

July 2022

**Health and wellbeing
among Australian
construction workers:**

Evidencing the Problem

Part 1 of 3

Introduction

This is the first in a series of three summary reports in which a body of evidence relating to the factors impacting construction workers' health and wellbeing is re-visited. This work has been undertaken over a 20-year period and serves to highlight the long-standing nature of some of the work health issues that have become important topics of industry discussion and reform in relatively recent years.

The summary reports are structured as follows:

- Summary report 1 (this document) re-visits evidence that construction workers' health and wellbeing are adversely impacted by their work conditions,
- Summary report 2 explores the systemic causes of the job conditions that negatively affect construction workers' health and wellbeing, tracing these back to broader issues relating to procurement and the management of projects within the industry,
- Summary report 3 examines research in which health and wellbeing promotion programs have been trialed and evaluated in construction industry settings. A number of these initiatives involved shifting from a six- to a five-day working week.

for time overruns, work hours in project-based construction work are often long and sometimes irregular. The management of construction projects typically involves balancing the expectations of different stakeholders and the potential for role conflict and stress is high.

The norm is six to seven working days per week in this business. It's deadline driven, that's the industry norm

– onsite construction worker

Crisis rectification and crisis resolution leads to emotional strain ... things change regularly, hourly, daily. My job can be very reactive which is stressful

– construction site supervisor

The demands of project-based construction work

There is a well-established and compelling evidence base showing that job-related characteristics in construction impact on the short and long term mental and physical health of the workforce. Much of this work has been undertaken in Australia.

The construction industry is a demanding work environment and many job-related stressors are experienced by workers, particularly those working in project delivery.

Construction organisations operate in a highly competitive market and are required to deliver projects within tight deadlines and budget constraints. With the threat of significant penalties

Long work hours

Australian construction workers report working long hours¹. The average number of hours worked each week varies depending on the type of role an employee, with site-based roles being the most demanding (See Figure 1).² These hours exceed the maximum weekly threshold of 48 hours, established by the International Labour Organisation (ILO) over 90 years ago to protect workers' health, although more recent data from a large national cohort study shows that, on average, Australian workers' mental health is adversely affected when working more than 39 hours a week.³

Figure 1 shows that Australian construction workers work above the "red line" of 39 hours a week.

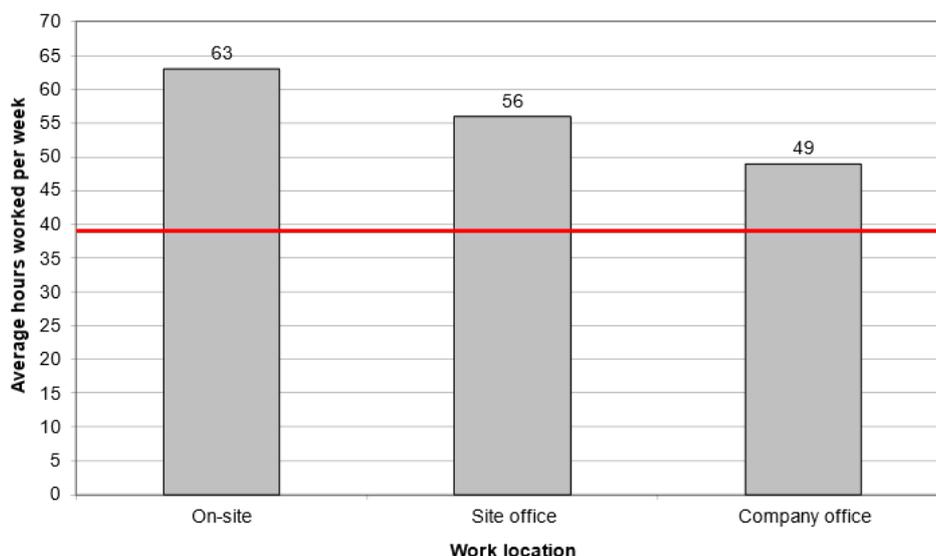


Figure 1: Average weekly work hours by construction industry work location/role²

You get into a cycle. There's not enough time. It's hard to step back and make a change in your lifestyle. You get into a pattern of eat, smoke, drink, sleep. Then you wake up and do it all again. Before you know it you have put on 20 kilos.

– onsite construction worker

I feel strongly that, as an engineer, I am undervalued by the community. While not totally dissatisfied with my remuneration, I get frustrated when I see other professions with similar levels of training and less responsibility, getting paid far more than my peers and myself. This is leading to a level of disenchantment in the profession and resulting in many engineers leaving and going to areas where they are 'properly paid for what they do' – even though they might enjoy it less.

- engineer

What is burnout?

The term 'burnout' describes a state of chronic emotional fatigue, cynicism and reduced personal accomplishment. Emotional exhaustion describes feelings of depleted emotional resources and a lack of energy; cynicism is characterised by a cynical attitude and an exaggerated distancing from one's work; and diminished personal accomplishment refers to a situation in which workers evaluate themselves negatively and are dissatisfied with their accomplishments at work.

Why is burnout a problem?

Burnout is associated with negative outcomes for both individuals and organisations. For individuals, burnout is linked to psychological distress, anxiety, depression, reduced self-esteem, substance abuse and even coronary heart disease. The prevention of burnout therefore needs to be treated as an important occupational health issue.

Burnout also has negative impacts on indicators of organisational effectiveness, including increased absenteeism and turnover, reduced satisfaction, organisational commitment, productivity and effectiveness.

Some research even suggests that burnout is contagious, spreading to affect the co-workers of those who experience it.

Burnt out construction workers

Research in the Australian construction industry reveals that workers are prone to burnout and that this is linked to the demands they experience at work.

A study of Australian engineers working in public and private sector construction organisations found that the number of hours worked per week, experience of having too much work to do in the time available and having to juggle conflicting job demands were all significantly linked to the exhaustion aspect of burnout.

The engineers were significantly less likely to feel cynical about their work if their jobs provided a sense of responsibility and role clarity and they were satisfied with their pay and with their promotion prospects.

Importantly, the engineers who experienced higher levels of exhaustion and cynicism indicated significantly higher intentions to leave their organisations, and in some cases indicated an intention to leave the construction industry altogether.⁴

Work and non-work contributors to burnout

Burnout was originally believed to be a work-related phenomenon. However, employees' work and non-work lives should not be treated as separate spheres of activity because what happens in one life domain can spill over to affect the quality of experiences in other domains. For example, the Australian study of construction engineers identified a number of job demands that significantly predicted the quality of the interpersonal relationships the engineers experienced outside work, most notably with their domestic partners and family members. The number of hours worked by the engineers had a particularly strong negative effect on the quality of these interpersonal relationships.⁵

The Australian research also found that conflict in interpersonal relationships outside of work is a key determinant of engineers' experience of burnout, explaining variability in exhaustion beyond that already explained by job demands alone. This finding highlights the critical interaction between work and non-work life factors that contribute to employee burnout.⁶

Another large-scale study of workers in the Australian construction industry found that the extent to which conflict experienced between work and non-work life (including the ability to enjoy positive relationships outside work, to engage in leisure activities and to complete required activities at home) also contributes to employee burnout. In fact, work interference with non-work life acts as a 'pathway' through which working long and irregular work hours leads to burnout in construction workers (Figure 2). That is, the long and irregular work hours required in construction industry jobs prevent workers from being able to engage satisfactorily in life outside work and, in turn, this contributes to burnout.⁷



Figure 2: Relationship between work schedule demands, work-life conflict and burnout in construction workers

Gendered effects

The effects of long and inflexible work hours on construction workers' health and wellbeing are also highly gendered. A longitudinal cohort study of Australian workers (in all industries) has found that, on average, women are able to work 13 fewer hours a week than men before their mental health is impaired. This is explained entirely by the larger proportion of domestic and caring work borne by women.³

Given this imbalance, culturally entrenched long and inflexible hours of work are likely to be particularly harmful to female workers and also act as a structural source of discrimination preventing women from advancing their careers in the construction industry.⁸

Female workers, particularly those in project-based roles, report long hours and high levels of work interference with non-work life as negatively impacting their commitment to the long-term pursuit of a career in the construction industry.⁹

The research also shows that there is a substantial difference in the work time commitments of the domestic partners of men and women who work in construction roles. More than half of male construction workers report their domestic partners either do not work in paid employment at all or that they work part time. In contrast, 88% of female workers in the industry report their domestic partners work full time, with 41.2% working more than 50 hours a week.¹⁰

This means that women working in the industry are likely to have substantially less support at home in relation to fulfilling domestic and caring responsibilities than their male counterparts.

At the same time, there is a growing recognition that male workers want to play a more active role in their life outside of work. It is therefore critical that this structural source of gender inequality is addressed if the industry is to better provide healthy and balanced work conditions for both male and female workers.

So many men I work with spend 12-14 hours at work every day. We are encouraged to be balanced but not rewarded for being balanced so hours at work are scrutinised although no-one would ever say so ... women do have more pressure with regards to family and child rearing, it is not an easy industry

– female construction worker

My spouse has flexibility with her job with start and finish times, plus works part time. This allows my home-based demands to be met. If there was a combination of two roles like mine, I couldn't meet my [work] demands

– male construction worker

Conclusions

The research indicates that workers in the Australian construction industry are suffering from high levels of burnout that is - at least in part - due to the characteristics of work in the industry. There is increasing recognition that mental ill-health is a problem for the construction industry and psychosocial risk factors need to be identified and controlled in addition to physical health and safety risks in the workplace.

The experience of burnout among the construction industry's workforce is also likely to reduce the industry's efficiency and threaten its long-term competitiveness. Construction is already facing a critical skills shortage and the attractiveness of jobs to new entrants and the ability to retain workers over the course of their careers are both key to the industry's long-term sustainability.

There is an opportunity to re-think entrenched ways of working that are harmful for workers, particularly those with caring responsibilities outside work. The research indicates that targeting the industry's rigid adherence to long and inflexible work hours is critically important.

The second summary report in this series explores in greater depth the systemic causes of poor health and wellbeing in the Australian construction industry and highlights the need for structural/cultural change to address these issues.

¹Turner, M., & Lingard, H. (2016). Work–life fit: identification of demand and resource typologies within a systems framework. *Construction Management and Economics*, 34(6), 377–392.

²Lingard, H., & Francis, V. (2004). The work-life experiences of office and site-based employees in the Australian construction industry. *Construction Management and Economics*, 22(9), 991–1002.

³Dinh, H, Strazdins, L & Welsh, J. (2017). Hour-glass ceilings: Work-hour thresholds, gendered health inequities. *Social Science & Medicine*, 176, 42–51.

⁴Lingard, H. (2003). The impact of individual and job characteristics on ‘burnout’ among civil engineers in Australia and the implications for employee turnover. *Construction Management & Economics*, 21(1), 69–80.

⁵Lingard, H., & Sublet, A. (2002). The impact of job and organizational demands on marital or relationship satisfaction and conflict among Australian civil engineers. *Construction Management & Economics*, 20(6), 507–521.

⁶Lingard, H. (2004). Work and family sources of burnout in the Australian engineering profession: Comparison of respondents in dual-and single-earner couples, parents, and nonparents. *Journal of Construction Engineering and Management*, 130(2), 290–298.

⁷Lingard, H., & Francis, V. (2005). Does work–family conflict mediate the relationship between job schedule demands and burnout in male construction professionals and managers?. *Construction Management and Economics*, 23(7), 733–745.

⁸Dainty, A. R., & Lingard, H. (2006). Indirect discrimination in construction organizations and the impact on women’s careers. *Journal of Management in Engineering*, 22(3), 108–118.

⁹Lingard, H., & Lin, J. (2003). Managing Motherhood in the Australian Construction Industry: Work-family Balance, Parental Leave and Part-time Work. *Construction Economics and Building*, 3(2), 15–24.

¹⁰Lingard, H., & Francis, V. (2008). An exploration of the adaptive strategies of working families in the Australian construction industry. *Engineering, Construction and Architectural Management*, 15(6), 562–579.

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