigour

* Tested the suitability of the interview questions

Main study

29 offshore oil and gas industry employees

Pilot study findings

❖ **Participants were asked fourteen questions which were formed from the focus group discussion**

❖ **The interview questions for the main study were amended to include new themes which emerged in the interviews in the pilot study.**

❖ **The results from the interviews showed that offshore oil and gas workers have multiple psychosocial hazards to deal with.**

❖ **Time away from family and the isolation of the offshore environment, poor communication facilities, cabin-sharing, heat and humidity were the main stressors referred to in the pilot study.**

❖ **No personal space or time to oneself results from 'a lack of real estate' as one participant described it.**

Main study findings

❖**The main study had 19 questions. One of the main stressors for offshore oil and gas employees is the casualisation of their workforce**

- Casual workers who work offshore are being short-changed when it comes to their right to casual conversion

- They are employed, terminated and re-employed so their organisation can avoid converting them to permanent employees

- This process is unfair and avoids the employers' responsibility under the amendment to the Fair Work Act 2009 (Cth)

- It causes stress, unpredictability and financial uncertainty

Main study findings

Other findings:

❖ **Poor internet, poor accommodation and lack of facilities add to an already stressful working environment**

❖ **Fear of speaking up permeated across the workforce, especially for casual workers.**

❖ **Offshore workers have experienced micromanagement in their jobs**

❖ **Being away from home and work-home interference can cause poor focus and poor safety behaviours**

❖ **Female workers offshore experience harassment and unwanted attention**

❖ **Offshore workers appreciate their union**

❖ **Heat and heat stressors are well-managed**

Phase 4 Data Analysis

Interpretive Phenomenological Analysis (IPA) [17] [18]	Nvivo [19]
• Reading and re-reading transcripts • Transcript checking • Writing up results	• Codes • Themes • Frequency lists • Word Clouds • Comparison with published literature

Outcomes of research

- **New knowledge was generated through the collection of evidence which identified current areas of concern related to offshore oil and gas industry employees' mental health**
- **A mentally-healthy audit tool to promote positive mental health has been developed based on the identification of offshore oil and gas industry employees' mental health hazards and their risk control measures.**

- **Recommendations will be given to industry organisations and offshore representatives, such as NOPSEMA, the Maritime Union of WA and offshore energy companies.**

Dissemination of the research results and recommendations

Pub#	Description	Publications and research report sharing	Status
1	Research article. Effects of the COVID-19 pandemic on employees' psychological health in the offshore oil and gas industry and opportunities for improvement.	Journal article	Published
2	Research article. COVID-19 and offshore oil and gas workers: The role of personality.	Journal article	Published
3	Research article. Effects of Casualisation on Mental Wellbeing and Risk Management in the Offshore Oil and Gas Industry.	Journal article	Published
4	Research article. Psychosocial safety and health hazards and their impacts on offshore oil and gas installations.	Journal article	Published
5	Research article. A theoretical perspective of mental health hazards for offshore oil and gas workers.	Journal article	Under review
6	Submit a paper with research findings and recommendations to NOPSEMA to published & share with the Australian offshore oil and gas industry and for implementation of research recommendations. Details of findings will be provided to the Maritime Union of Australia (Western Australia branch).	Research report	Upcoming – late 2023
7	Research Report	Research report will be made publicly available through Curtin University Library e-space.	Upcoming – late 2023

Recommendations

- **Ensure and assure that employees who raise work-based issues or speak out about unsatisfactory behaviours or processes are not penalised in any way.**

- **Address direct and indirect harmful behaviours towards female employees, in line with current impactful research findings and recommendations, for example Champions of Change.**

- **End the use of shared accommodation, in particular 'hot bedding'. In the absence of providing single cabins, provide employees with the ability to withdraw to a private space, away from colleagues and with visual and auditory privacy.**

- **Allow employees with casual work status to transition to permanent work status if they wish. Ending contracts at just before 12 months to avoid their obligation to reforms in the Fair Work Act is both dishonest and unfair.**

- **The environment should also provide satisfactory means of communication to enable employees to contact family and friends onshore. Internet should be able to accommodate usage at maximum capacity at any time.**

- **Provide a better work-life balance, which would partly address the issue of what causes poor mental health offshore. Group activities, better exercise facilities and entertainment options such as movies, board games and television are some suggestions to improve mental health while offshore.**

- **Assure confidentiality when employees are accessing counselling services or mental health programs and implement a system of accountability where confidentiality is breached.**

- **Use proactive measures to get to the underlying cause of poor mental health rather than reactive measures.**

- **Provide varied, good-quality food**

- **Make Mental Health 1st Aid compulsory**

- **Provide information on how to build resilience, as well as practical guidance.**

Summary

+ **44** of the factors identified in the review of published literature were mental health hazards for offshore oil and gas workers in Australia.

+ A model of stressors was developed from the **research results with 31** new mental health hazards recognised.

+ A Mentally Healthy Offshore Workplace Audit Tool, that includes suggested risk control measures, a mentally healthy offshore workplace Audit Guide for the offshore oil and gas sector, and a Self-report Checklist for Employees for offshore psychosocial hazards have been developed based on the research results and conclusions.

+ The Mentally Healthy Offshore Workplace Audit Tool and guide have been reviewed by the three study participants and by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) with changes made from their feedback to ensure that this tool is fit for purpose.

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Questions?