

NSW Ministry Health

Evaluation Intervention Innovation Fund

Summary of key findings and implications for policy and practice

Project title: An evaluation of a workplace alcohol and drug harm reduction program

Lead investigator and organisations: Denis McNamara, Building Trades Group Drug and Alcohol Program (BTGDAP) (former CI Jim Finnane).

Other investigators and organisations: Professor Ann Roche, Associate Professor Ken Pidd, Dr Janine Chapman, Ms Brooke Phillips, National Centre for Education and Training on Addiction (NCETA)

Background and Rationale – what problem were you solving?

The Australian construction industry has high levels of alcohol and other drug (AOD) use and related harms, with social and cultural influences and workplace conditions traditionally conducive to risky drinking and drug use. Tailored training approaches are required to address AOD-related risks to workplace safety and improve worker wellbeing. The Building Trade Group Drug and Alcohol Program (BTGDAP) delivers 2-hour Workplace Impairment Training sessions to educate construction employees in NSW about the risk of AOD-related harm to themselves and others, offer a support pathway for workers affected by AOD or mental health issues, and improve safety on building sites. This project was undertaken to evaluate the BTGDAP Workplace Impairment Training. NSW Health funded the BTGDAP to undertake the evaluation program in partnership with the National Centre for Education and Training on Addiction (NCETA).

Summary of Key Research Findings

Please summarise findings from the research below in abstract format (maximum 300 words)

Aims	The aim of the evaluation was to assess the impact of the training on employee AOD-related knowledge, attitudes, consumption patterns and help-seeking behaviours. Research questions were: <ol style="list-style-type: none">1. Does the BTGDAP training result in positive changes to:<ol style="list-style-type: none">a. Risky drinking and drug useb. Knowledge of AOD-harms and workplace impairmentc. Attitudes to the impact of AOD-risk to health and workplace safetyd. Awareness of treatment and counselling options2. What are the training delivery costs and ratio of costs to benefits?3. From the perspective of key stakeholders, what are the most and least effective aspects of the training, and what are the barriers and facilitators of implementation?
Research Question/s	
Research design	A before-and-after, non-randomised trial conducted with N=719 construction workers (n=531 in the Training Group, and n=188 in the Non-Training Group) in NSW.

Methodology

A before-and-after, non-randomised trial conducted with N=719 construction workers (n=531 in the Training Group, and n=188 in the Non-Training Group) in NSW. Participants completed hard-copy surveys on-site at baseline (T1), assessing risky drinking (primary outcome), drug use, and a range of knowledge and attitudinal measures (secondary outcomes). Training Group participants were assessed on secondary measures immediately post-training (T2). All participants were re-assessed on all measures approximately three months later (T3). N=15 key stakeholders participated in semi-structured interviews to provide feedback on the training. Statistical analyses assessed the changes in quantitative data outcomes from T1-T2, and T1-T3, and thematic analyses identified common themes in the qualitative data.

Results

The prevalence of AOD use across the sample was exceptionally high. Three in four were risky drinkers. Rates of cocaine and meth/amphetamine use were 3.5 times higher than the national average, and prescribed pain killer use was 3 times higher than the national average. Short-term outcomes (based on analyses from T1-T2) were highly successful. Trainees reported significant increases in AOD knowledge, greater awareness of impairment, higher perceptions of risk to health and workplace safety from AOD use, and increased awareness of, and confidence in, how to access support for AOD and mental health.

From T1-T3, 73% of the sample was lost to follow up, impacting the representativeness of the sample. Caution is therefore warranted in the interpretation of results at T3. Of the remaining sample, 92% of Training Group participants indicated that they thought more carefully about workplace impairment factors since the training. No significant improvements were found for alcohol use or illicit drug use measures, but an improvement in the proportion of workers categorised as risky drinkers was demonstrated in comparison to the Non-Training Group. Sustained improvements were also demonstrated for alcohol knowledge, confidence in talking to co-workers about AOD, and knowing how to get help for AOD and mental health issues. Due to the substantial loss to follow up at T3, costs to benefit analyses were not undertaken.

Feedback from stakeholders was positive, highlighting the importance of the training to open dialogue, reduce stigma and encourage help-seeking among workers. Stakeholders considered the training an essential service for construction workers. Stakeholders noted that the positive benefits from the training were translated on-site.

Implications for policy and practice

Notwithstanding the methodological limitations, the findings of the study were generally positive with areas for improvement identified. The outcomes provide some support for the continued implementation of the BTGDAP Workplace Impairment Training in the construction industry. The workers reported extremely high prevalence of illicit drug use (especially cocaine) and risky drinking. Opioid dependence and high risk of polydrug use is of critical concern to the industry. A tailored intervention approach is required with coverage of these topics warranted in the training. Additional issues identified for inclusion in further training were information on withdrawal, crisis support and nicotine dependence. Regular refresher courses are required to reinforce key take-home messages with employees.

Companies and trainers can take practical action by ensuring site-facilities are suitable and appropriate, and offering interpreters for workers whose first language is not English. Practical guidance on lifestyle change was highlighted as a gap in the training, and workers requested more 'solutions-focused' discussions to accompany the educational components. Feedback from stakeholders supported a 'whole of industry' approach to the training, recognising that while the training met a significant gap for the industry, implementation was inconsistent. While this evaluation found positive changes from a 2-hour training program, it is noted that more intensive, nuanced approaches are also required. Targeting individual-level education, while useful, will have limited impact in the absence of widespread systemic and cultural change. It is also important to note that logistical challenges led to methodological limitations (i.e. large dropout rate at T3) that reduced the scope to address research questions 2 and 3. Significant findings reported at T3 require confirmation in future studies.

The challenges of conducting research within a highly dynamic, transient and time pressured industry such as construction are considerable. Logistical recruitment and retention challenges required extensive unanticipated travel, additional project management time and in-kind contributions. It is important that such challenges are anticipated and met with a realistic level of resourcing in future industry-based projects. A more resource intensive, larger-scale project is required to confirm these findings in a fully randomised trial. This evaluation has generated findings of key importance for workers and employers and added value to the limited evidence base informing effective approaches to workplace AOD harm reduction in Australia and overseas.

Research Impact

Has this research study led to further investigations or collaborations that led to other funding applications?

YES

NO

If yes, please detail what further investigations or collaborations this research study has led to. N/A

Appendix: Publication and Dissemination Activities

Completed publications

- Roche, A.M., Chapman, J., Duraisingam, V., Phillips, B., Finnane, J., & Pidd, K. (2021). Flying below the radar: Psychoactive drug use among young male construction workers. *Substance Use and Misuse*, 56(6), 758-767. doi: 10.1080/10826084.2021.1892139
- Chapman, J., Roche, A.M., Duraisingam, V., Phillips, B., Finnane, J., & Pidd, K. (2020). Working at heights: Patterns and predictors of illicit drug use in construction workers. *Drugs: Education, Prevention & Policy*, 28(1), 67-75. doi: 10.1080/09687637.2020.1743645
- Roche, A.M., Chapman, J., Duraisingam, V., Phillips, B., Finnane, J., & Pidd, K. (2020). Construction workers' alcohol use, knowledge, perceptions of risk and workplace norms. *Drug and Alcohol Review*, 39(7), 941-949. doi: 10.1111/dar.13075
- Chapman, J., Roche, A.M., Duraisingam, V., Phillips, B., Finnane, J., & Pidd, K. (2020). Exploring the relationship between psychological distress and likelihood of help-seeking in construction workers: The role of talking to workmates and knowing how to get help. *Work (Reading, Mass.)*, 67(1), 47-54. doi: 10.3233/WOR-203251

Planned publications

- Chapman, J., Roche, A.M., Duraisingam, V., Phillips, B., Finnane, J., & Pidd, K. (manuscript submitted). Prescription pain medication use among Australian male construction workers: Prevalence and predictors.
- Chapman, J., Roche, A.M., Phillips, B., Finnane, J., & Pidd, K. (manuscript in preparation). Is workplace alcohol and drug impairment training effective? Outcomes from an evaluation trial in the Australian construction industry.
- Phillips, B., Chapman, J., Roche, A.M., Finnane, J., & Pidd, K. (manuscript in preparation). Key stakeholder views on construction industry alcohol and drug safety awareness training effectiveness in Australia: Implications for policy and practice.

Conferences and presentations

- Alcohol and drug use among construction workers: Which drugs and which workers? Oral presentation delivered by Dr Janine Chapman, NCETA, at the Australian Public Health Conference, Sept 2019, Adelaide. This abstract was listed as a finalist for the Capacity Building Award from the Public Health Association of Australia.
- Who uses what: Polydrug use among construction workers and implications for intervention. Oral presentation by Prof Ann Roche, NCETA, at the Australasian Professional Society on Alcohol & Other Drugs (APSAD) Conference, Nov 2019, Hobart.
- Professor Roche will present the results of this project, 'An evaluation of workplace alcohol and drug harm reduction program', to the NSW Ministry of Health and stakeholders at the Early Intervention and Innovation Fund (EIIIF) Webinar Series, July 2021.

Media and promotion

- Roche, A.M., Pidd, K., Chapman, J., Lender, B., & Finnane, J. (Oct 2018). Evaluation of a workplace alcohol and other drug (AOD) harm reduction program (New Projects). *Drug and Alcohol Research Connections*, online article.
- Flinders University Office of Communication and Engagement published a media article in May 2020 reporting findings from Roche, et al. (2020). Construction workers' alcohol use, knowledge, perceptions of risk and workplace norms. *Drug and Alcohol Review*. doi: 10.1111/dar.13075. This story was reported on

industry-specific news and online magazine channels Safety Solutions, Build Australia, Get Building and general news outlets Mirage News and The National Tribune.

Please send completed reports to:

Mark Plum Project Officer, Alcohol and Other Drugs, Prevention and Population Health

Email: Mark.Plum@health.nsw.gov.au

For any enquiries please call Mark Plum on (02) 9461 7262