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Health and wellbeing among Australian construction workers:

Evaluating Solutions

Part 3 of 3

RMIT UNIVERSITY

Introduction

The second summary report in this series discussed the systemic causes of health and wellbeing challenges experienced by Australian construction workers. In particular, the issue of long work hours - and related health impacts - was linked to prevailing cultural norms driven by the industry's entrenched procurement and project management practices.

In the final summary report of this three-part series, we describe research that has sought to implement and evaluate healthier ways of working in the construction industry.

While some of this work was undertaken more than a decade ago, the findings are still relevant as issues of long hours, fatigue, mental and physical health and workforce diversity are increasingly recognised as critical areas for industry improvement.

> *I've always worked a six-day week and was often stressed and tired by Saturday. On this job I've felt very relaxed on the weekend ……. I've also been able to complete all my jobs around the house. Our crew is happier because their money hasn't changed much and they have a life. I personally think that productivity has been excellent because everybody is fresh and happy.*
>
> *– construction worker*

Implementation of a five-day week

An Australian Research Council funded research project (undertaken in partnership with the Construction Industry Institute of Australia) examined the effects of changing working time practices in four large infrastructure construction projects in Queensland. These projects included two water infrastructure and two road construction projects. At each of these projects, working time arrangements were changed to provide workers with the opportunity to work a five-day week. Data was collected at each project using a combination of surveys, interviews, focus groups and diary data collection methods.

These working time modifications produced mixed results from which important lessons can be learned.

At the first project (a water infrastructure project), a compressed work week was introduced. This involved eliminating an eight-hour Saturday shift but extending the working hours from Monday to Friday from 10 to 11.5 in summer months. In winter months the daily work hours were reduced from 11.5 to 10.5.

Data was collected from workers at this project, and also at a control project (being delivered by the same construction company) that was working a standard six-day week. The evaluation found that both salaried and waged workers' well-being and satisfaction with the balance they experienced between their work and non-work life were generally high when working a compressed work week. The majority of workers at this site indicated a strong preference for the five-day week. However, there were some differences between waged and salaried workers. No salaried workers but a small number of waged workers indicated they preferred to work a six-day week.

Interview data supported the positive benefits of the compressed work week on family life and the opportunities afforded by having a two-day weekend. Interviews with workers at the 'control' site revealed lower levels of satisfaction with the balance between work and non-work life than at the case study construction project. This case study project was also completed six months ahead of schedule and under budget. The project leadership team said they thought the compressed work week had improved workers' morale, commitment to the project and health and safety performance, and reduced the occurrence of conflicts and disputes in the project.

At the second project (another water infrastructure project) the project schedule was changed from a traditional six-day week to a compulsory five-day week. Work hours were capped at 10 per day between Monday and Friday.[1]

This change to the five-day week was not sustained at the second project. The project management team observed that approximately 30% of the waged workers left the site to work at other projects where they could continue to earn additional wages working on Saturdays. Anecdotally, these were the more skilled and experienced workers and their departure negatively impacted productivity at the project. In response, the project leadership team reverted back to a six-day work week but allowed salaried workers to have alternate Saturdays off based on a roster system. The six-day work week was not compulsory for waged workers, however the majority of waged workers chose to work six days a week when given the choice to do so.

Although waged workers recognised that not working on Saturdays provided them with benefits, including time for rest and mental and physical recovery, time to spend with their family or time to participate in other non-work activities, many still preferred to work the six-day week. In contrast, salaried workers strongly favoured the five-day week.

At the third project (a road construction project) data was collected before and after the implementation of a modified working schedule. At this project workers were able to take two 'two-day' weekends, one 'one-day' weekend, and one 'three-day' weekend in every four week cycle. Site hours were stretched to between 6.30am to 5pm on weekdays (the previous start time was 7am) and from 6.30am to 3pm on the one Saturday worked each month. Workers at this project reported significantly lower levels of work-to-home conflict following the implementation of the change to working time arrangements at this project.[2] Interviews revealed that waged and salaried workers were generally happy with the revised working time arrangements, although waged workers still indicated concerns about loss of pay associated with giving up regular Saturday work.[3]

At the fourth project (another road construction project) workers were surveyed and indicated high levels of work interference with home life. Following this, an optional five-day week was introduced. The five-day week was only available to workers who could demonstrate a 'personal need' to use this option. Workers also had to demonstrate that their work would not be adversely affected by the changed work schedule. Work hours between Monday and Friday were not extended. Fewer than 20 out of more than 300 workers engaged at the project opted to change their work schedules. All workers who changed their

schedule were salaried workers. Interviews suggested that the balance between work and non-work life was not significantly improved, even by those who opted to work five days and were approved to do so. Moreover, the culture of long hours was maintained at the project.

The research relating to these four construction projects suggests that introducing modified work time arrangements in the construction industry can provide benefits in terms of reductions in conflict between work and non-work life, which is strongly and consistently linked to lower levels of health and wellbeing. However, an important lesson from the case studies is that implementing modified working time arrangements in the construction industry is complicated. Mandated 'one size fits all' work hour reductions (with commensurate loss of pay) were not effective. It is important to acknowledge different worker groups and to ensure that modifications to working time arrangements are designed in close consultation with workers.

> *I found that when I have done the five-day week and had the two days, it does give me enough time to recharge. It gives me enough time to catch up and, yeah, I come in Monday feeling better. And so, again, it's up to an individual basis. But if we could work the five days a week, even if we're working until 5:00, that would still give me two days to recharge the batteries and do what I have to do in that short period of time.*
>
> *– construction worker*

Supportive supervision

Research also highlights the benefits of providing a supportive work environment to protect workers from the harmful effects of long hours and work interference with non-work life.

Support from supervisors is particularly beneficial in helping to mitigate the negative consequences for health and wellbeing.

Data collected from the Australian construction industry shows that work interference with non-work life is significantly more strongly related to burnout when workers perceive they are in a work environment in which they are not supported (indicated by the steep blue line in Figure 1). When workers receive high levels of support from their supervisors, the relationship between work interference with non-work life and burnout is weak (indicated by the almost flat grey line in Figure 1).

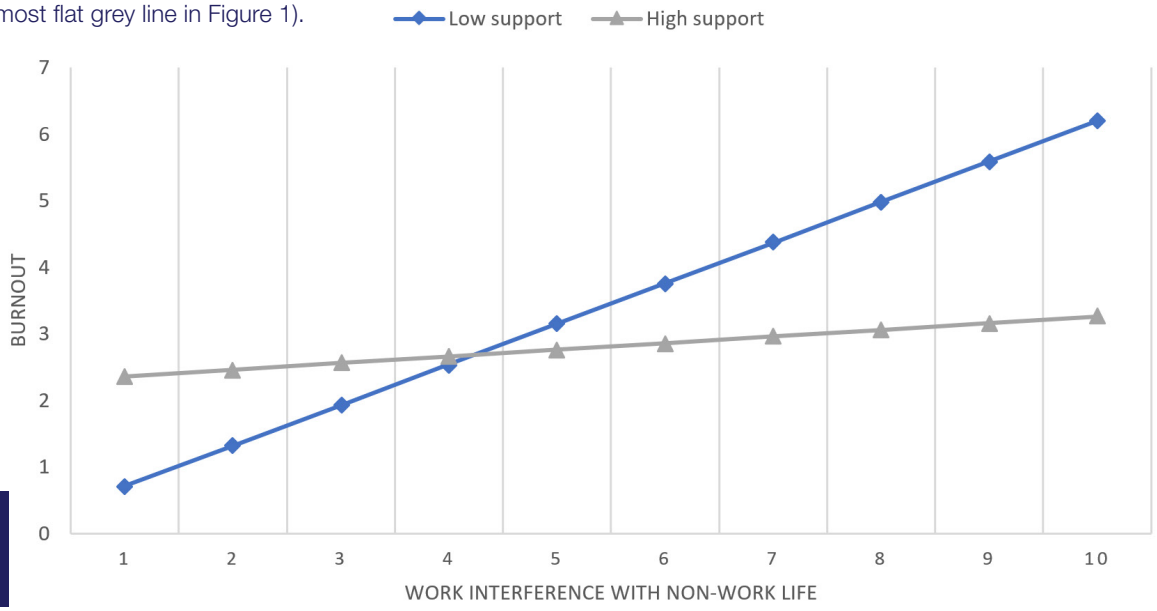

Figure 1: The protective nature of supervisor support[4]

Life and career stage

This summary report focuses on evaluating solutions to support health and wellbeing, and in doing so it is important to acknowledge workers' preferences for working hours[5]. Life stage and career stage can have a significant impact on working hours and associated health and wellbeing outcomes.

Our analysis of manual/non-managerial construction workers in Australia reported that, although mental health declines in all workers when exposed to adverse job conditions (such as high job demands and complexity, a low level of job control, a low level of perceived job security, a lack of effort-reward fairness and high work intensity), the decline is more marked and rapid in mid-aged workers who experience two or more adverse conditions.[6] Mid-life is a complex stage of development and mid-age workers are more likely than younger or older workers to be juggling work with family demands and to have more significant financial responsibilities. Differences between younger, older and mid-age workers' experiences' highlights the need to understand and address factors that impact psychological health and wellbeing over the life course.

For example, access to flexible working hours for parents can reduce strain by enabling them to meet their work and family responsibilities. Access to flexible working hours may also support workers who have caring responsibilities for elderly or unwell family members. Workers transitioning into retirement may prefer to reduce their working hours, whereas some workers may choose to work long hours to maximise earning potential.

While we know that long working hours can degrade workers' health and wellbeing, it is also important to acknowledge that a 'one size fits all' approach to working hours may not work. Organisations can support a healthy workforce by capping long hours as well as implementing working time policies which are responsive to workers' life and career stage.

> *My child is too young to complain [about my time spent at work] at the moment. But I feel as they get older they will, and I will need to compensate and find ways to manage all important aspects in my life*
>
> *– male construction worker*

Transition into retirement is now something I'm thinking about. Like a functional role of 2 to 3 days per week

– construction company senior manager

Sense of Place

In a mentally healthy workplace, steps are taken to remove workplace stressors as well as to create a work environment enabling workers to flourish. Sense of Place (SoP) describes the perception of place in connection with the qualities and attributes that distinguish a place from others, give it a sense of authenticity, and induce feelings of attachment and belonging. We examined how a working environment supporting SoP was related to mental wellbeing. Our SoP model (Figure 2) consists of six elements: support (supervisor and coworker), community, life balance, engagement, respect, and employee resilience[7].

At a large construction project in New Zealand, the client implemented a 'Village' strategy specifically designed to foster a positive social environment. The strategy sought to create an environment in which workers felt valued and proud of their involvement in the project to the extent that they would want to bring their families to the project. The physical facilities provided to workers at the site were designed to create a central meeting place and socialisation areas for project workers with high levels of cleanliness and good amenities, including the provision of wellbeing resources and a psychologically safe place to rest and recover from work. The project facilities included an integrated shared space for office and site-based workers and were designed to provide a natural connection between different office areas to improve socialisation, reduce social isolation and prevent the 'ghetto-isation' of sub-trades within their own sheds/areas. We measured SoP at this project and found high scores for all six elements. The SoP elements were also strongly and consistently linked to a positive measure of psychological health and wellbeing among the project workers.

These findings suggest that, alongside the removal of stressful job-related characteristics, organisations can take a proactive and positive approach to promoting the mental wellbeing of project workers through the implementation of strategies focused on the six elements of SoP.

There was a real feeling of care and respect for all members engaged in the project. This is in contrast to many projects I have worked on in my early career

– onsite construction worker

The [project site] is a unique space to be involved with. It has grown a workplace culture that gives me and my team a sense of belonging and self-worth to the project

– onsite construction worker

Figure 2: Elements of a supportive Sense of Place[7]

Conclusions

The first summary report in this three-part series outlined how certain job characteristics can harm construction workers' psychological health and wellbeing. The second summary report focused on the systemic causes of some of these harmful job characteristics. This final summary report outlines initiatives and changes that may create healthier ways of working in the construction industry. Together, these reports acknowledge and provide preliminary evidence that the health and wellbeing of construction workers (both managerial/professional and non-managerial/manual) can be better protected when care is taken to ensure jobs and ways of working are designed to reduce psychosocial risk factors, many of which can be traced back to fundamental issues associated with the way project-based work is organised and conducted. At the same time, initiatives to create a positive work environment in which people can flourish is also instrumental in promoting a positive culture of health and wellbeing.

However, the complex nature of construction work (including procurement and supply chain characteristics) strongly suggests the need for a systemic, whole of industry approach to improving and sustaining the mental and physical health of the construction workforce.

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