MARS Centre PhD Research Topics

Towards safe and mentally healthy work in mining

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Abstract

Fostering mentally healthy workplaces is a serious challenge facing the mining sector in Australia. Prioritisation of the issue is driven largely by two recent developments: 1) the inclusion of psychosocial hazards within work health and safety regulations, and 2) public reports exposing troubling rates of sexual harassment in Western Australia's mine sites. In response to this, the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) established the Mental Awareness, Respect and Safety (MARS) Program, funding a range of initiatives to improve culture and respect in the mining industry. ECU's MARS Centre is one of those initiatives, responsible for supporting the industry with cutting-edge research on creating mentally healthy mining workplaces, building a culture of safety and respect, and preparing the sector for workplace safety in the future. The MARS Centre welcomes strong PhD research proposals in these areas.

Further details

SafeWork Australia defines psychosocial hazards as 'anything that could cause psychological harm', including, for example, excessive workloads, low job control, and poor support. In the mining sector, remote work, demanding production targets, irregular working hours, and job insecurity are among the key risks to the psychological wellbeing of workers. These risks can lead to a range of physical and psychological health outcomes, such as stress, exhaustion and burnout, anxiety and depression, musculoskeletal disorders, and cardiovascular disease. The impact of psychosocial hazards differs depending on the individual exposed, and the nature and number of psychosocial hazards they are exposed to. These complexities are among the main reasons why psychosocial risks are difficult to manage.

Sexual harassment is a psychosocial risk that poses a significant concern in Australia's mining sector. In 2018, the Australian Human Rights Commission survey found approximately 40 per cent of workers had experienced sexual harassment in the past five years. Following this, the Western Australian Parliamentary Inquiry (2022), *Enough is Enough: Sexual harassment against women in the FIFO mining industry* exposed a toxic culture of acceptance and cover-up, contributing to low reporting of the issue. Research into sexual harassment in the mining sector to date has focused predominantly on its prevalence and impacts. While there has been some effort towards understanding good practice in prevention and management, there are still important gaps in knowledge that require further research.

The MARS Centre welcomes PhD research proposals on the following topics:

- Understanding and preventing psychosocial risks in mining work.
- Examining the impacts of fly-in fly-out (FIFO) working arrangements on mental health and psychological wellbeing.
- Exploring gender equity and inclusion in the mining industry.
- Determining the extent, nature and management of other forms of ill-treatment in the mining industry, including workplace bullying, violence, harassment and discrimination.
- Social sustainability and corporate responsibility and mining workforce wellbeing.
- The role of Psychosocial Safety Climate (PSC) in fostering respectful mining workplaces.

- Identifying the risks and challenges associated with new technologies and new ways of working in the mining sector, including the shift from physical to knowledge-based work.
- Assessing the efficacy and effectiveness of existing or novel initiatives to promote improved mental health or address sexual harassment in the mining industry.
- Examining the role of advanced communication technologies on flexible working, connectivity, and social support for mining workers.
- Exploring whether changing industry demographics, and in particular greater gender balance, can positively influence mining industry culture to promote greater levels of worker wellbeing and reductions in workplace sexual harassment.
- Examining the impact of mining workforce ageing on work health and safety risk.
- Applying the Pressure, Disorganisation and Regulatory Failure (PDR) or Ten Pathways models to health and safety in mining.

These topics are examples of interesting and important research required to advance understanding around mentally healthy workplaces in mining and fostering a culture of safety and respect. A review of recent research journal articles may generate additional ideas related to these topics.

Below are some of the key reports and articles that support understanding of the field. Links are provided where available to the article via the title of the paper.

Australian Human Rights Commission (2023). A Quick Guide for Complying with the Positive Duty under the Sex Discrimination Act 1984.

Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology, 22*(3), 273–285.

Drane, C.F., Yam, C., Anderson, M., Fruhen, L., Jorritsma, K., & Parker, S. (2023). *Mental Awareness, Respect and Safety in the mining industry – The MARS Program Landmark Study: Workplace Policy and Practice Survey*. A report prepared by the Centre for Transformative Work Design for the Government of Western Australia.

Jain, A., Leka, S., & Zwetsloot, G. (2011). Corporate Social Responsibility and Psychosocial Risk Management in Europe. *Journal of Business Ethics*, *101*(4), 619–633. http://www.jstor.org/stable/41475923

Jenke, T. Boylan, J.L., Beatty, S., Ralph, M., Chaplyn, A. Penney, G. & Cattani,M. (2022). Fatality risk management: Applying Quinlan's Ten Pathways in Western Australia's mining industry. *Safety Science*, 146, https://doi.org/10.1016/j.ssci.2021.105494

Mettam, L. (2022). *Sexual harassment against women in the FIFO mining industry*. https://www.parliament.wa.gov.au/parliament/commit.nsf/(Report+Lookup+by+Com+ID)/EF 1DF1A3F5DF74A848258869000E6B32/$file/20220621%20-Report%20No%202.pdf.

Nielsen, K., Randall, R., Holten, A.-L., & González, E. R. (2010). Conducting organizational-level occupational health interventions: What works? *Work & Stress*, *24*(3), 234–259. https://doi.org/10.1080/02678373.2010.515393

Potter, R., O'Keeffe, V., Leka, S., Webber, M., & Dollard, M. (2019). Analytical review of the Australian policy context for work-related psychological health and psychosocial risks. *Safety science*, *111*, 37-48.

Underhill, E., & Quinlan, M. (2011). How Precarious Employment Affects Health and Safety at Work: The Case of Temporary Agency Workers. *Relations Industrielles / Industrial Relations*, *66*(3), 397–421. http://www.jstor.org/stable/23078363

Yam, C., Parker, S., Fruhen, L., Woodley, G., Hendriks, J., Burns, S., & Drane, C. (2022). *Mental Awareness, Respect and Safety in the mining industry – The Landmark Study: A review and synthesis of the literature*. A report prepared by the Centre for Transformative Work Design for the Government of Western Australia.

Zadow, A., Dollard, M. F., Parker, L., & Storey, K. (2019). Psychosocial safety climate: a review of the evidence. *Psychosocial safety climate: A new work stress theory*, 31-75.

The MARS Centre team comprises of 23 dedicated researchers and educators with research expertise related to the MARS objectives. This includes leading scholars in the fields of human factors, WHS and psychosocial risk, respect at work, injury prevention, occupational health and epidemiology, corporate social responsibility, business ethics, community mental health and industrial relations. Prospective candidates can identify potential supervisors through the staff profiles on the MARS Centre Members page.