Construction Work Health and Safety Research @ RMIT

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Culture in Construction: Final Report

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Foreword

The Construction Industry Culture Taskforce was established in 2018 and is a unique collaboration between the Australian Constructors' Association and others in the industry, the NSW and Victorian Governments and Australia's leading construction workplace academics.

Our genesis is in the Construction Industry Leadership Forum (CILF), which brought together government and industry to share knowledge and set a collaborative program to try to resolve the interwoven issues facing the industry - commercial and contractual, capability and capacity constraints and thirdly, industry culture. Our Taskforce was set up to apply a focus on the latter set of challenges- how to transform the workplace culture of the construction industry.

Initial research we commissioned identified the significant cultural issues holding back the productivity and performance of the sector - excessive work hours and fatigue, mental ill health and low levels of wellbeing, and the failure to attract a diverse workforce. Our report by BIS Oxford Economics found these cultural issues cost the Australian economy around $8 billion annually. The construction industry statistics in these areas are among the poorest of any industry in Australia and it's no coincidence that industry productivity is also significantly lower than most other sectors.

Clearly, a step change is vitally important. To help achieve it, the Taskforce has developed a Culture Standard, aimed at becoming part of the procurement process for government infrastructure works, so client agencies, contractors, unions and supply chain can transform construction workplaces together.

The Culture Standard provides a framework through which all parties can work in partnership to drive change across three key areas of industry culture - time for life, wellbeing and diversity and inclusion. As part of procurement, the Culture Standard provides a level playing field for contractors and government clients to buy in, project by project, to creating better, safer, and more equitable work environments and support construction to become an industry of choice.

An important aspect of our work has been the adoption of an evidence-based approach. We have drawn on existing data and undertaken comprehensive new research to investigate the impact of the Culture Standard when applied on the ground. Our research program, led by Distinguished Professor Helen Lingard, has tracked the implementation of the Culture Standard on five pilot projects, developed a cost benefit analysis to determine the time and cost implications of the Standard, and engaged with key decision makers across industry.

Pilot Projects have provided us with extensive data sets and expressions of overwhelming support for the Culture Standard, demonstrating that a shift towards a more balanced and inclusive industry is not only necessary, but achievable, productive, desired by workers and their families, and yielding benefits for contractors, through the supply chain, and for client agencies.

Results from these pilot projects are showing strong support for a five-day work week, with 93% of salaried respondents and 71% of waged respondents favouring this schedule. Moreover, these changes have not adversely affected site productivity, challenging the industry's long-held belief that longer hours equate to more output.

Instead, they have highlighted the benefits of a rested, respectful and diverse workforce, including improved safety, industry attractiveness and job satisfaction. This approach aligns with the broader goals of the CICT to foster a culture that values wellbeing, diversity, and sustainability alongside productivity and efficiency and, importantly, in the face of acute labour shortages, the attractiveness of the industry to workers and to and efficiency.

The journey towards cultural transformation is not without its challenges. It requires a collective effort from all stakeholders, including government, industry leaders, and workers themselves. The collaborative nature of the CICT exemplifies the kind of multi-faceted approach needed to drive meaningful change. For these efforts to be successful, it needs a widespread adoption of the Culture Standard, ensuring that the actions to implement principles of diversity, wellbeing, and time for life become part of the fabric of the industry.

Since the establishment of the Taskforce, we have welcomed other state and territory jurisdictions to join us in our work on the Taskforce. Sceptics are now converts and momentum is strong. The Culture Standard works.

Now that our pilot projects have demonstrated results, more projects are now applying the Standard in procurement, such as Parramatta Light Rail Stage 2 and the Melbourne Arts Precinct. We have good reasons, including the support of the Commonwealth in its land transport funding agreements with the states and territories, to think this groundswell will continue.

There will always be more to do, and improving workplace culture cannot solve all the challenges facing the industry, but it is an essential and significant head start. It is a fundamental piece to reposition and make more productive Australia's largest industry, on which our quality of life depends.

I thank all those who have committed extraordinary energy and expertise to the development and implementation of the Standard, especially the contractors, sub-contractors, unions, and client agencies and researchers involved in the pilots.

And, of course, I thank the NSW and Victorian governments and the Australian Constructors Association, and all the representatives around the Taskforce table from 2018 for their vision and unwavering support.

Gabrielle Trainor AO

Chair

Construction Industry Culture Taskforce

April 2025

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Executive summary

The development and implementation of a Culture Standard for the construction industry, to be used in procurement, is a world-leading initiative.

Six years ago, the Construction Industry Culture Taskforce (CICT) was determined to build a strong evidence base for the application of a Standard to create the step-change needed in an industry facing unprecedented challenges.

Based on piloting the Culture Standard on five diverse, large infrastructure projects, the CICT wanted to understand the industry's response to, and the impact of the Culture Standard in addressing the significant site-based issues holding back the productivity and performance of the infrastructure construction sector.

The CICT engaged a multidisciplinary team of leading academics from RMIT University, the University of Melbourne, the University of Sydney and the Australian National University. Australian economists worked alongside the research team to analyse whether the Culture Standard affects productivity in the construction sector, impacts time and costs associated with project delivery and leads to broader societal benefits.

The key findings of this *Culture in Construction Final Report* include:

Workers overwhelmingly prefer working under the Culture Standard: A majority of both waged and salaried workers preferred a 5-day work week due to the benefits associated with spending time with family and participating in out of work activities

Working under the Culture Standard does not adversely affect project time and costs: Findings of the cost benefit analysis indicate that there is no observable evidence to suggest that the application of the time for life provisions of the Culture Standard increases the cost of delivering construction projects.

Retention was much higher: In four out of the five projects, the employee turnover rates were notably lower across the Pilot Projects implementing the Culture Standard when compared to the relevant head contractors' turnover rates. Improved retention has the potential for the sector to avoid costs of between $386-771million per annum.[1]

Workers felt more productive: The majority of Pilot Project interview participants believed their productivity was enhanced, due to a variety of health and work-related factors. In particular, people experiencing a two-day break from work each week indicated they were rested rather than fatigued.

There were higher female participation rates: On average 32% of staff employed on the Pilot Projects identified as women, compared to 24% within the head contractors' workforce more generally. (This may have been a deliberate effort to recruit more women to the projects and it was helpful in testing the impact of the Culture Standard).

Support for worker wellbeing was greater than is normal in the industry: Workers with high levels of mental wellbeing also saw that their workplaces were more supportive of their family life, and were fairer

1 *Estimates are of value to NSW and Victoria (FY$25) based on the assumption that broad rollout of the Culture Standard in these states generate outcomes similar to those observed on the pilot projects.*

and more respectful. Workers with high mental health also reported more positive work-life balance and less exposure to inappropriate banter in the workplace.

Workplaces were more inclusive: Women said they experienced a more positive and respectful workplace where they felt valued and welcome.

The small hip pocket impact was worth it: Many waged participants who were initially concerned about the way that working under the Culture Standard would impact their income indicated that the impacts were not as significant as they had expected and that the benefits of having two consecutive days off work outweighed the costs associated with the modified working time arrangements. Having experienced the benefits of the 5-day week, some waged workers indicated they would no longer be willing to work six days per week. However, some waged workers preferred to work a 6-day or 7-day week so as to maximise their income.

Background

Primarily, the research focused on the experience of five Pilot Projects across the states of New South Wales and Victoria in implementing the Culture Standard. These projects represented a mix of both vertical and horizontal projects delivered by a range of Government procurement agencies and construction contractors.

Each Pilot Project implemented the requirements of the Culture Standard differently, highlighting that construction projects can exercise considerable flexibility and control over how the elements of the Culture Standard were addressed. The Culture Standard requirements do not assume a ‘one size fits all’ approach. It offers the ability to implement as best suited to the project context.

Between November 2022 and May 2024, the research team conducted surveys and interviews on these projects using a longitudinal research design. They collected survey and interview data across multiple waves. The pilot project research design is described in section 2.3 of this report.

To deliver on the requirements of the Standard, projects set a range of initiatives aimed at enhancing time for life, wellbeing and diversity outcomes. In addition to the 50- hour weekly cap and 5-day working week, one of the most important measures was providing access to formal and informal flexible work arrangements. Interview participants also described the critical role of leadership in supporting and a culture of care in which senior project leaders prioritised health and wellbeing, role modelled flexible working styles and supported the creation of safe, respectful and inclusive workplaces.

At three Pilot Projects, data collection continued through to project completion. This provided an opportunity to determine whether workers’ experiences of working under the Culture Standard changed as a project progressed towards completion. Comparison of data collected revealed that weekly work hours did not increase significantly as the project reached the final stages of completion, usually a time of more intensive workload. In addition, work demand, managerial support for work-family interaction, work-life balance, organisational fairness, inappropriate banter, respect at work, work engagement, and mental wellbeing all remained stable across the multiple waves of data collection at these projects.

Time for Life

The Culture Standard requires an average 50 hour work week with a two day break, with weekends highly preferred and flexible arrangements wherever possible. The survey results indicated that 24% of both salaried and waged workers worked between 46 and 50 hours each week at the Pilot Projects. However, salaried workers were more likely to work more than 50 hours a week than waged workers (43% compared to 20% respectively).

The survey data also indicated that most salaried workers (52%) and almost half of the waged workers (47%) who completed the survey preferred to work about the same hours as they were working under the Culture Standard. Proportionally more salaried workers (41%) preferred to work fewer hours than waged workers (20%), while 33% of waged workers indicated a preference to work more hours than they were working under the Culture Standard. This percentage was similar across the five Pilot Projects.

When asked about their preferred work schedule, 93% of salaried and 71% of waged participants indicated they prefer to work a 5-day week. Proportionally more waged workers than salaried workers indicated a preference for a 6-day working week (25% compared to 5% respectively).

The interview findings (reported in section 3.3 of this report) similarly revealed that most salaried and waged participants preferred a 5-day week due to the benefits associated with spending time with family, participating in sports and leisure activities, and resting and recovering from the working week.

Participants reported that having two consecutive days off enabled them to start the next working week feeling refreshed rather than fatigued. Interview participants also indicated that working five days each week encouraged them to better plan their working week so they could complete their assigned tasks without the need for a sixth day. Some participants indicated that moving from a 6-day to a 5-day working week had improved their productivity. They explained this as being due to them feeling refreshed after a 2-day break and therefore commencing the working week ready to work, having recovered sufficiently from the previous week.

Many waged participants who were initially concerned about the way that working under the Culture Standard would impact their income indicated that the impacts were not as significant as they had expected and that the benefits of having two consecutive days off work outweighed the costs associated with the modified working time arrangements. Having experienced the benefits of the 5-day week, some waged workers indicated they would no longer be willing to work six days per week. However, some waged workers preferred to work a 6-day or 7-day week so as to maximise their income. Reasons given for this included the increased cost of living and saving for a major purchase (such as property).

In relation to work experiences, the survey results indicated that salaried workers perceived significantly higher managerial work-family support, organisational fairness, and respect at work than waged workers. Salaried workers also reported higher levels of work engagement and mental wellbeing compared to waged workers. Conversely, salaried workers also reported higher perceived workload than the waged workers who completed the survey.

Wellbeing

Pilot Project findings reflect the inter-relatedness of the three pillars of the Culture Standard and the ability to impact worker wellbeing.

Survey participants were categorised into one of three groups reflecting whether they reported low, medium or high mental wellbeing (based on population norm data), and their experience of work characteristics was compared.

Some significant differences were observed as follows:

- Participants in the low mental wellbeing group indicated they experience significantly higher work demand than those in the medium and high mental wellbeing groups

- Participants in the low and medium mental wellbeing groups reported significantly lower managerial work-family support than those in the high mental wellbeing group those in the medium and low mental wellbeing groups

- Participants in the high mental wellbeing group perceived significantly more organisational fairness, respect, and work engagement than those in the low and medium mental wellbeing groups, and

- Participants in the high mental wellbeing group reported significantly less inappropriate banter than those in the low and medium mental wellbeing groups. These findings reflect the inter-relatedness of the three pillars of the Culture Standard.

Diversity

Pilot Projects implemented a range of initiatives to create a safe and respectful workplace for women and to bring more women into project roles. For example, initiatives implemented at the Pilot Projects included the provision of inclusive site amenities, diversity conditions built into subcontractor agreements, appointment of staff focused on inclusion and diversity, respect at work policies clearly stated in contracts and inductions, and zero tolerance of disrespectful behaviour.

The majority of women interviewed indicated they had experienced a positive and respectful workplace where they felt valued and welcome. Most women felt confident and supported to report incidents of inappropriate behaviour, however this was not the case for all women who were interviewed. Some women in site-based roles continued to experience inappropriate language and behaviour in the workplace. Of these women, a small number chose not to report incidents because they did not want to be labelled as troublemakers and/or potentially jeopardise their employment, while others did not want to create a scene and just wanted to ‘get on’ and do their work with minimum ‘fuss’.

The Culture Standard has a particular focus on having women represented across a broad range of project roles. The cost benefit analysis indicated that, with the exception of one Pilot Project, the proportion of staff that identify as women was higher on the Pilot Projects than in the workforce of the relevant head contractor organisations. On average 32% of staff employed on the Pilot Projects identified as women, compared to 24% within the head contractors’ workforce more generally.

Key Decision Maker Interviews

The research program also involved conducting interviews with key decision-makers from government agencies, industry peak bodies, trade unions and construction organisations across two stages:

Stage One interviews were conducted with 22 key decision-makers between June and November 2022. These interviews explored the key decision-makers’ reflections on the likely impacts of implementing the Culture Standard and are presented in section 3.1 of this report.

Stage Two interviews were conducted with 19 key decision-makers from August to October 2024. Of the 22 participants who completed the stage one interview, 11 took part in the Stage Two interviews. The Stage Two interviews focused on reviewing results from the Pilot Projects and exploring whether the key decision-makers’ perceptions had changed since Stage One. These results are presented in section 3.6 of this report.

In the Stage One key decision-maker interviews, participants differed in their views on the Culture Standard. Some expressed unequivocal support for the implementation of the Culture Standard, identifying the urgency and necessity of industry change. Other participants were more cautious in their support and indicated they would like more evidence about the benefits and costs associated with

implementing the Culture Standard before deciding whether or not they would support the more widespread adoption of the initiative.

A particular concern raised by key decision-makers during the Stage One interviews was that implementing the Culture Standard would increase the cost of delivering construction projects. However, findings of the cost benefit analysis indicate that there is no observable evidence to suggest that the application of the time for life provisions of the Culture Standard increases the cost of delivering construction projects.

During the first round of key decision-maker interviews, some stakeholders suggested that the procurement practices adopted by client organisations encourage contractors to reduce costs and timelines in order to win work. It was argued that these systemic pressures to compete on cost and time performance would create a challenge for the implementation of the Culture Standard, in particular the time for life elements. Some Pilot Project participants shared their concerns that current tendering practices could be a barrier to adoption of the Culture Standard. However, the Pilot Project analysis showed that, when projects are procured and tendered on the basis that people will work a 5-day week, it is possible to maintain the Culture Standard across the project life cycle.

At the time of the Stage Two key decision-maker interviews many participants, particularly in government roles, strongly emphasised the ways that the industry context has changed since the first round of interviews. Changes observed are the emergence of a housing crisis and the signing of a National Housing Accord and an agreement between the Commonwealth and state and territory governments in August 2023 to build 1.2 million new well-located homes over the 5 years from mid-2024. This is in the context of an already existing labour shortage in construction. Many government participants indicated that concerns that they previously expressed about the costs of adopting the Culture Standard are greatly diminished. Key reasons for this change in perspective are increased concern and a sense of urgency about the industry's ability to meet proposed construction targets under the National Housing Accord in combination with an existing significant pipeline of infrastructure projects. Some participants also indicated a greater awareness of the health and social costs associated with long and inflexible hours of work and argued that, even if there are cost implications associated with implementing the Culture Standard, these should be considered similar to costs associated with other social procurement policies, i.e., incurred in the interests of generating value above and beyond the value of the construction being procured.

Notwithstanding the strong support for the Culture Standard among participants in government roles, overall Stage Two interview key decision-maker interview participants were divided in their views. On the one hand, many participants representing construction contracting organisations were strongly supportive of the Culture Standard. While, on the other hand another group of participants (primarily industry peak bodies and some contractor representatives) remained opposed to the implementation of the Culture Standard. These participants are still concerned about the lack of flexibility afforded to organisations in scheduling work if a 5-day week schedule is prescribed.

During the Stage Two interviews, procurement was identified as the most effective mechanism through which the Culture Standard could be implemented. Most government representatives identified the need for government agencies to include requirements to comply with the Culture Standard in their construction contracts and, importantly, then verify that contractors are adhering to the requirements. Some of the Stage Two participants suggested that, in order to attract more women into the construction industry, flexible work options and part time work (reduced hour contracts) are needed. These participants regarded women as an important group of workers to fill the shortfall the industry is currently experiencing. However, the importance of providing equal and equitable access to good quality jobs and career opportunities is also important as reflected in the gender diversity provisions of the Culture

Standard. Overall, the Stage Two key decision-maker interviews reinforced the importance of improving the culture of the construction industry in the three areas reflected in the Culture Standard. Many of the key decision-maker interview participants expressed the opinion that the construction industry has no other option but to change its culture and practices to be more attractive to young workers who currently regard construction as an unattractive career option.

Part 1: Introduction

1.1 Background to the Culture Standard

The Construction Industry Culture Taskforce (CICT) - comprising the Australian Constructors Association and the Governments of New South Wales and Victoria - was established in 2018. The CICT was established to secure the long-term sustainability of the construction industry through addressing cultural issues in the industry.

The CICT developed a draft Culture Standard (hereafter referred to as the Culture Standard) which is expected to be incorporated into public sector procurement processes relating to infrastructure construction. It is expected that the Culture Standard will help to create positive change throughout the construction industry's supply chain.

To inform the development of the Culture Standard, the CICT invested in research to quantify the problem, and findings are outlined in the Cost of Doing Nothing report. The CICT also engaged a university-based research team to undertake a literature review of work hour reduction trials and their impacts on wellbeing, diversity, and productivity in construction and other industries. The literature review suggested that a 'triple win' may be achieved whereby workers' health, safety and wellbeing and the industry's gender diversity profile could be improved by addressing the issue of long and inflexible work hours and rigid adherence to a 6-day working week.

The Cost of Doing Nothing Report and the Triple Wins Literature Review can be downloaded from the CICT website.

In response to the Cost of Doing Nothing Report and the Triple Wins Literature Review, the Culture Standard established requirements relating to three major issues impacting the construction industry's performance and sustainability (CICT, 2021, p.8):

- long working hours - hours of work in the industry are excessive, resulting in high rates of turnover, absenteeism, and stress-related leave.
- lack of gender diversity – the failure to attract and retain women narrows the industry's talent pool and reduces its capacity to deliver projects, and
- wellbeing - stress levels are high and the suicide rate amongst construction workers is considerably higher than the national average.

In their Culture in Construction Consultation Paper, the CICT (2021) acknowledged that *"the challenges of working hours, wellbeing and gender diversity in the industry have entirely interwoven causes and effects. Addressing one will not deliver the change the industry needs. The Standard is an integrated way to make a step change in the way construction works in partnership with our clients, to the benefit of all"* (p.8). It is therefore important to note that, while the Culture Standard addresses each of the three areas of separately, it is acknowledged that they are inherently interrelated. The interrelation between the three focus areas has a strong evidence base and is well documented in the academic literature.

More information on the development and content of the Culture Standard is available at the CICT website.

1.2 Aim of the research

The development and implementation of a Culture Standard for the construction industry is a world-leading initiative. Consequently, a robust and rigorous program of research was supported by the CICT to understand the industry's response to and impact of the Culture Standard. The research program aims to:

- canvas the perspectives of key industry stakeholders relating to the need for and implementation of cultural change, and
- evaluate the effects of implementing the Culture Standard at five Pilot Projects (CICT, 2021).

A multidisciplinary team of researchers from RMIT University, the University of Melbourne/University of Sydney and the Australian National University was engaged to understand the response to and impact of the Culture Standard. Frontier Economics was engaged to work alongside the research team to undertake an analysis of the costs and benefits associated with implementing the Culture Standard.

To achieve the research aims a multi-method research program was developed consisting of five key elements. Table 1.1 outlines the outcomes and outputs associated with each element of the research program.

Table 1.1: Research program overview

Research element	Outcome	Outputs
Literature review exploring the relationships between work hours, health, safety, and gender equality.	The literature review findings informed the development of the Culture Standard.	Triple Wins Literature Review
Examination of NSW Government Infrastructure Trainees' intention to pursue a career in construction.	This component explored the factors considered important to new entrants to the construction industry in making career decisions. It found that issues relating to time for life, having a healthy lifestyle and working in a diverse, fair and inclusive workplace are important job characteristics to young workers. This evidence supports the focus on the three pillars of the Culture Standard.	NSW Infrastructure Trainee Research Reports NSW Infrastructure Trainees Research to Practice Paper
Longitudinal evaluation of the implementation of the Culture Standard at five Pilot Projects.	Data collected at the Pilot Projects included both survey and interview data. Data was collected from waged and salaried workers. Workers' experiences and opinions about the impact and outcomes associated with the Culture Standard were	CICT Interim Report CICT Interim Report Research to Practice Paper

Research element	Outcome	Outputs
	explored as projects progressed from early stages to completion.	
Examination of key decision-makers' perceptions of the Culture Standard.	Key construction industry decision-makers (representing the Australian Government, state government agencies, industry peak bodies and trade unions) were identified and interviewed at the beginning and towards the end of the research program. This provided rich insights into stakeholders' level of support for the Culture Standard and/or areas of concern.	Incorporated into this report.
Cost benefit analysis of the Culture Standard.	This provided evidence of monetary and non-monetary costs and benefits associated with adoption of the Culture Standard.	Incorporated into this report.

Accompanying Table 1.1 is Figure 1.1 which summarises the research elements and where they fit in the research program. Figure 1.1 shows that the final research report incorporates three elements:

i) longitudinal evaluation of the implementation of the Culture Standard at five Pilot Projects (note that data was collected at five time points, however Pilot Projects did not participate in all data collection time points – see section 2.3)

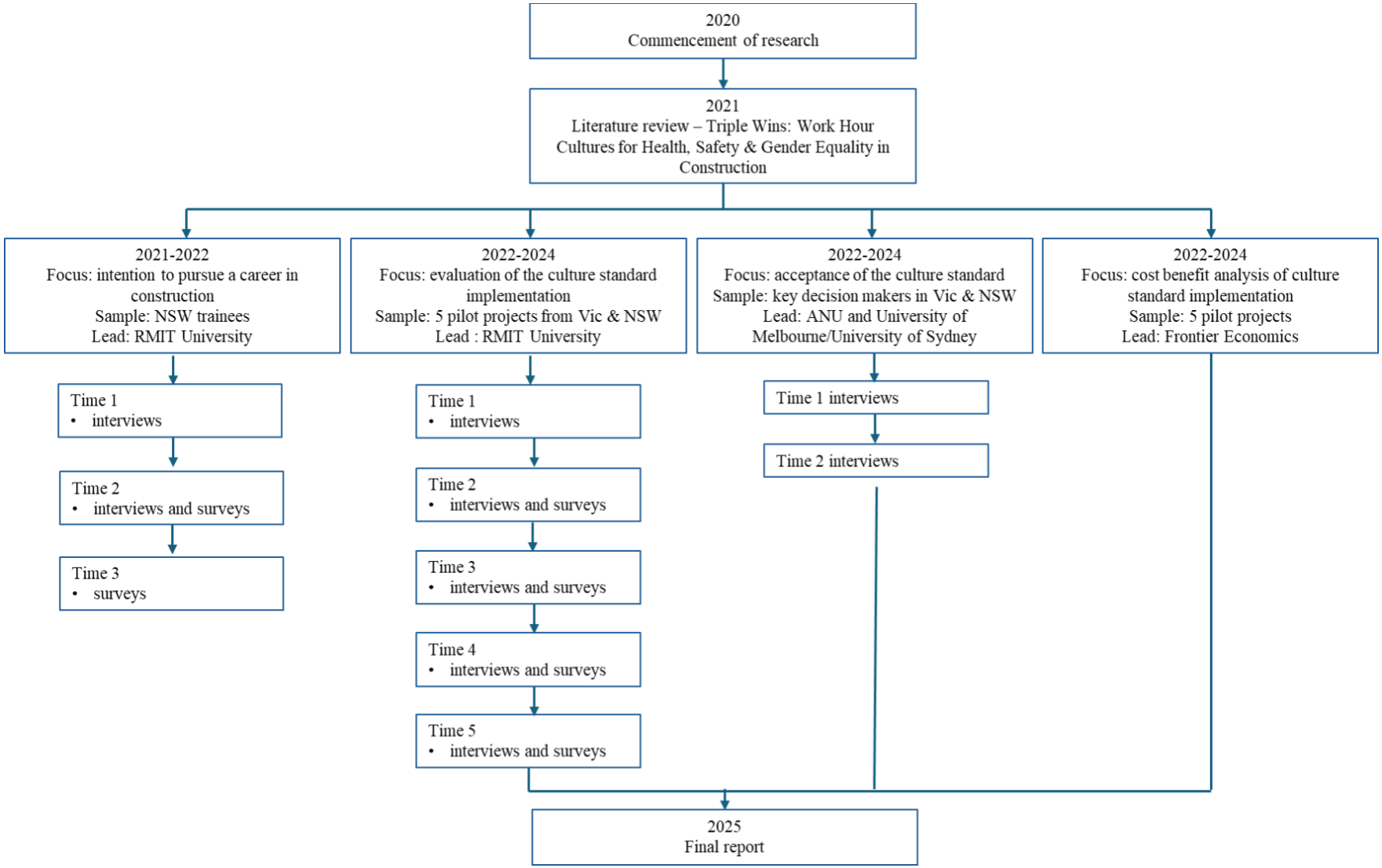
ii) examination of key decision-makers' perceptions of the Culture Standard, and

iii) cost benefit analysis of the Culture Standard.

Part 2 of this report describes the methods used in each of the research elements incorporated into the final report.

Methods, key findings, and implications of the literature review and examination of NSW Government Infrastructure Trainees' intention to pursue a career in construction are outlined in the reports hyperlinked in Table 1.1.

Figure 1.1: Overview of research program components



1.3 Purpose of this report

This report brings together the findings from each of the research program elements. It is intended to provide an overview of the methods used to collect and analyse data, describe key findings from the Pilot Project evaluations, key decision-maker interviews and cost benefit analysis and discuss key findings of the research program.

1.4 Report structure

The report comprises the following sections:

Report section	Overview
Executive summary	Provides a summary of the report.
Part 1: Introduction	Outlines the background to the Culture Standard and provides an overview of the research program elements and the research aim. Development of the evidence base is summarised, followed by the purpose of the report and the report structure. At the end of this section a glossary is provided.
Part 2: Methods	An overview of the research process is provided, followed by a description of the data collection and analysis methods used, including in the key decision-maker interviews, the Pilot Project survey and interviews, and the cost benefit analysis.
Part 3: Results	Results are outlined in six sections. First, the key decision-maker interviews (stage one) are presented. This is followed by the Pilot Project survey findings and interview findings. The analysis of costs and benefits associated with implementing the Culture Standard are presented, and then questions originating from the key decision-maker interviews (stage one) are addressed by drawing on the Pilot Project findings as well as the cost benefit analysis. The section concludes with findings of the decision-maker interviews (stage two).
Part 4: Discussion	Draws together the key points arising from the research program and considers these in light of the Culture Standard and the national and international literature.
Part 5: References	References used throughout the report are listed.
Part 6: Appendices	Supplementary materials about the data collection and analysis methods are provided.

1.5 Glossary

CICT Construction Industry Culture Taskforce

EBA Enterprise Bargaining Agreement

EPL Environment Protection Licences

KDM Key Decision-Maker

RDO Rostered Day Off

Part 2: Methods

2.1 Research process overview

The research involved different components undertaken in parallel, as summarised in Section 1.2.

Key decision-maker interviews – two rounds of interviews were undertaken with senior decision-makers in the construction industry including construction organisations, industry peak bodies, trade unions, and state government clients. Stage One interviews sought key-decision-makers' views about the 5-day work schedule and capped work hours, the costs and benefits of the modified work schedule and any perceived problems or opportunities associated with implementing the Culture Standard. Stage Two interviews sought to understand changes in the key decision-makers' perceptions after the implementation of the Culture Standard at five Pilot Projects.

Pilot Projects – the Culture Standard was implemented at five construction projects, two in Victoria and three in NSW. Multiple waves of surveys and interviews were conducted at these Pilot Projects to examine the different ways the Culture Standard was implemented and explore workers' experiences of the Culture Standard implementation at these projects.

Cost benefit analysis – a cost benefit analysis was undertaken to explore whether and how the implementation of the time-for-life provisions in the Culture Standard drive productivity and the potential other benefits or costs for workers, the industry and society more broadly. The objective of the analysis was to provide robust evidence of the value and productivity impacts of implementing the Culture Standard.

A detailed description of the methods involved in undertaking the above research components is provided in the following sections.

2.2 Key decision-maker interview method

Interviews were conducted with industry leaders and stakeholders (key decision-makers) to understand their viewpoints and concerns in relation to changes to work hours and schedules involved in the implementation of the Culture Standard. The key decision-maker interviews consisted of two stages.

2.2.1 Stage One

The first round of key decision-maker (KDM) interviews was conducted between June and November 2022. During these interviews, individuals from key stakeholder groups in the Australian construction industry were asked about their opinions on the Culture Standard's recommendations for work hour modifications.

Specifically, the interviewees were asked to share their views on work hour limits of 50 hours/week over five days, and the government trials of these work hours at selected projects. The interview questions were are also designed to gather participants' insights concerning the costs and benefits of modified work hours, challenges to implementing modified hours, and how the participants, as leaders, might influence the implementation of the Culture Standard's work hour recommendations.

The CICT provided a sampling frame comprising construction contracting organisations, industry peak bodies, trade unions, and government agencies. The target sample was people in senior roles ('key decision-makers') including national and state level CEOs of multinational construction companies operating in Australia with experience delivering large infrastructure and transportation projects; executive level leaders of state chapters of industry peak bodies representing all tiers of the construction industry;

state and national level executives of unions representing a range of construction trades and workers; and executives of state level government agencies with a direct role in setting procurement policies or acting as clients of large infrastructure and transportation projects.

Decision-makers were invited to take part in the interviews via email and phone, with a suite of recruitment materials sent via email to provide the context and rationale for the interviews. These materials included a copy of the interview questions, a short background on the study, a brief summary of the evidence supporting modified work hours, a copy of the *Triple Wins* literature review, a copy of the CICT Consultation Paper, and a decision-maker information sheet which outlined the parameters of the interview, privacy policy, funding behind the research, and the university ethics approval for the interviews.

The interviews were conducted online by researchers from the Australian National University (ANU) and the University of Melbourne. Each interview lasted approximately 45 minutes. As the interviews were exploratory, the interviews were semi-structured and open-ended with questions designed to elicit decision-makers' own reflections, opinions, and professional experiences as they relate to the topic area. The KDM interview guide is provided in Appendix A.

Following each interview, the interviewers met immediately to review and compare notes on the salient themes emerging in the interview. As the interviews progressed, the interviewers also compared interpretations of recurring themes that were emerging. This iterative, cumulative discussion of emerging themes offered a first line of data analysis and inter-coder reliability, a way to cross-reference the validity and reliability of researcher interpretations of the data.

Once interviews were completed, the audio files were professionally transcribed and analysed. As with the immediate post-interview analysis, the transcripts were analysed using an inductive, grounded approach which involved reading the transcripts and coding sections of the interviews. As successive interviews were coded, running notes were kept on emerging patterns and relationships between analytic categories, such as which codes co-occurred, which codes were most common across the interviews, and which codes clustered around decision-maker types. These notes about emerging patterns and relationships were checked against the data as coding continued, with the ongoing refinement of both codes and observations about patterns and relationships.

To check for the reliability of the codes, the researchers met to compare and discuss the codes each had assigned to sections of text across a sample of interviews. Where there were overlapping ideas represented by multiple codes, researchers agreed on which code best encapsulated particular sections of text.

Subsequently, the codes were aggregated into higher level themes. The analysis of the stakeholder interviews generated over 500 first level codes, which were then aggregated into 38 higher level themes. The research team then met to discuss the findings and insights from the data.

2.2.2 Stage Two

Decision-makers who took part in a Stage One interview were invited to participate in a Stage Two interview. The interviews were conducted online by researchers from ANU and the University of Sydney. Each interview lasted approximately 45 minutes. As the interviews were exploratory, the interviews were semi-structured and open-ended with questions designed to elicit decision-makers' own reflections, opinions, and professional experiences as they relate to the topic area. The second stage KDM interview guide is provided in Appendix A.

The second round of KDM interviews was conducted between August and October 2024. In advance of the Stage Two interviews, a summary of findings from the analysis of first round KDM interviews, as well

as interim data from the Pilot Projects implementing the reduced work hours were presented to decision-makers. The Stage Two interviews asked the decision-makers to reflect on the areas of agreement and disagreement with other stakeholders interviewed, and to consider alternate perspectives on modified work hours. During the second interviews, the decision-makers were also asked for their opinion on the interim data provided for the Pilot Projects implementing the Culture Standard.

Data preparation and analysis followed the same process used for the first round of KDM interviews.

2.3 Pilot Project method

Data was collected at five Pilot Projects that implemented the Culture Standard. Data collection at these Pilot Projects involved multiple rounds of surveys and interviews undertaken between November 2022 and May 2024. At all of these projects, data collection started at the early stage of the construction phase. On three projects (A, C and D), data collection continued through to project completion as these projects completed within the data collection period of this research.

2.3.1 Survey method

Multiple waves of surveys were conducted at each Pilot Project. Timing of data collection at each Pilot Project was decided based on project progress and workforce profile. Table 2.1 shows the timing of surveys conducted at the Pilot Projects and the number of responses received in each wave. A total of 739 survey responses were received.

Table 2.1: Summary of surveys conducted at the Pilot Projects

Project	Wave 1	Wave 2	Wave 3
A	June 2023 (53 responses)	December 2023 (43 responses)	April 2024 (46 responses)
B	June 2023 (65 responses)	November 2023 (180 responses)	-
C	June 2023 (30 responses)	February 2024 (57 responses)	-
D	September 2023 (110 responses)	May 2024 (90 responses)	-
E	December 2023 (65 responses)	-	-

The survey instrument consisted of 36 questions in three sections.

Section one asked demographic questions, such as age, gender and family structure.

Section two asked questions about participants' work including their employer, type of pay, work hours, and preferences relating to work hours and schedule.

Section three asked questions about:

- work demand (Aronsson et al., 2014)
- workload (Rothmann and Joubert, 2007)
- managerial work-family support (Behson, 2005)

- work-life balance (Haar, 2013)
- organisational fairness (Mor Barak, 1998)
- respect (Walsh et al., 2012)
- mental wellbeing (Ng Fat et al., 2017), and
- work engagement (Demerouti et al., 2010).

Survey scales and items are outlined in Appendix B.

The survey was administered using the "TurningPoint" automated response system with "KeePad" hand-held devices. Survey questions were projected onto a screen and read out by a facilitator. Participants were required to press a number on the hand-held devices to indicate their responses to each statement.

Following each data collection wave, the survey data was analysed for each project. Descriptive statistics were developed to understand the experiences of participants in different demographic groups, e.g. people who differed by age, gender, family structure, pay type, work-hour ranges, etc.

Participants' perceptions of the characteristics of their work (work demand, workload, managerial work-family support, work-life balance, organisational fairness, prevalence of inappropriate banter, respect, and work engagement) were captured using Likert-scales with different response ranges (see Appendix B). These scales were quantified by assigning a score of 1 to the lowest response category and increasing the scores of the subsequent category by 1 point consecutively. For example, a 5-point Likert scale ranged from 1 (strongly disagree) to 5 (strongly agree).

Mean scores were calculated for each variable and the results were compared between different demographic groups. To test the statistical significance differences in mean scores between groups, t-tests, one-way analyses of variance (ANOVA) were conducted. Chi-square tests were used to test for significant differences between observed and expected data (see Appendix C for descriptions of these statistical procedures).

To measure mental wellbeing, the seven-item short-form Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) was used (Stewart-Brown et al., 2009). Responses to each item were captured on a 5-point scale ranging from 1 (none of the time) to 5 (all the time). The responses reflected how frequently the participants experienced specific feelings over the two weeks prior to completing the survey. An overall mental wellbeing score was calculated by adding up the scores of all the items and transforming the score according to the procedure specified by Ng Fat et al. (2017). Calculating an overall score for mental wellbeing required that participants respond to all the seven items in the SWEMWBS. The overall scores enabled participants to be divided into three groups reflecting whether they reported low, medium or high mental wellbeing scores based upon the application of population norm scores (see Ng Fat et al., 2017). The SWEMWBS has a mean of 23.5 and a standard deviation of 3.9 in general population samples. This means that 15% of the population can be expected to have a score >27.4. Consequently, the threshold for high mental wellbeing was set at 27.5. Conversely, 15% of the population can be expected to have a score <19.6, so a threshold point of 19.5 was established below which participants were deemed to have low mental wellbeing.

The mean scores for work characteristic variables were compared between participants in different mental wellbeing groups. The statistical significance of differences in mean scores were tested using an ANOVA technique. Since different scales were used to measure the work characteristics, mean scores were normalised and presented as percentages before the comparison.

2.3.2 Interview method

Multiple rounds of interviews were conducted at each Pilot Project, as summarised in Table 2.2. Participants were recruited with the assistance of head contractors delivering each project in response to a sampling frame developed by the research team. The sampling frame aimed to include interview participants from a range of work groups, life stages, and genders (Appendix D). A total of 319 interviews were conducted.

Table 2.2: Summary of interviews conducted at the Pilot Projects

Project	Wave 1	Wave 2	Wave 3	Wave 4
A	February 2023 (17 interviews)	June 2023 (17 interviews)	December 2023 (18 interviews)	April 2024 (13 interviews)
B	March 2023 (17 interviews)	June 2023 (16 interviews)	September 2023 (17 interviews)	December 2023 (19 interviews)
C	March 2023 (16 interviews)	June 2023 (20 interviews)	December 2023 (19 interviews)	April 2024 (14 interviews)
D	November 2022 (18 interviews)	February 2023 (18 interviews)	September 2023 (17 interviews)	May 2024 (8 interviews)
E	July 2023 (19 interviews)	September 2023 (17 interviews)	December 2023 (19 interviews)	-

At the commencement of each interview, the interviewer explained the research purpose to participants, as outlined in the Participant Information Statement and Consent Form, and requested permission to audio-record the interview for transcription purposes. Participants were advised that their involvement was voluntary and data confidentiality would be strictly protected.

Interviews lasted between 7 and 67 minutes. Interviews were semi-structured and open-ended, i.e. while an interview schedule (see Appendix E) guided the interview, participants were able to deviate from the interview questions and provide any details that they felt would be relevant to the research. In addition, at the end of the interviews, participants were asked to provide any additional information that they felt would be useful to the research. As the research project progressed, the interview schedule was refined and updated to:

- account for the findings from the previous rounds of interviews and explore areas where more information was needed, and
- incorporate additional questions relevant to the stage of the Pilot Projects and specific activities; For example, following each “occupation/campaign” period on horizontal projects, specific questions were asked about project arrangements and the experiences of participants working during the occupation/campaign. Also, in the last round of interviews, participants were asked to reflect on the implementation of the Culture Standard over the project duration and provide their views about the potential to adopt the Culture Standard across the entire industry in the future.

Where possible, interviews were undertaken with the same participants across the repeated waves to examine perspectives across multiple time points.

Interviews were recorded and transcribed verbatim. The transcripts were thematically analysed and coded by two researchers to ensure reliability in the coding/analysis process. The coding process involved a mix of inductive and deductive approaches. The deductive coding process was guided by the key areas of the Culture Standard, i.e. high-level codes reflected experiences in relation to the three

pillars of the Culture Standard (time for life, wellbeing, and gender diversity). Additional themes were identified under these areas, using an inductive approach which involved: (1) close reading of the transcripts and identifying key themes; (2) creating categories and themes related to the research aims; (3) identifying overlapping codes; and (4) refining and revising the themes to identify converging and recurring themes.

2.4 Cost benefit analysis method

Frontier Economics was engaged by the CICT to undertake a cost benefit analysis of the implementation of the Culture Standard at the Pilot Projects. In this section, the method used by Frontier Economics is outlined.

2.4.1 Overview of approach

A cost benefit analysis (CBA) is undertaken to establish whether there is value in implementing a policy or intervention. A CBA compares the costs and benefits associated with an intervention for society as a whole. It is a common input into government decision-making when considering whether to pursue policy interventions and projects more generally.

The analysis undertaken in relation to the Culture Standard followed the key steps and analytical approaches associated with a CBA, notably that the CBA:

- is undertaken from the perspective of society — meaning it considers all costs and benefits that accrue to society as a whole, rather than the costs and benefits that accrue to workers or the construction sector. This is relevant because efficient government decision-making is based on the impact of proposed options on society more generally rather than any one party or entity, and

- is an incremental analysis — meaning the analysis considers whether an intervention generates additional costs and benefits over and above a base case reflecting what would have happened without the intervention i.e. under a 'business-as-usual' scenario. This recognises that some changes would have occurred, irrespective of the trialling of the Culture Standard, as a result of other drivers in the sector and changes in the economy.

2.4.2 Key steps

Frontier Economics undertook the following key steps in their analysis:

1. Understanding the intervention and base case — Frontier Economics first sought to understand and predict how the time for life (TfL) provisions might be expected to change cost and time outcomes relative to a base case. This necessarily involves determining an appropriate base case or counterfactual for the assessment i.e., what would be expected to have happened on sites or in the industry assuming a business-as-usual approach to managing work shifts and hours.
2. Identifying how the TfL provisions were actually actioned or implemented at the Pilot Projects.
3. Identifying the key incremental impacts expected to result from these interventions — i.e the economic, environmental and social costs and benefits that arose at the Pilot Projects (through comparison to a base case) and that theoretically might arise from the implementation of the Culture Standard.
4. Identifying data and evidence that could be used to quantify and, where possible, monetise these costs and benefits.
5. Collating and comparing both quantitative and qualitative outcomes. For some impacts it was possible to estimate the relative incremental economic value of applying the TfL provisions more broadly across NSW and Victoria under a set of assumptions. However, many of the expected incremental impacts (i.e. costs and benefits) proved challenging to observe in the Pilot Projects for

reasons which are further described in the sections that follow (see the next section of *Challenges associated with identifying and isolating impacts*). Where it has not been possible to value impacts, the impacts have been assessed qualitatively. Therefore, the final step in the analysis involves bringing this information together.

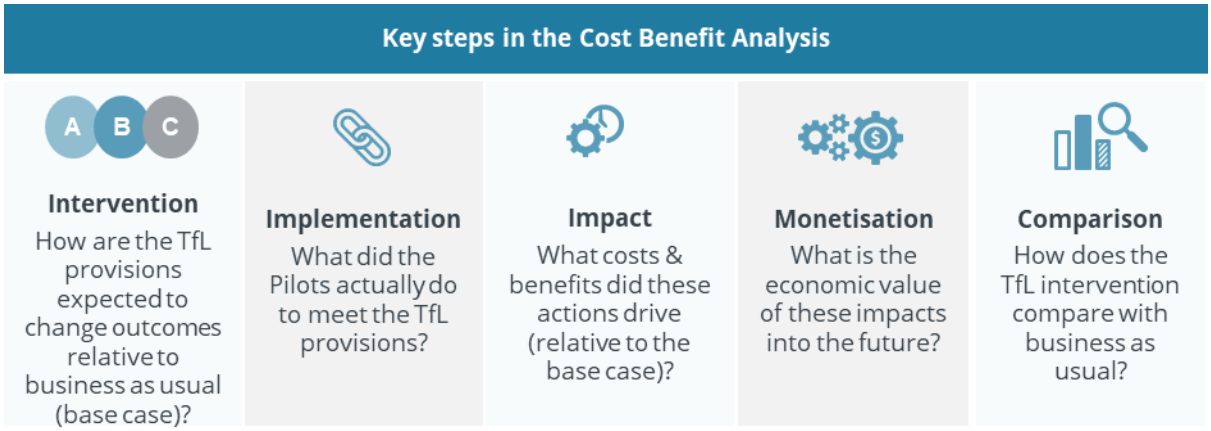


Figure 2.1: Summary of key steps in the CBA process *Source: Frontier Economics.*

To inform this assessment, Frontier Economics was engaged early in the life of the Pilot Projects to identify a framework for the assessment and to identify relevant information that may exist or could be gathered to inform this assessment. Box 1 below outlines the data and analysis that was considered and used to inform this assessment.

A key challenge for the assessment was observing the extent to which the TfL provisions led to a change in the impacts of interest on the Pilot Projects because there is insufficient, robust baseline data on what would have happened in the absence of the Culture Standard being implemented.

Box 1: Data used to support the assessment

RMIT Culture in Construction pilot worker survey

Frontier Economics has used information on worker preferences from the Pilot Project worker survey to inform the assessments of impact on workers' utility or quality of life in a generic sense.

Head contractor data on Pilot Project outcomes and workforce outcomes

A data request was completed by the Pilot Project head contractors which gathered data relating to the following for both the Pilot Project and their projects and employees more generally:

- incident and accidents by severity and dangerous occurrences
- estimates on employee numbers and the number of hours worked by all workers over the course of the project
- levels of absenteeism in the head contractor's staff
- levels of turnover in the head contractor's staff employed on the Pilot Project
- outcomes of any staff wellbeing surveys conducted
- proportion of staff employed who identify as women

- total Pilot Project contract value, and
- typical onboarding costs.

Frontier Economics compared the Pilot Project outcomes to those observed for the head contractor at the organisational level to identify the impact of the TfL provisions on various outcomes, most notably turnover, safety, and absenteeism.

Follow up conversations with head contractor staff

Frontier Economics also gathered information from follow up interviews with key head contractor pilot project staff to try and identify whether the TfL provisions may have impacted site productivity and the nature and significance of these impacts. This included requesting information associated with:

- how they accounted for the TfL provisions in programming the works, and whether this assisted in avoiding delays
- the change in shift scheduling applied and whether and how this led to change in hours worked. Any resulting change in renumeration as a result of altered schedule, work hours, overtime and shifts
- the change in project programming including how this affected timeframes and sequencing of tasks
- whether the change in shift scheduling led to an increase in workforce size or a change in workforce composition i.e. did the contractor need to make greater use of night shifts
- whether technology was implemented to facilitate tracking of hours or improve programming
- the number of incidents and the nature of any delays in the project program that they consider were the result of implementing the Culture Standard TfL provisions, and
- whether the value/level of re-work was affected by implementing the Culture Standard TfL provisions.

The Culture Standard stocktake describes how the head contractor expected to meet the requirements of the Culture Standard.

Industry level data

To inform the counterfactual or base case, Frontier Economics sought to identify and collect existing construction industry level data relating to:

- hours of work
- workplace health and safety outcomes
- levels of absenteeism
- levels of turnover, and
- number of workers

Primary studies and literature

Frontier Economics has gathered relevant data from existing primary research studies and academic literature relating to:

- labour productivity changes resulting from scheduling changes and reduced fatigue
- impacts arising from improved gender diversity

- societal cost of work-related injuries and illnesses
- costs of employee turnover, and
- travel-related costs.

Source: Frontier Economics

2.4.3 Challenges associated with identifying and isolating impacts

Valuing the impacts described above requires two steps:

1 identifying the extent to which the intervention leads to a change in outcomes (i.e., the Δ quantity), and

2 identifying the monetary value of a unit improvement in the outcome (i.e., the price).

Together this generates a monetised value of the change (i.e., price × Δ quantity). Frontier Economics commenced this consultancy with the aim of applying this framework for each impact investigated.

A key challenge Frontier Economics encountered was observing the extent to which the TfL provisions led to a change in the cost and benefit impacts on the Pilot Projects. There are a number of reasons for this.

Most notably there is often insufficient, robust baseline data on what would have happened in the absence of the Culture Standard being implemented.

Many of the expected impacts of the Culture Standard will not generate an observable response or change in the short term or when applied to only a small select number of projects. For example, it would be challenging to conclude that the Culture Standard has led to a reduction in women exiting the industry as this decision would be driven by the culture and practices in the wider industry, rather than just those experienced on one isolated and time-limited project. This does not preclude the possibility these impacts would occur with a more substantive industry roll-out.

Many outcomes observed are influenced by timing and timelines of the project. For example, absenteeism is seasonal and affected by the prevalence of illnesses circulating in the community. In addition, the state of the wider economy (i.e. the cost-of-living crisis) is likely to have temporarily influenced perception and considerations of workers, particularly in regard to making short term trade-offs between income and time for life.

Where these challenges exist, Frontier Economics acknowledged them and took them into account when drawing out the findings. It is also worth noting that the other elements of the Culture Standard are also expected to affect some of the same outcomes expected from changes to work hours and shifts, such as the health and wellbeing of workers. Therefore, Frontier Economics was unable to expressly isolate the impacts of a specific TfL provision from the other provisions in the Culture Standard. This is not considered to be a substantive problem as it is assumed that the provisions complement each other and are likely to be implemented together.

Finally, Frontier Economics did not include consideration of the administrative and compliance cost for government and industry that may arise from the implementation of the Culture Standard TfL provisions. The reason for this is that these costs will ultimately be driven by the compliance and monitoring approach taken, which at the time of writing was not considered in detail. For example, if there was a desire to track work hours there could be a cost for both parties associated with introducing more rigorous approaches to tracking time.

Part 3: Results

3.1 Key decision-maker interviews - Stage One

This section of the report outlines results from the key decision-maker interviews – Stage One. This part of the report covers the following areas:

- sample
- stakeholder views on the Culture Standard
- anticipated costs and benefits
- anticipated barriers to adoption, and
- questions arising from the key decision-maker interviews – Stage One

3.1.1 Sample

In total 22 key decision-maker interviews were conducted between June and November 2022. A summary of participants by location and industry stakeholder group is provided in Table 3.1. Fifteen participants were male and seven were female. Participants included senior public service representatives, construction company executives and leaders of industry peak bodies and trade unions. Government participants occupied leadership roles in agencies responsible for the financing, procurement and delivery of public infrastructure projects. Construction company participants were Chief Executive Officers of large organisations engaged in the delivery of vertical and horizontal construction projects. Industry peak body participants included leaders from the New South Wales and Victorian chapters of federated organisations representing construction companies of varying sizes. Trade union participants included state and national leaders of key trade union bodies that represent construction workers.

Table 3.1: Key decision-maker interview sample – Stage One

Organisation type	Location			Total (N=22)
	NSW	Vic	Other	
Government	6	6		12
Construction company	1	1	1	3
Industry peak body	1	2		3
Trade union	1	2	1	4

3.1.2 Stakeholder views on the Culture Standard

Participants differed in their views on the Culture Standard. Some expressed unequivocal support for the implementation of the Culture Standard identifying the urgency and necessity of industry change. Other participants were more cautious in their support. These participants acknowledged the construction industry is a tough working environment and observed that the prevailing industry culture may deter people from pursuing careers in construction. However, they also expressed the view that industry reform needs to go deeper than the implementation of the Culture Standard to address problematic commercial models underpinning the procurement and delivery of projects. Some participants expressed conditional support for the Culture Standard on the proviso that it could be shown that implementing the Culture Standard does not negatively impact the time and cost involved in project delivery. For these participants, if the same quantum of work could be done in five days (capped at 50-hours) they considered the Culture Standard to be viable. Consequently, there was considerable interest in the impact of the Culture Standard on labour productivity. Some participants, including those in government roles, indicated that if it could be demonstrated that implementing the Culture Standard is cost-neutral, then it would be a rational decision to adopt it. Some participants supported the concept of a 5-day working week with capped hours as a starting point, but suggested that this should not be rigidly applied across the project lifecycle. These participants perceived that flexibility to work longer hours (and more days) might be required, for example, if projects fall behind schedule. Some participants were sceptical that the Culture Standard could be maintained across the lifecycle of a construction project. These participants felt that project pressures, tight deadlines and the threat of liquidated damages would result in construction companies requiring people to work more than the five in seven days specified by the Culture Standard. This was particularly expected to be the case in large transport infrastructure (road or rail) projects in which periods of high work intensity (occupations) are typically required. Some participants, including a peak industry body representative, believed that the implementation of the Culture Standard would inevitably increase project cost and timelines. To this participant, these anticipated cost and time increases were unacceptable.

3.1.3 Anticipated costs and benefits

Participants anticipated that workers would experience a number of important benefits as a result of the implementation of the Culture Standard. These included being able to spend more time with their families and having improved mental health and wellbeing. Trade union, peak body and construction company representatives all commented on the damage that working long hours and a 6-day week can have on workers' family relationships. Some participants also commented on the potential benefits for workers' health, safety and wellbeing. Participants anticipated that implementation of the Culture Standard could help the construction industry to more effectively recruit and retain women. Participants, mainly from government organisations, also anticipated that providing workers with more opportunity to rest and recover from work could improve labour productivity.

However, participants also identified a variety of anticipated costs associated with the implementation of the Culture Standard. Government, construction company and industry peak body representatives anticipated increased timelines and therefore increased costs of project delivery. For many of these participants these increased timelines and associated costs were deemed to be unacceptable, even if improvements in workers' health and wellbeing were realised. In contrast to this view, other participants (mainly government and trade union representatives) indicated that some increase in project cost could (and should) be accepted in order to improve the health and wellbeing of the construction workforce.

Some government and trade union representative participants suggested that productivity gains would potentially offset any anticipated costs.

Other participants, including industry peak body and some trade union representatives, questioned the feasibility of working 50-55 hours over a 5-day week, given the physically demanding nature of work undertaken by some construction trades. These participants expressed concerns about the impacts of a work schedule in which daily hours of work are increased and work is performed over fewer days in the week (i.e. a compressed work week) on workers' physical and mental fatigue. Trades, including steel-fixers, form-workers and bricklayers were specifically singled out as groups that would be adversely affected by the working time changes under the Culture Standard. However, another trade union representative, whose members had direct experience of working on a previous 5-day week project, indicated that workers who experienced the 5-day week schedule supported it, including workers in physically demanding trades like form-workers, steel-fixers and scaffolders. This participant argued that, even though many waged workers are initially sceptical, the majority of workers who experience working a 5-day week schedule ultimately form a strong preference for a 5- compared to a 6-day schedule.

Both union and construction company representatives anticipated that waged workers would be concerned about experiencing a potential reduction in pay associated with the time for life provisions of the Culture Standard. Impacts on waged workers' take-home pay are therefore a critical factor to consider in the implementation of the Culture Standard. However, the trade union representative who had direct experience of the implementation of a previous 5-day week project described minimal loss of pay associated with the 5- compared to the 6-day week as a result of longer hours worked over fewer days (i.e. a work week compression).

Trade union representatives also raised concerns about whether Rostered Days Off (RDOs) would be affected by the Culture Standard. Any suggestion that RDOs would be affected was unacceptable to union members.

3.1.4 Anticipated barriers to adoption

Participants identified a number of anticipated barriers to the adoption of the Culture Standard.

For example, some participants suggested that the Culture Standard would not be practical to implement in horizontal construction projects, due to the need to work around live road and rail infrastructure and therefore engage in periods of intensive work, weekend work and night shifts etc. Tunnelling was frequently identified as an activity in which the Culture Standard's time for life provisions could not be practically implemented due to the need to keep heavy machinery working 24 hours a day/ seven days a week. Participants (particularly construction contractor, industry peak body and trade union representatives) identified the commercial models (and their inherent risk allocation and penalties) currently used in the procurement of construction work as creating a barrier to the implementation of the Culture Standard. In particular, the use of fixed-price lump sum contracts with financial penalties for time overruns was identified as a barrier to the practical implementation of the Culture Standard. Procurement practices that focus on prioritising lowest cost and short timelines in contractor selection were also identified as a practical barrier to the adoption of the Culture Standard. It was observed that, for the Culture Standard to be effectively implemented, clients would need to ensure that assessment used in procurement and contractor selection criteria do not assume that work would be undertaken over a 6-day week and tenders submitted on the basis of a 5-day working week are appropriately considered.

3.1.5 Questions arising from the key decision-maker interviews – Stage One

The key decision-maker Stage One interview results were used to frame questions to answer in the Pilot Project data analysis (described in Parts 3.2 and 3.3) and the economic analysis of the costs and benefits associated with implementing the Culture Standard (described in Part 3.4). These questions are explicitly addressed in Part 3.5 of this report and include:

1) Were the expected benefits associated with the implementation of the Culture Standard observed in the Pilot Projects?

2) Were the anticipated costs associated with the implementation of the Culture Standard observed in the Pilot Projects?

3) Is it possible to implement the Culture Standard in horizontal projects?

4) Is it possible to implement the Culture Standard in the current commercial conditions?

5) Do current procurement and tendering practices impact the viability of the Culture Standard? and

6) What happens to RDOs?

The key decision-maker Stage Two interview results are outlined in Part 3.6 of this report.

3.2 Pilot Project survey findings

3.2.1 Project type and work schedule

The five Pilot Projects adopted different work schedules based on project circumstances and characteristics. At three transport infrastructure projects two different schedules were implemented: one for regular work activities; and one for periods of high-intensity work undertaken during campaigns/occupations involving night shifts. Changes to work schedules were made during the project duration at two Pilot Projects to balance work hours, workers' health and wellbeing, and project demands. Details of each Pilot Project and work schedule arrangements implemented are provided in the following section.

Project A:

Horizontal project located in Victoria delivered by a collaborative contracting model.

Project A's normal work schedule involve working a 10-day fortnight, with work being undertaken on Saturday every other week when there is a Rostered Day Off (RDO) on Monday. Site-based workers typically work ten to 11-hour days between Monday and Friday and six hours on alternate Saturdays. Some salaried workers were able to work from home on the RDOs.

Project A also engaged in periods of high-intensity work during campaigns/occupations involving night shifts. During this time workers would work up to four 12-hour shifts (48 hours) followed by two days off. Longer occupations would last for 12 days or a fortnight. There were also shorter weekend occupations.

Project B:

Vertical project located in NSW delivered through a design and construct contract.

Project B's normal work schedule involved working Monday to Friday with no Saturday work. Work hours were initially long (11.5 to 12-hour days). However, these daily hours reduced to 10-11 hours in later stages of the project. Non-critical work was scheduled on Friday to allow workers the opportunity to leave early. There was a RDO every fortnight. Occasional Saturday work was undertaken for specific tasks, e.g. crane erection.

Project C:

Vertical project located in NSW delivered through a design and construct contract with early contractor involvement.

Project C's work schedule involved working ten to 11-hour days between Monday and Friday with no Saturday work. Workers directly employed by the head contractor also had the opportunity to leave early (3 pm) one day each week. There was a RDO every fortnight. Some office-based employees worked 8-9-hours each day.

Project D:

Horizontal project located in Victoria delivered through a design and construct contract.

Project D's normal work schedule involved working ten to 11-hour days between Monday and Thursday and 7.5 hours on Friday. The site did not typically work Saturdays until later in the project period, and Saturday work was restricted to end by 1pm. The site had every second Monday (an RDO) off.

Project D also engaged in periods of high-intensity construction activity during campaigns /occupations. During this time workers indicated they were working 12-hour days on a 6:3 rotation (i.e. six consecutive workdays followed by three days off).

Project E:

Horizontal project located in NSW delivered by an alliance.

Project E implemented a day shift roster of five 11-hour days (Monday to Friday from 7am to 6pm). However, the site remained open on Saturdays between 8am and 1pm and workers were able to work on Saturday if they chose to do so. Workers could also choose to undertake ten days of night work per month. The maximum number of nights that could be worked per week was three and night shift did not occur on Wednesday or Friday or during weekends.

3.2.2 Overall findings

The last waves of survey data collected on the five Pilot Projects were combined. The combined dataset included 438 independent responses. Analysis from this combined dataset is presented in the following section.

3.2.2.1 Work hours by gender

Figure 3.1 compares work hours between men and women. The results showed that the largest proportion of women (31.0%) worked fewer than 37 hours per week, while the largest proportion of men (25.1%) worked 46-50 hours. 11.0% of men and 4.8% of women indicated working more than 55 hours per week.

A Chi-square test indicated that the differences in work hours between men and women were statistically significant (χ^2 (15, 412) = 40.212, p < 0.001).

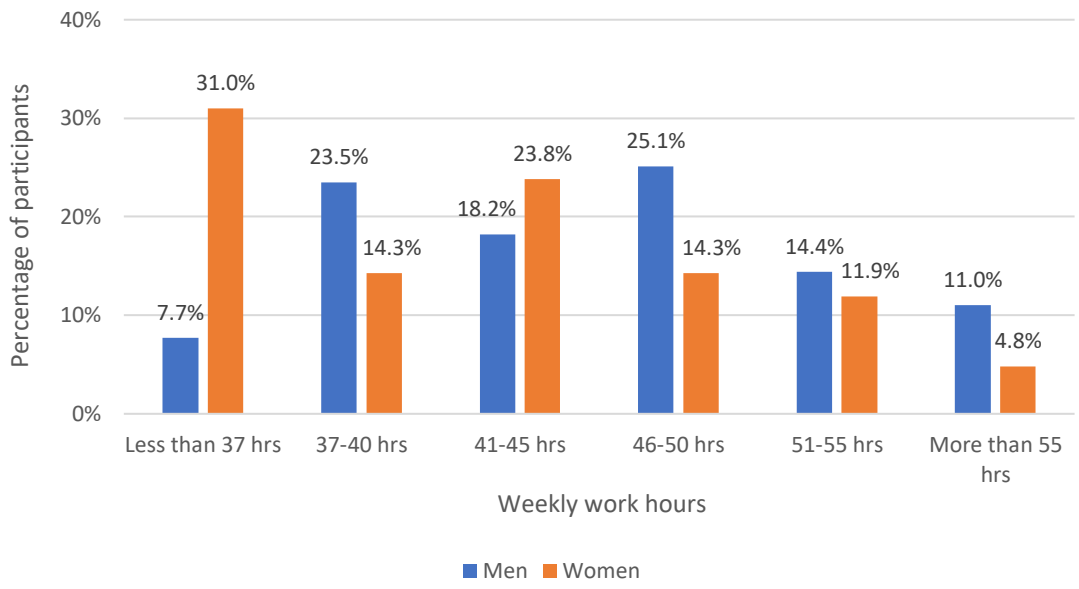


Figure 3.1: Comparison of work hours per week by gender

3.2.2.2 Comparison of work hours between salaried and waged workers

Figure 3.2 compares work hours between salaried and waged workers. The results showed that the proportion of salaried (24.2%) and waged (24.1%) workers working 46-50 hours was similar. A larger proportion of waged workers worked fewer than 46 hours per week compared to salaried workers, while a higher proportion of salaried workers (43.4%) worked more than 50 hours per week compared to waged workers (19.7%). Overall, these results suggest that, on average, salaried workers reported more weekly working hours compared to waged workers.

A Chi-square test indicated that the differences in work hours between salaried and waged workers were statistically significant (χ^2 (5, 419) = 28.050, p < 0.001).

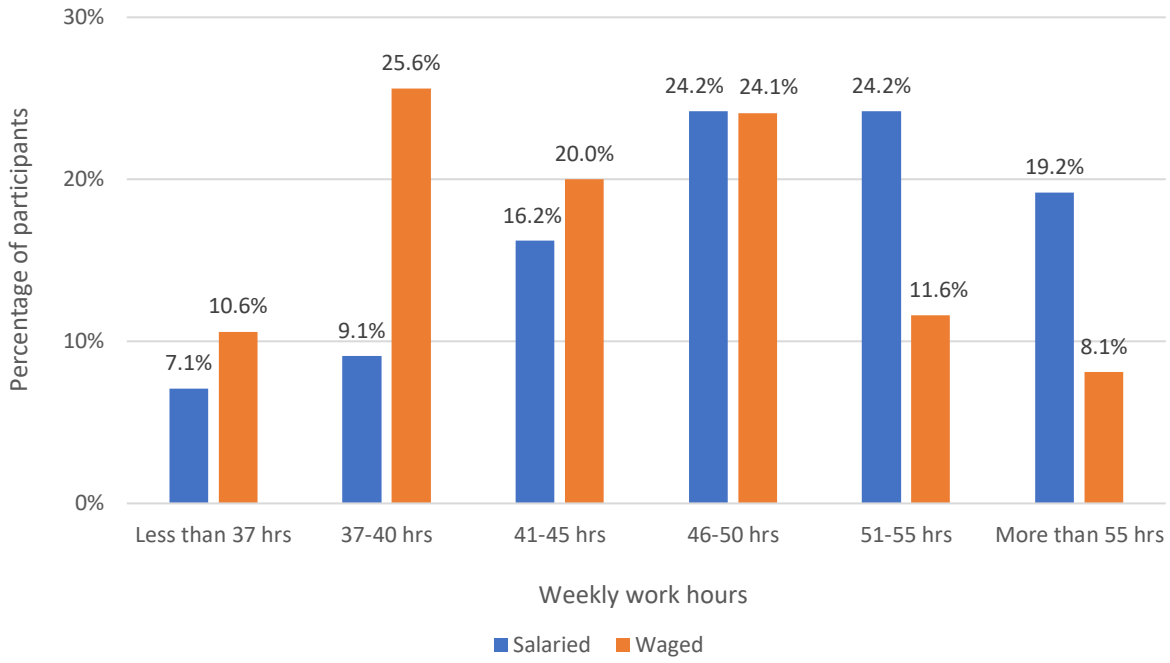


Figure 3.2: Comparison of work hours per week between salaried and waged workers

3.2.2.3 Comparison of work hours between vertical and horizontal projects

Figure 3.3 compares weekly reported work hours between participants working on vertical (i.e. building construction) and horizontal (i.e. road/rail construction) Pilot Projects. The results show that the proportion of participants working 46-50 hours per week was similar in vertical (24.0%) and horizontal (24.5%) projects. A larger proportion of participants engaged in vertical projects worked 37-45 hours per week, while a higher proportion of participants engaged in horizontal projects worked more than 50 hours per week. The proportion of participants working fewer than 37 hours per week at horizontal projects (17.9%) is higher than it was among participants from vertical projects (3.4%).

A Chi-square test indicated that the differences in work hours between participants from vertical and horizontal projects were statistically significant (χ^2 (5, 429) = 72.286, p < 0.001).

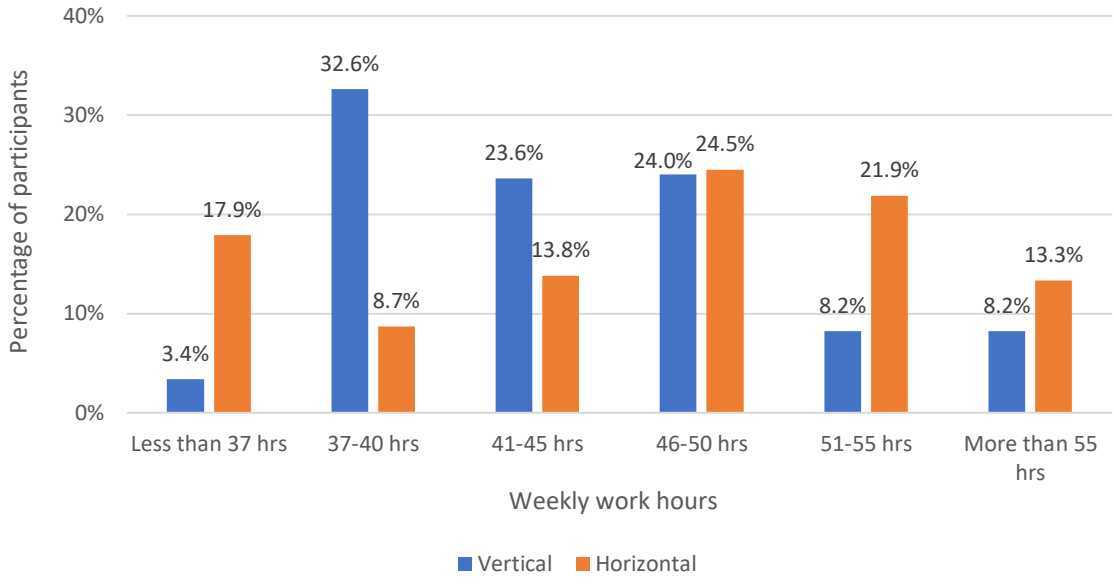


Figure 3.3: Comparison of work hours per week between vertical and horizontal projects

3.2.2.4 Preferred work hours and work schedule by family structure

Preferred work hours and preferred work schedule were compared between participants reporting different family structures.

Figure 3.4 shows that the largest proportion of participants who indicated they are single (without child/children), are one partner in a couple without child/children, or who are one partner in a couple with child/children indicated a preference to work about the same hours as they were working under the Culture Standard. Irrespective of family structure, between 21.1% and 28% of participants indicated a preference to work fewer hours than they were working under the Culture Standard. With the exception of people who identified themselves as single parents, a similar proportion of participants (20-32%) indicated a preference to work more hours than they were working under the Culture Standard. However, 42% of participants who indicated they are single parents indicated a preference to work more hours than they were working under the Culture Standard.

A Chi-square test indicated that the differences in preferred work hours among groups of participants with different family structures were not statistically significant (χ^2 (8, 416) = 8.721, p = 0.366 > 0.05).

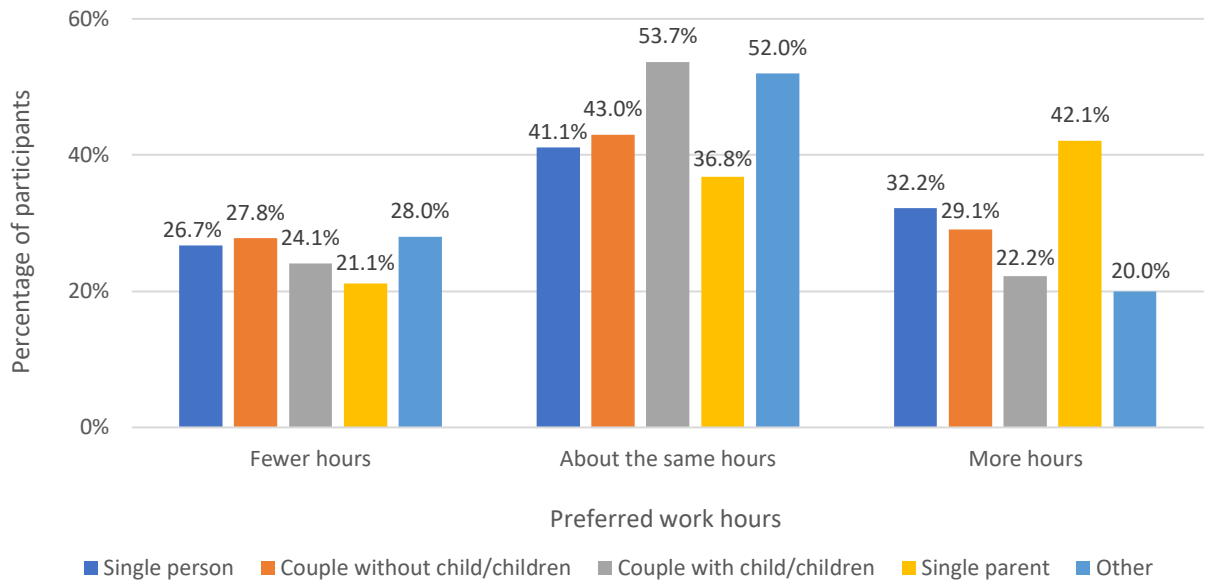


Figure 3.4: Comparison of preferred work hours among different family structures

Figure 3.5 shows that largest proportion of participants who indicated they are single (without child/children), are one partner in a couple without child/children, are one partner in a couple with child/children or who are single parents indicated a preference to work a 5-day week and have weekends free (ranging from 42.1% to 73%). A smaller proportion of participants indicated a preference to work a 6-day week (ranging from 9% to 36.8% depending on family structure). Proportionally fewer people who indicated they are single parents (42.1%) indicated a preference for a 5-day week, while proportionally more single parents (36.8%) indicated a preference for a 6-day week compared to participants in other family structures.

A Chi-square test indicated that the differences in preferred work schedule among different family structures were not statistically significant (χ^2 (12, 416) = 17.614, p = 0.128 > 0.05).

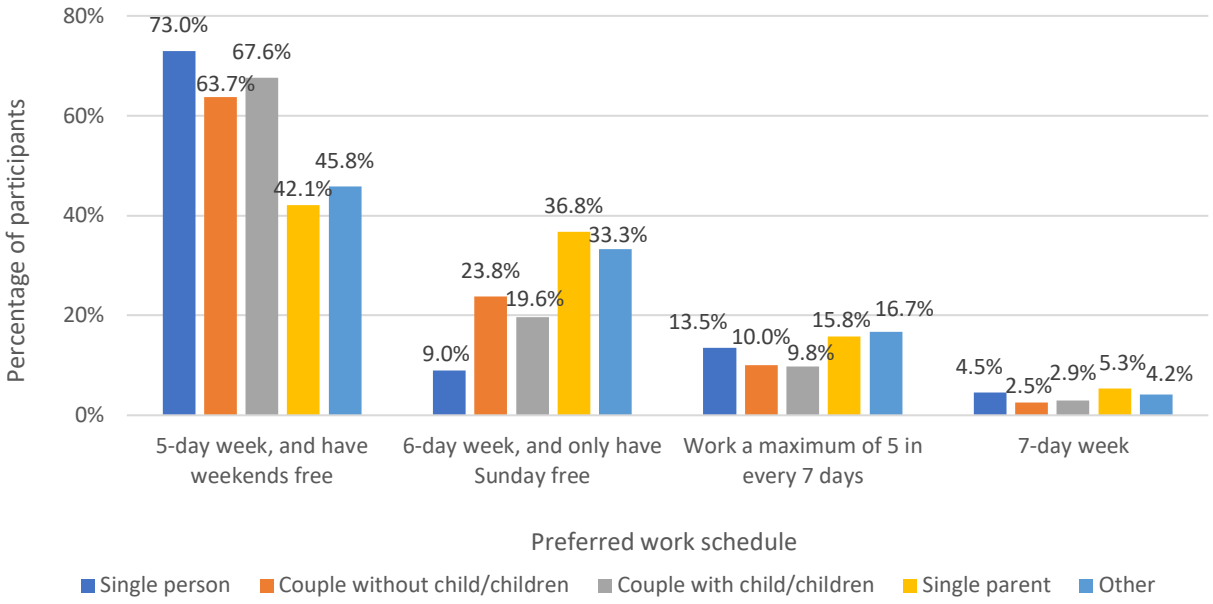


Figure 3.5: Comparison of preferred work schedule among different family structures

Since waged workers are more likely to be financially impacted by different work hours and schedules, a subset of the participants was created that only included waged workers. Figure 3.6 shows that working about the same hours was the most preferred option among waged workers who indicated they are single, are one partner in a couple without child/children are one partner in a couple with child/children (ranging between 41.2% and 51%). However, 41.2% of waged participants who indicated they are single parents indicated a preference to work more hours. Working fewer hours was the least preferred option among the sub-set sample of waged workers (ranging from 17.1% to 22.4%).

A Chi-square test indicated that the differences in preferred work hours among waged workers with different family structures were not statistically significant (χ^2 (8, 308) = 4.879, p = 0.770 > 0.05).

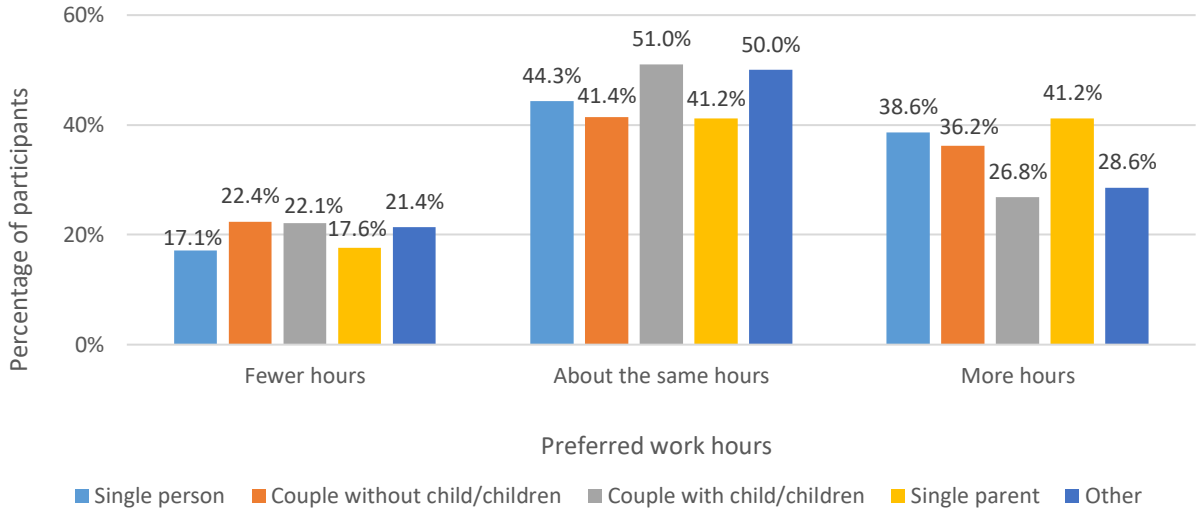


Figure 3.6: Comparison of preferred work hours among waged workers with different family structures

Figure 3.7 shows that working a 5-day week with weekends off was the most preferred schedule among all groups of waged workers, except those who indicated “other” as their family structure. A high proportion (72.5%) of waged participants who identified themselves as being single preferred the 5-day schedule. Between 11.6% and 38.5% of waged participants indicated they would prefer to work a 6-day week. Waged participants who indicated they are single parents or are one member of a couple without child/children’ had a proportionally higher preference for a 6-day week (35.3% and 32.2% respectively) compared to participants in other family structures.

A Chi-square test indicated that the differences in preferred work schedule among waged workers with different family structures were not statistically significant (χ^2 (12, 307) = 15.510, p = 0.215 > 0.05).

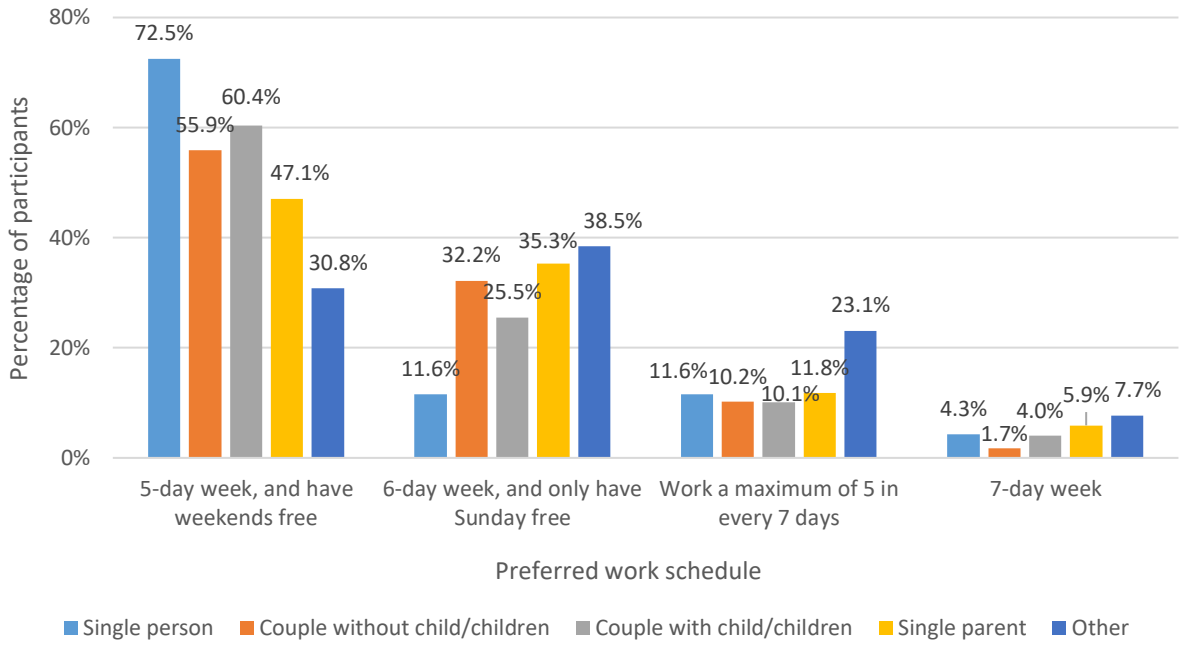


Figure 3.7: Comparison of preferred work schedule among waged workers with different family structures

3.2.2.5 Comparison of preferred work hours and work schedule between salaried and waged workers

Figure 3.8 shows that the majority of salaried workers (51.5%) and almost half of waged workers (46.9%) preferred to work about the same hours as they were working under the Culture Standard. Proportionally more salaried workers (40.6%) preferred to work fewer hours, while 32.8% of waged workers indicated a preference to work more hours than they were working under the Culture Standard.

A Chi-square test indicated that the differences in preferred work hours between salaried and waged workers were statistically significant (χ^2 (2, 421) = 30.604, p < 0.001).

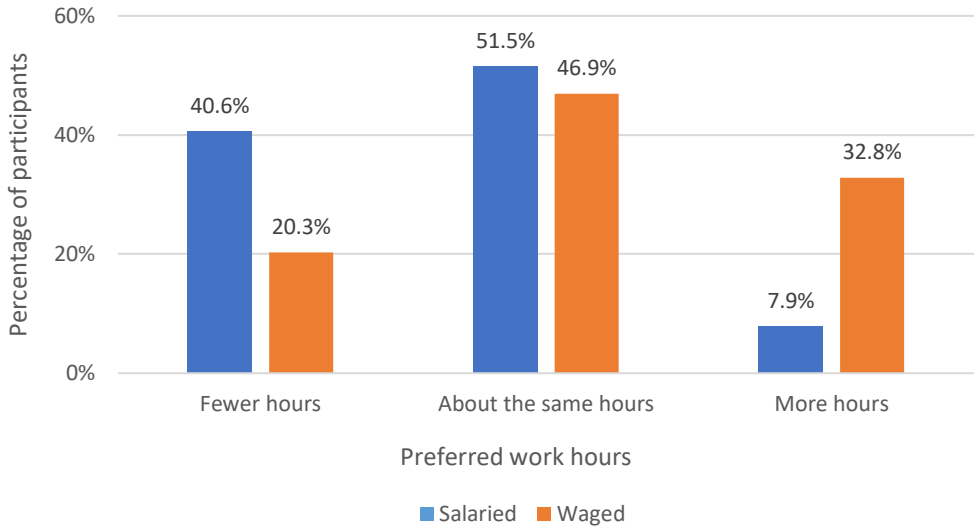


Figure 3.8: Comparison of preferred work hours between salaried and waged workers

Figure 3.9 shows that the majority of salaried (81%) and waged (60.3%) workers indicated they would prefer to work a 5-day week with weekends free. Proportionally more waged workers than salaried workers indicated a preference for a 6-day working week (24.9% waged compared to 5% salaried).

A Chi-square test indicated that the differences in preferred work schedule between salaried and waged workers were statistically significant (χ^2 (3, 417) = 20.777, p < 0.001).

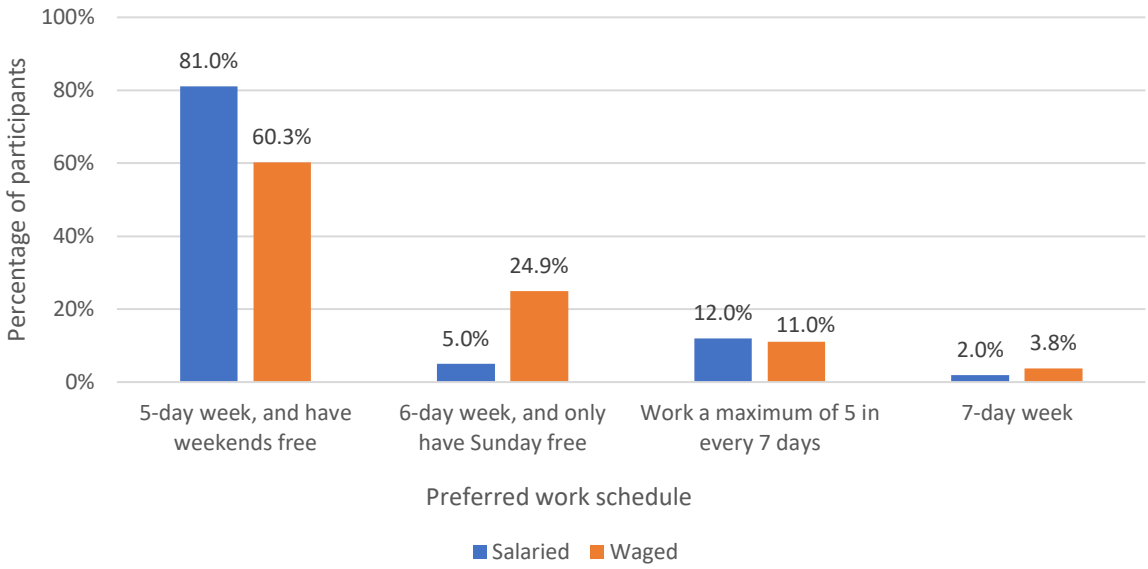


Figure 3.9: Comparison of preferred work schedule between salaried and waged workers

3.2.2.6 Preferred work hours and work schedule among participants who differed by age and payment type

Figure 3.10 shows that, irrespective of age or payment type (i.e. waged or salaried), the majority of participants indicated a preference to work the same or fewer hours as they were working under the Culture Standard. The majority of salaried participants under the age of 30 years (55%) indicated a preference for fewer hours, while 80% of salaried participants 50 years of age or over indicated a preference to work the same number of hours a week as they were working under the Culture Standard. Between 29.9% and 35.7% of waged participants indicated a preference to work more hours than they were working under the Culture Standard. Proportionally more waged participants under the age of 30 years indicated a preference for working fewer hours than waged participants 50 years of age or over (24.8% compared to 14.3%).

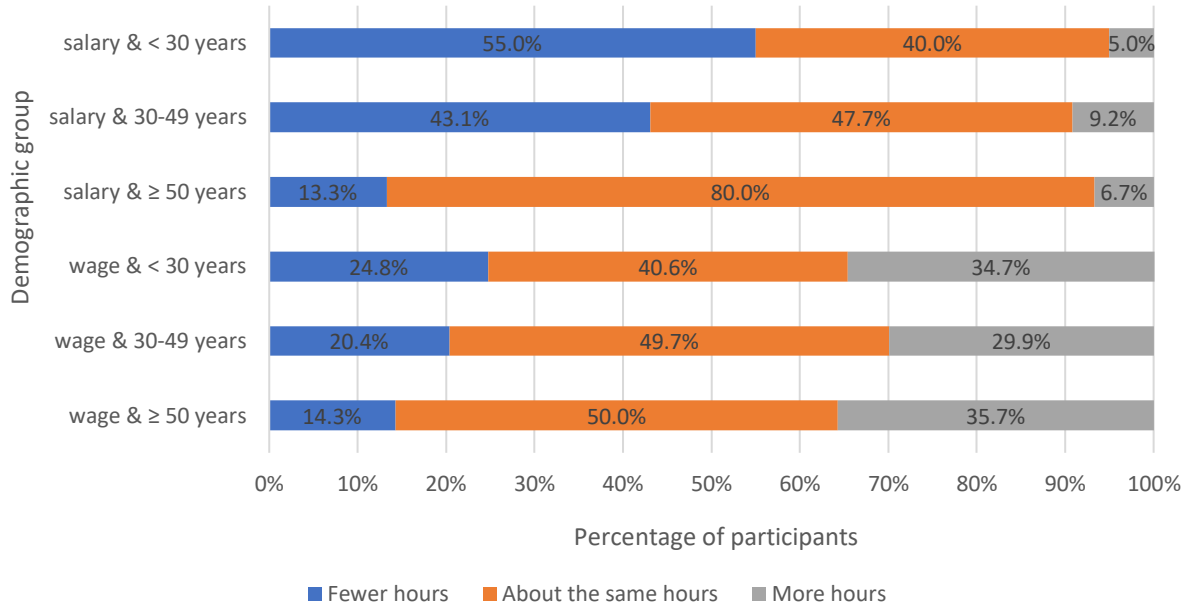


Figure 3.10: Comparison of preferred work hours by age and pay type

Figure 3.11 shows that the majority of participants, irrespective of age or payment type indicated a preference to work a 5-day week and have weekends free (ranging between 59.3% and 92.9%). A further 25% of salaried participants under the age of 30 years indicated a preference to work five in every seven days. Proportionally more waged participants than salaried participants indicated a preference for a 6-day week. Proportionally fewer waged workers aged 30 or below indicated a preference to work a 6-day week (23.5%) than waged participants aged 50 years or more (29.6%).

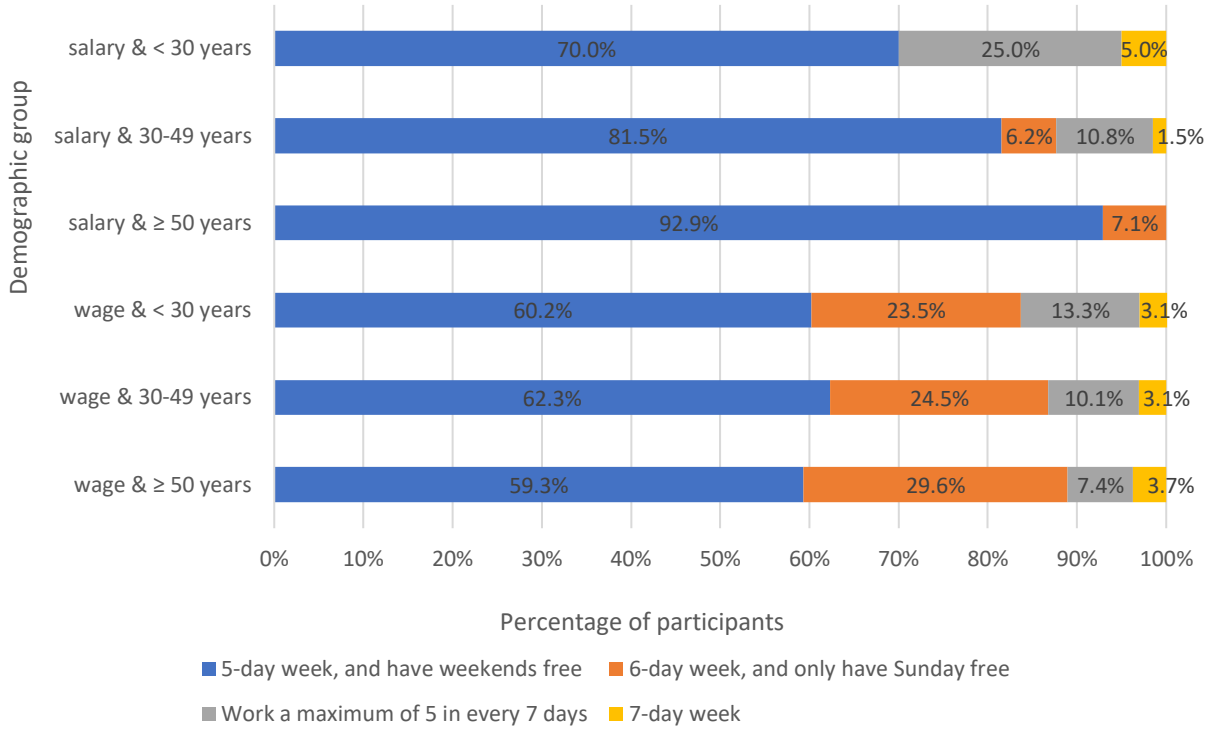


Figure 3.11: Comparison of preferred work schedule by age and pay type

3.2.2.7 Preferred work hours and work schedule between vertical and horizontal projects

Figure 3.12 shows a similar distribution of work hour preferences between participants engaged in vertical compared to horizontal Pilot Projects. A total of 76.5% of participants engaged in vertical projects indicated a preference to work about the same number of hours as they were in the Pilot Project or fewer hours. A total of 68.5% of participants engaged in horizontal projects indicated a preference to work about the same number of hours as they were in the Pilot Project or fewer hours. Proportionally, slightly more participants from horizontal projects indicated a preference to work more hours than did those from vertical projects (31.5% compared to 23.5%).

A Chi-square test indicated that the differences in preferred work hours between vertical and horizontal projects were not statistically significant (χ^2 (2, 431) = 3.770, p = 0.152 > 0.05).

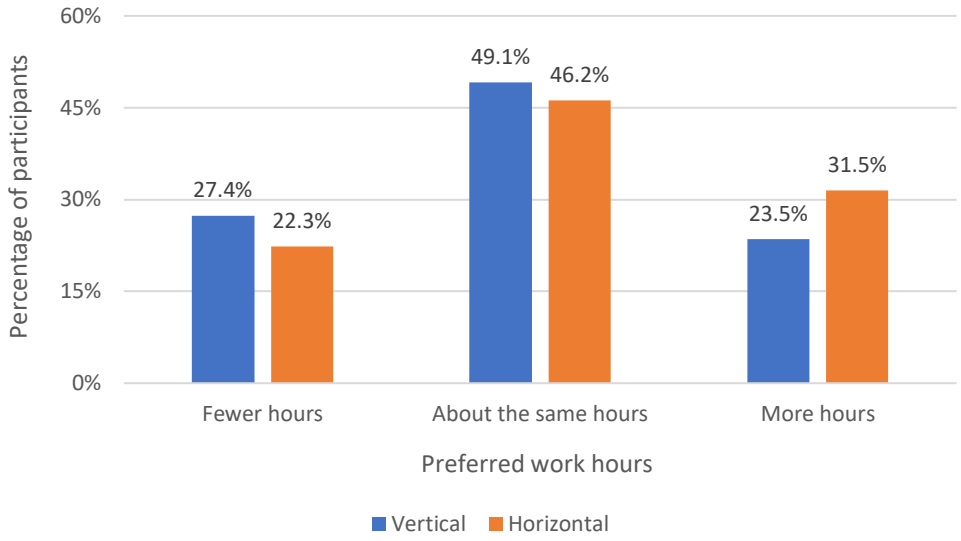


Figure 3.12: Comparison of preferred work hours between participants engaged in vertical and horizontal Pilot Projects

Figure 3.13 shows the majority of workers on vertical projects (66.5%) and horizontal projects (64.1%) expressed a preference to work a 5-day week with weekends off. A similar proportion of participants in vertical and horizontal projects indicated a preference to work a 6-day week (20.6% compared to 19.5%).

A Chi-square test indicated that the differences in preferred work schedule between vertical and horizontal projects were not statistically significant (χ^2 (3, 428) = 1.095, p = 0.778 > 0.05).

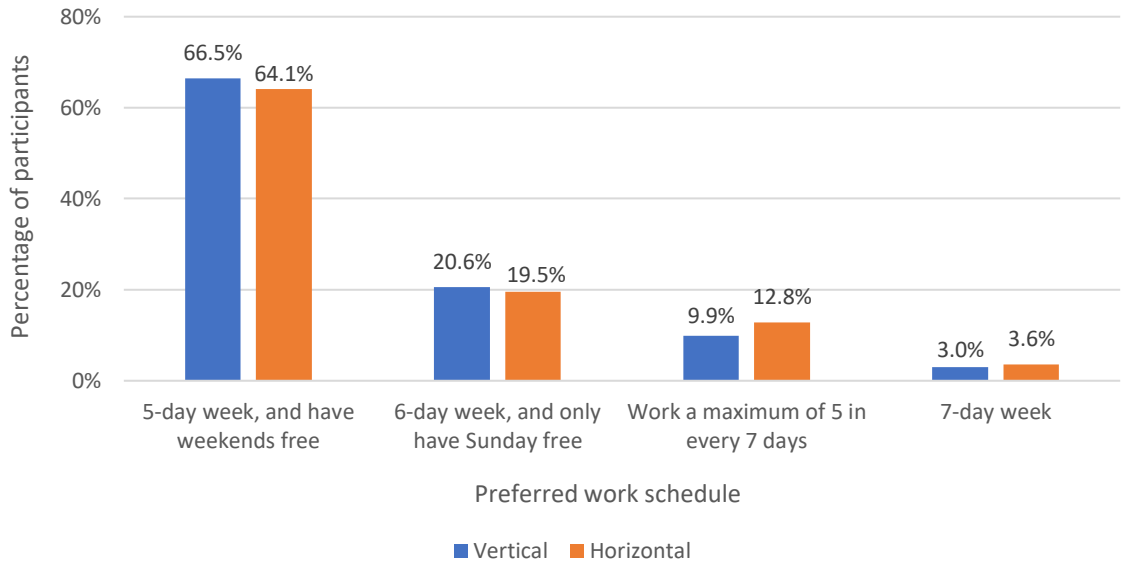


Figure 3.13: Comparison of preferred work schedule between participants engaged in vertical and horizontal Pilot Projects

3.2.2.8 Work experiences and mental wellbeing among different age groups

For each participant, a mean score was calculated for perceptions of work demand, workload, managerial work-family support, work-life balance, organisational fairness, banter, respect, work engagement and mental wellbeing. When calculating the mean score for work demand, scores for the question which asks participants if they have enough time to finish their work tasks were reversed. Therefore, higher mean scores indicate a **higher** level of work demand perceived by participants.

Since different scales were used to measure the work experiences and mental wellbeing, mean scores were normalised and presented as percentages. Figure 3.14 shows the normalised mean scores for participants in different age groups.

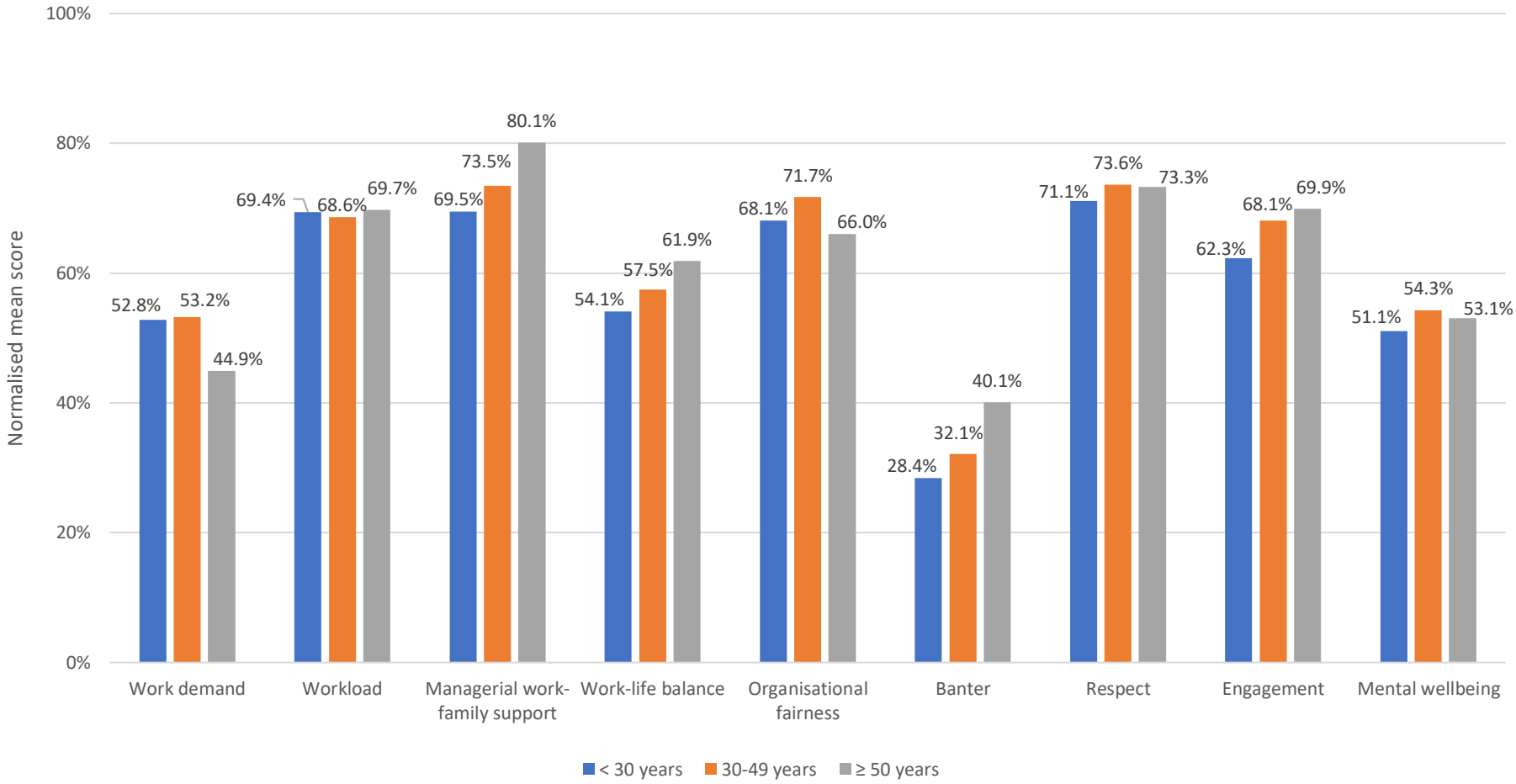


Figure 3.14: Comparison of mean scores for work experiences and mental wellbeing by age group

Participants in different age groups had similar scores for workload, organisational fairness, respect, and mental wellbeing. Participants who were 50 years of age or older reported higher scores for managerial work-family support, work-life balance, banter[2], and work engagement, while participants aged 50 years or older had lower scores for work demand compared to those in other age groups.

To test the statistical significance of differences in mean scores, one-way analysis of variance (ANOVA) was used. Following ANOVA, a Bonferroni post-hoc test was used to identify exactly which groups differ from each other. The results (see Appendix F, Table 6.4 and 6.5) indicated:

- generally, the differences in the mean scores for work demand, banter, and work engagement among the three age groups were statistically significant
- work demand – participants aged 30 to 49 years had significantly higher mean scores for work demand than those aged 50 years or over
- banter – participants aged under 30 years reported lower mean scores for (inappropriate) banter than those aged 50 years or over, and
- work engagement – participants aged under 30 years had significantly lower mean scores for work engagement than those in the other two age groups.

3.2.2.9 Comparison of work experiences and mental wellbeing between salaried and waged workers

Normalised mean scores for work demand, workload, managerial work-family support, work-life balance, organisational fairness, banter, respect, work engagement, and mental wellbeing were compared between salaried and waged participants. Figure 3.15 shows the comparison of normalised mean scores.

Salaried workers had slightly higher scores for workload, work-life-balance, organisational fairness, respect, work engagement and mental wellbeing than waged workers. In contrast, waged workers reported slightly higher scores for work demand and (inappropriate) banter than salaried workers. The largest difference between salaried and waged workers was in managerial work-family support, with salaried workers reporting higher scores than waged workers.

Independent samples t-tests were conducted to determine if the differences between waged and salaried workers' mean work characteristic and mental wellbeing scores were statistically significant. The results of the t-tests (see Appendix F, Table 6.6) revealed that salaried and waged workers differed significantly in their perceptions of workload, managerial work-family support, organisational fairness, respect, work engagement, and mental wellbeing (with salaried workers perceiving significantly higher workload and more positive managerial work-family support, organisational fairness, respect, work engagement, and mental wellbeing than waged workers).

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2 In this survey banter measured the frequency with which participants experienced inappropriate or offensive banter in the workplace. A high score reflects a less respectful workplace culture.

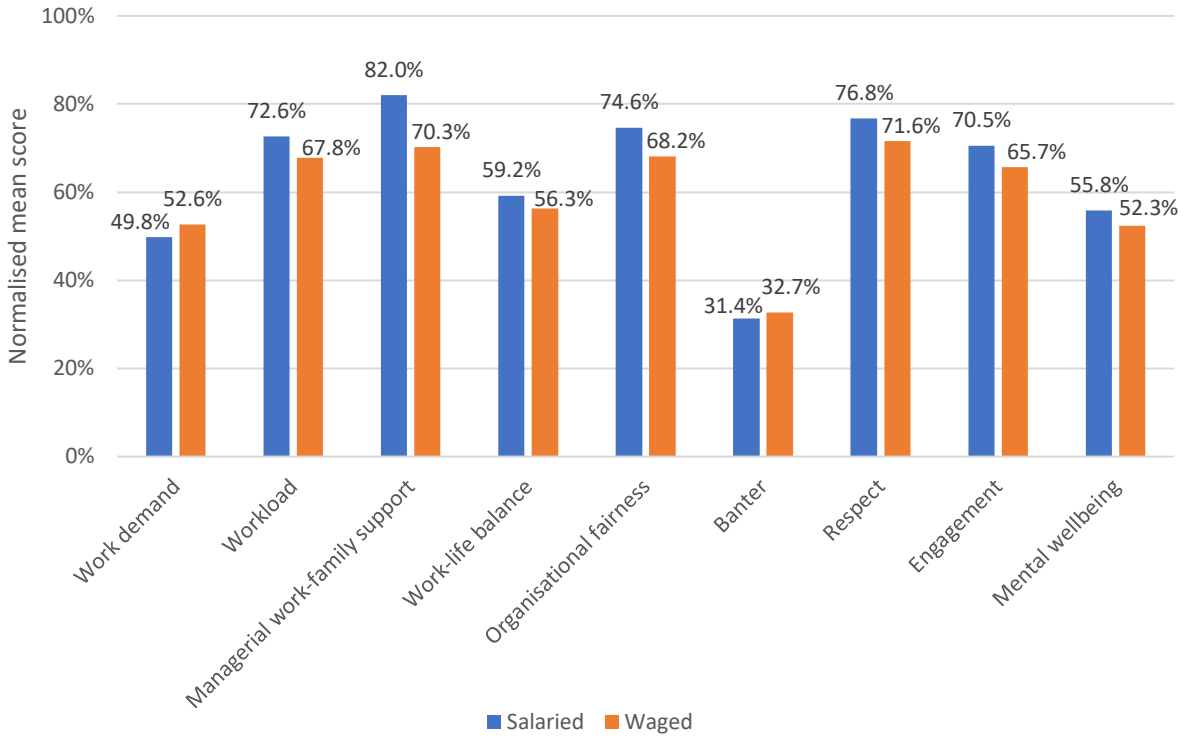

Figure 3.15: Comparison of mean scores for work experiences and mental wellbeing between salaried and waged workers

3.2.2.10 Work experiences among different mental wellbeing groups

Participants were divided into three groups reflecting whether they reported low, medium or high mental wellbeing scores. The allocation of participants to groups was based upon the application of population norm scores for the short version of the Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) used in the study.[3]

An overall mental wellbeing score was calculated by adding up the scores of all the items and transforming the score according to the specified procedure. Calculating an overall score for mental wellbeing required that participants respond to all the seven items in the SWEMWBS.

The SWEMWBS has a mean of 23.5 and a standard deviation of 3.9 in general population samples[4]. This means that 15% of the population can be expected to have a score >27.4. Consequently, we have set the threshold for high wellbeing at 27.5. Conversely, 15% of the population can be expected to have a score <19.6, so we established a threshold point of 19.5, below which participants were deemed to have low wellbeing.

Normalised mean scores for work demand, workload, managerial work-family support, work-life balance, organisational fairness, (inappropriate) banter, respect, and work engagement were compared between

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3 https://warwick.ac.uk/fac/sci/med/research/platform/wemwbs/using/howto/

4 Ng F., L., Scholes, S., Boniface, S., Mindell, J., & Stewart-Brown, S. (2017). Evaluating and establishing national norms for mental wellbeing using the short Warwick–Edinburgh Mental Well-being Scale (SWEMWBS): findings from the Health Survey for England. Quality of Life Research, 26(5), 1129-1144.

participants in different mental wellbeing groups. Figure 3.16 shows the comparison of normalised mean scores.

Participants in the high mental wellbeing group reported higher levels of managerial work-family support, work-life balance, organisational fairness, respect at work, and work engagement compared to participants in the low and medium mental wellbeing groups. In contrast, participants in the low mental wellbeing group reported lower managerial work-family support, work-life balance, organisational fairness, respect at work, and work engagement compared to participants in the medium and high mental wellbeing groups. Participants in the low mental wellbeing group indicated higher work demand and slightly higher workload compared to participants in the medium and high mental wellbeing groups.

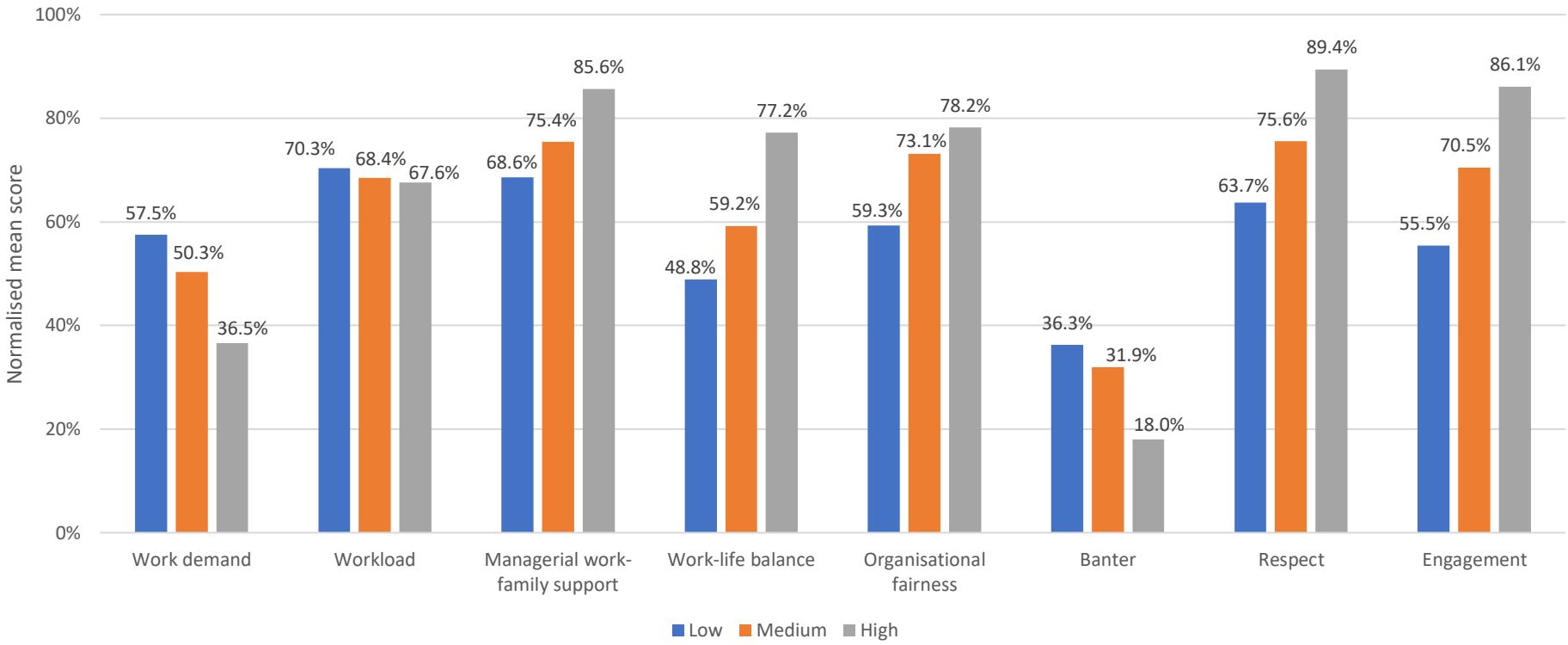


Figure 3.16: Comparison of mean scores for work experiences in different mental wellbeing groups

The results of ANOVA and Bonferroni post-hoc tests (see Appendix F, Table 6.8 and 6.9) indicated:

- generally, the differences in the mean scores for work demand, managerial work-family support, work-life balance, organisational fairness, (inappropriate) banter, respect at work, and work engagement among the three mental wellbeing groups (i.e., low, medium, and high) were statistically significant
- work demand – participants in the low mental wellbeing group had significantly higher work demand than those in the medium and high mental wellbeing groups
- managerial work-family support – participants in the low and medium mental wellbeing groups reported significantly lower managerial work-family support than those in the high mental wellbeing group
- work-life balance – participants in the high mental wellbeing group had significantly better work-life balance than those in the medium and low mental wellbeing groups
- organisational fairness – participants in the high and medium mental wellbeing groups perceived significantly more organisational fairness than those in the low mental wellbeing group
- banter – participants in the high mental wellbeing group reported significantly less inappropriate banter than those in the low and medium mental wellbeing groups
- respect – participants in the high mental wellbeing group perceived significantly more respect at work than those in the low and medium mental wellbeing groups, and
- work engagement – participants in the high mental wellbeing group had significantly higher levels of work engagement than those in the low and medium mental wellbeing groups.

3.2.2.11 Comparison of work experiences and mental wellbeing by gender

Normalised mean scores for work demand, workload, managerial work-family support, work-life balance, organisational fairness, (inappropriate) banter, respect, work engagement, and mental wellbeing were compared between men and women. Figure 3.17 shows the comparison of normalised mean scores.

Women reported slightly higher workload, managerial work-family support, work-life balance and work engagement compared to men, while men reported slightly higher work demand, respect, and mental wellbeing than women. The largest gender differences in mean scores were identified for organisational fairness and (inappropriate) banter. In comparison with women, men perceived higher organisational fairness while women reported a higher frequency of inappropriate banter than men in the workplace.

Independent samples t-tests were conducted to determine whether any differences in mean scores between men and women were statistically significant. The results (see Appendix F, Table 6.7) indicated that men and women who responded to the survey differed significantly in their perceptions of organisational fairness and banter.

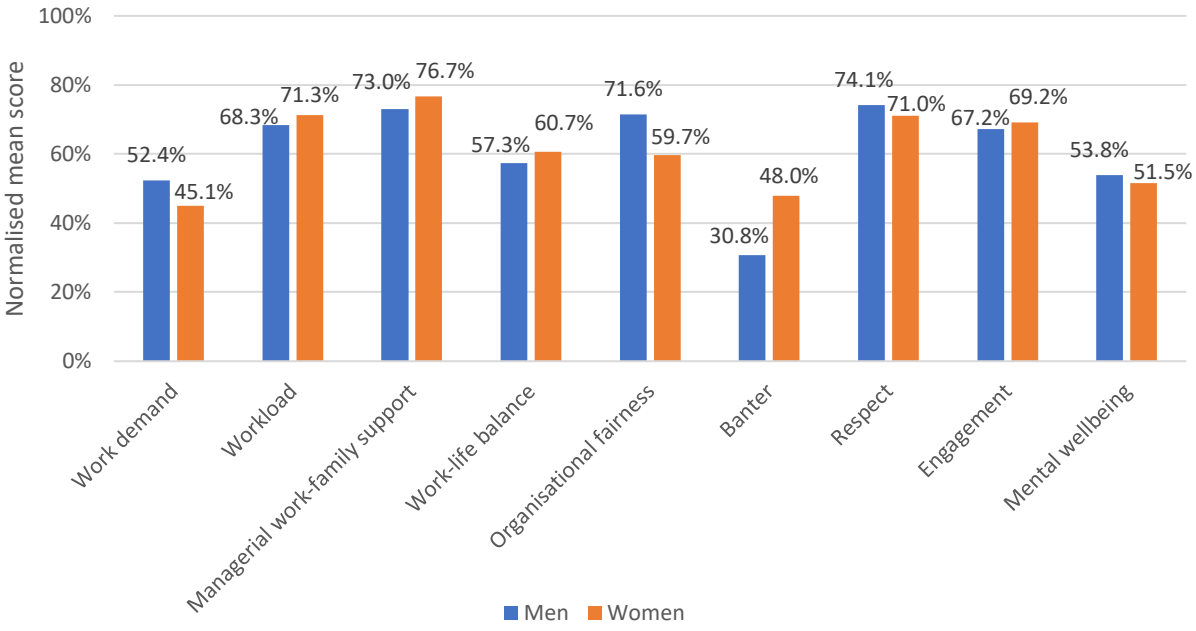


Figure 3.17: Comparison of mean scores for work experiences and mental wellbeing by gender

3.2.2.12 Work experiences and mental wellbeing between vertical projects and horizontal projects

Normalised mean scores for work demand, workload, managerial work-family support, work-life balance, organisational fairness, (inappropriate) banter, respect at work, work engagement and mental wellbeing were compared between participants at vertical and horizontal Pilot Projects. Figure 3.18 shows the comparison of normalised mean scores.

Participants engaged at vertical projects indicated higher scores for work demand, workload and slightly higher scores for (inappropriate) banter compared to those working at horizontal projects. In contrast, participants engaged at horizontal projects reported slightly higher scores for managerial work-family support and work engagement than those working at vertical projects. Participants engaged at vertical projects and horizontal projects had similar scores for work-life balance, organisational fairness, respect at work and mental wellbeing.

Independent samples t-tests were conducted to determine whether any differences in mean scores between vertical and horizontal projects were statistically significant. The results (see Appendix F, Table 6.10) indicated that workers at vertical and horizontal projects differed significantly in their perceptions of work demand, workload, managerial work-family support and work engagement, all of which were more favourable at the horizontal compared to the vertical Pilot Projects.

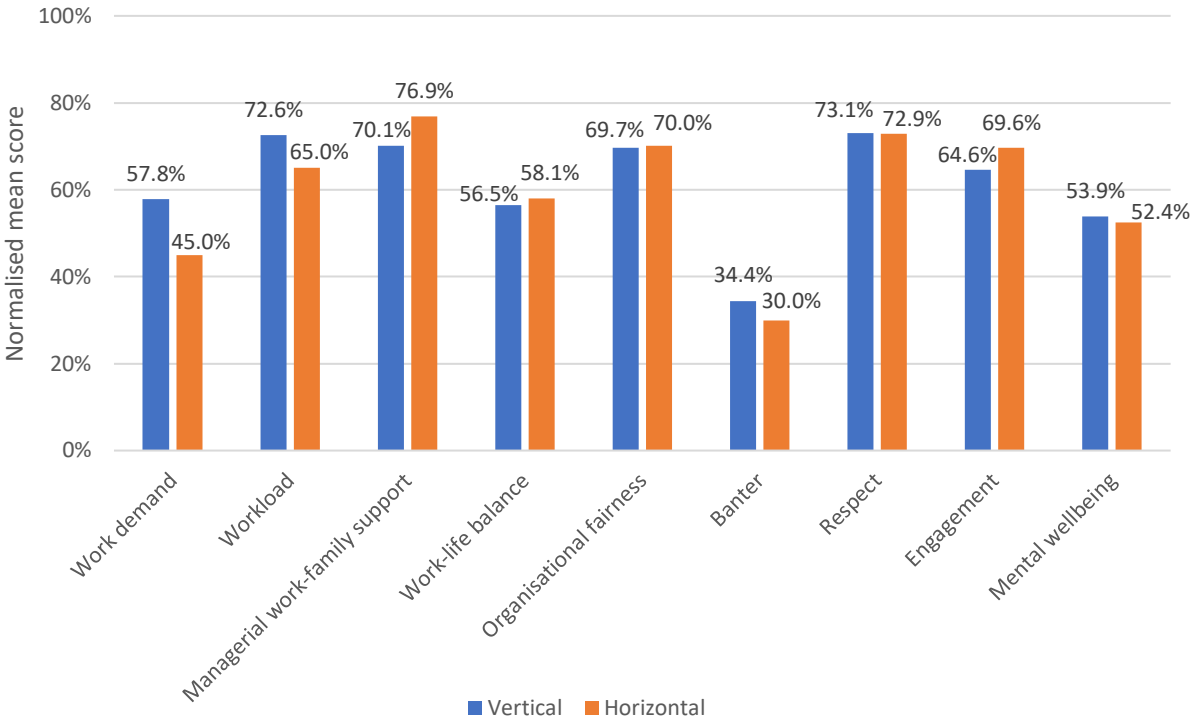


Figure 3.18: Comparison of mean scores for work experiences and mental wellbeing between vertical and horizontal projects

3.2.2.13 Predictors of mental wellbeing and work engagement

To test the effects of work experiences on participants' work engagement and mental wellbeing, linear regression analysis was performed. The analysis was performed in three steps: 1) testing the direct relationship between work experiences and participants' mental wellbeing, 2) testing the relationship between work experiences and participants' work engagement, and 3) testing the mediating effect of work engagement on the relationship between work experiences and participants' mental wellbeing. The results of the three regression analyses are provided in Appendix F, Tables 6.11 to 6.13.

The results suggest that higher levels of banter were directly associated with participants' lower mental wellbeing. In addition, work-life balance, respect and work demand were associated with both mental wellbeing and work engagement. The results indicated that work-life balance, respect and work demand can influence mental wellbeing both directly and indirectly, through influencing work engagement. In particular, higher perceived work-life balance and respect were associated with better mental wellbeing (direct relationship) as well as with better work engagement which, in turn, was associated with better mental wellbeing (indirect relationship). Similarly, higher levels of perceived work demand were associated with participants' lower mental wellbeing (direct relationship) and with worse work engagement which, in turn, would lead to lower mental wellbeing (indirect relationship). These effects are depicted in Figure 3.19.

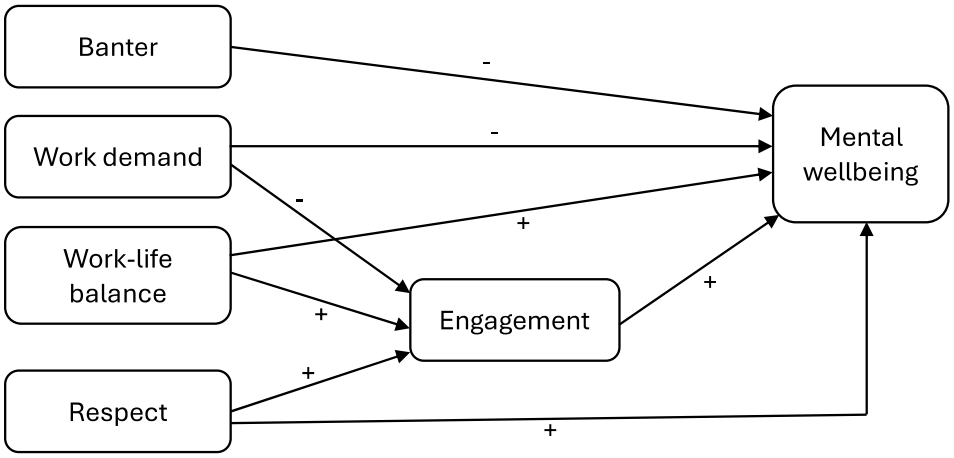


Figure 3.19: Relationships between work experiences, work engagement and mental wellbeing

3.2.3 Examining participants' experiences over the life of the Pilot Projects

As explained in Part 2.3 of this report, three Pilot Projects (A, C and D) were followed from their commencement until their completion, as their completion date fell within the data collection period for this research. This provided an opportunity to determine whether workers' experiences of the implementation of the Culture Standard changed at these Pilot Projects as projects progressed towards completion. The percentage of project duration that had elapsed at the time of each survey is shown in Table 3.2.

Table 3.2: Survey administration across project duration

	Pilot Project A	**Pilot Project C**	**Pilot Project D**
Survey 1	20% project duration	40% completion	60% project duration
Survey 2	60% project duration	75% project duration	87% project duration
Survey 3	88% project duration	N/A	N/A

3.2.3.1 Changes in work hours for Projects A, C, and D over time

Figure 3.20 presents changes in work hours per week reported by the participants from Project A as the project progressed. The results revealed that most participants indicated working 50 hours or fewer per week and the percentages of participants reporting 50 hours or fewer per week remained similar across the three waves of the survey. Similarly, the proportion of participants working more than 50 hours did not change significantly as the project progressed. A small portion of participants (15.2%) reported working more than 55 hours a week in the last wave of the survey.

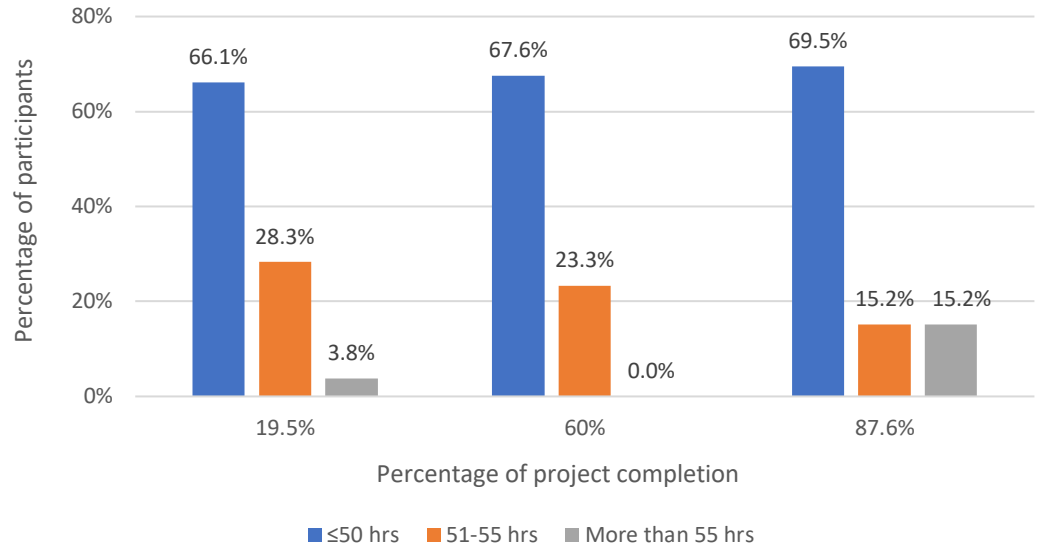


Figure 3.20: Changes in work hours at Project A over time

Figure 3.21 presents changes in work hours per week at Project C as the project progressed. There were no significant changes in participants' reported work hours per week across the two waves of survey and the proportion of participants working between 50 and 55 hours per week only slightly increased (from 10% to 15.8%), while the proportion of participants working more than 55 hours per week was lower in the second (compared to the first) survey.

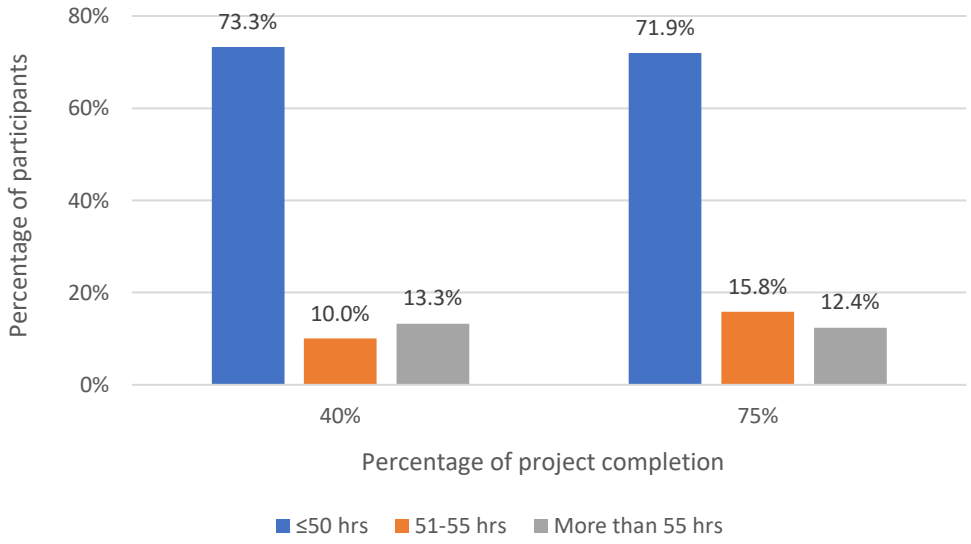


Figure 3.21: Changes in work hours at Project C over time

Figure 3.22 presents changes in work hours per week at Project D as the project progressed. There was no significant change in the reported weekly work hours, as the proportion of participants working more than 50 hours per week was stable between the two surveys (between 27.7% and 27.8%). The proportion of people indicating they work 50 hours or fewer each week (between 69.7% and 68.9%).
was similarly stable as the project progressed.

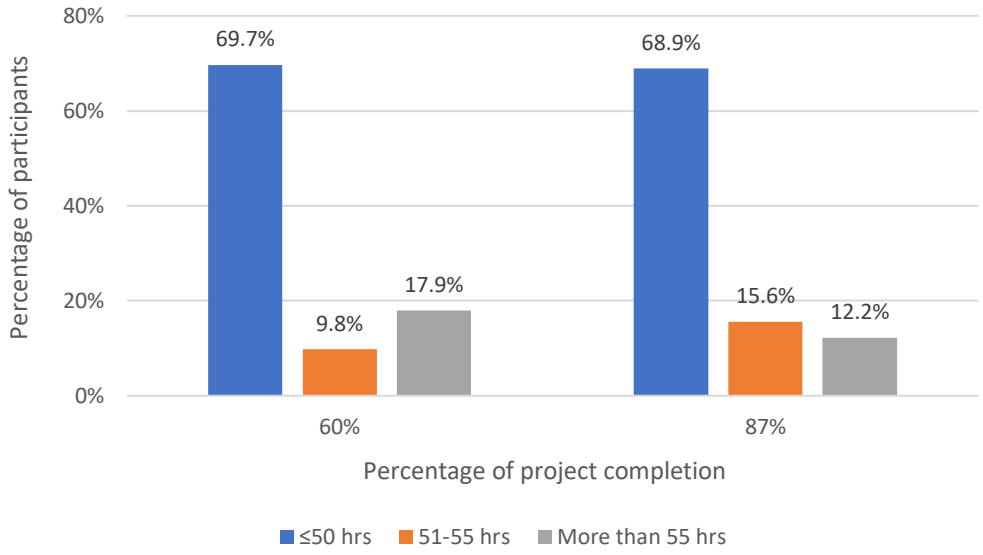


Figure 3.22: Changes in work hours at Project D over time

3.2.3.2 Work demand according to project completion

Figure 3.23 shows that mean scores reflecting participants' perceptions of work demand remained relatively stable for both Pilot Project A and Pilot Project D as these projects progressed. Perceptions of work demand slightly increased at Pilot Project C between the first and second surveys.

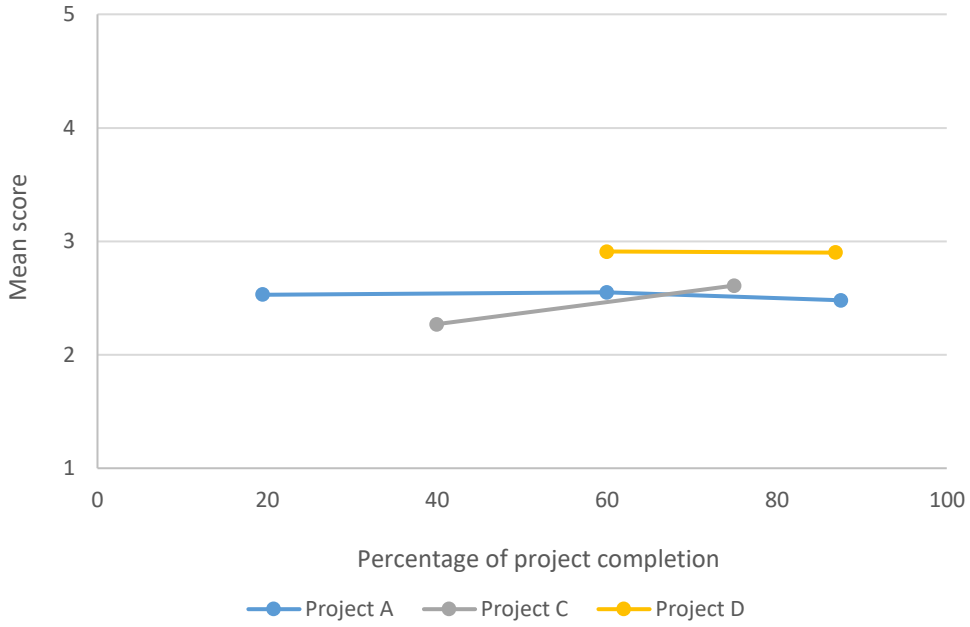


Figure 3.23: Perceptions of work demand over time

3.2.3.3 *Managerial work-family support according to project completion*

Figure 3.24 shows stable mean scores for managerial support for work-family interaction over the different survey waves. However, participants' perceptions of managerial support for work-family interaction were more positive in the second survey conducted at Pilot Project D than in the first survey.

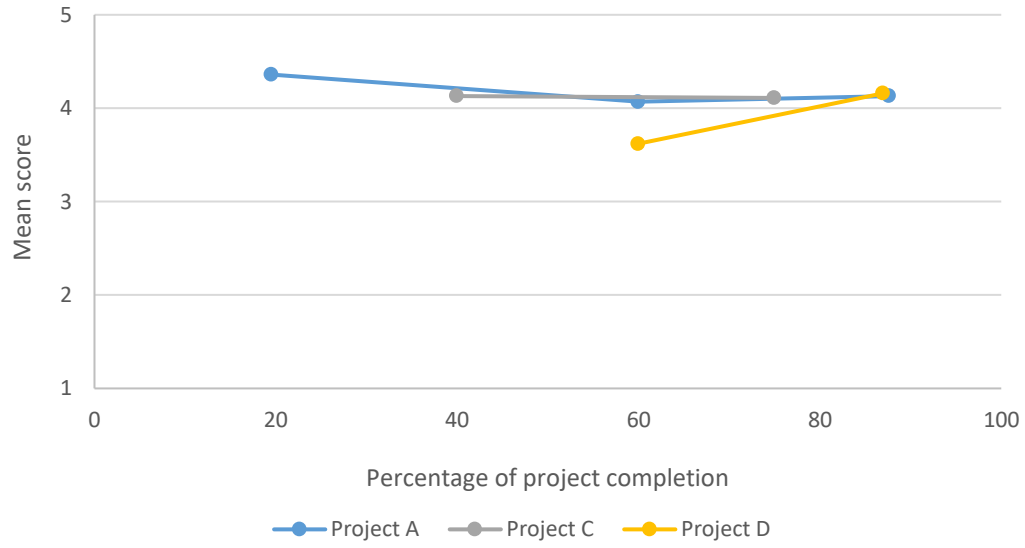


Figure 3.24: Perceptions of managerial work-family support over time

3.2.3.4 *Work-life balance according to project completion*

Figure 3.25 shows that mean scores for perceptions of work-life balance remained fairly stable at the Pilot Projects. Perceptions of work-life balance at Pilot Project C deteriorated slightly between the first and second surveys, however, this was only a marginal change.

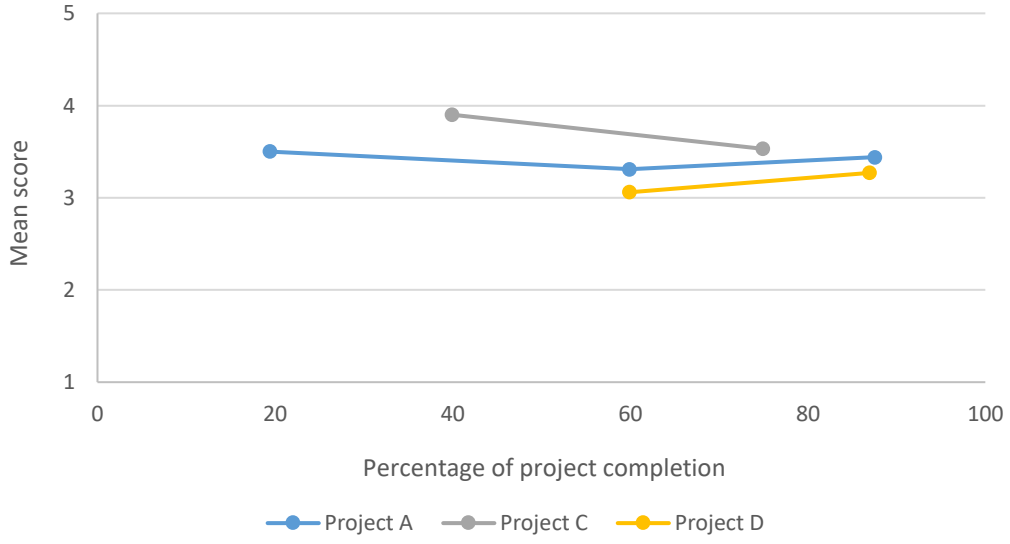


Figure 3.25: Perceptions of work-life balance over time

3.2.3.5 Organisational fairness according to project completion

Figure 3.26 shows stable mean scores for perceived organisational fairness at Pilot Projects A, C and D. There was a marginal reduction in perceptions of fairness at Pilot Project C between the first and second surveys.

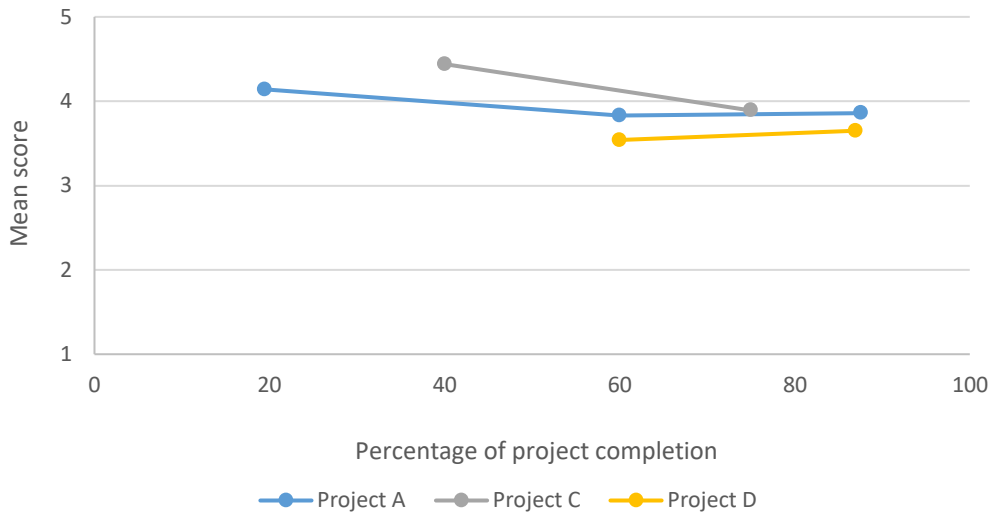


Figure 3.26: Perceptions of organisational fairness over time

3.2.3.6 (Inappropriate) banter according to project completion

Figure 3.27 shows low and stable mean scores for inappropriate banter at the three Pilot Projects. Perceptions of inappropriate banter increased slightly at Pilot Project C as the project progressed. However, this increase was small and the levels remained low.

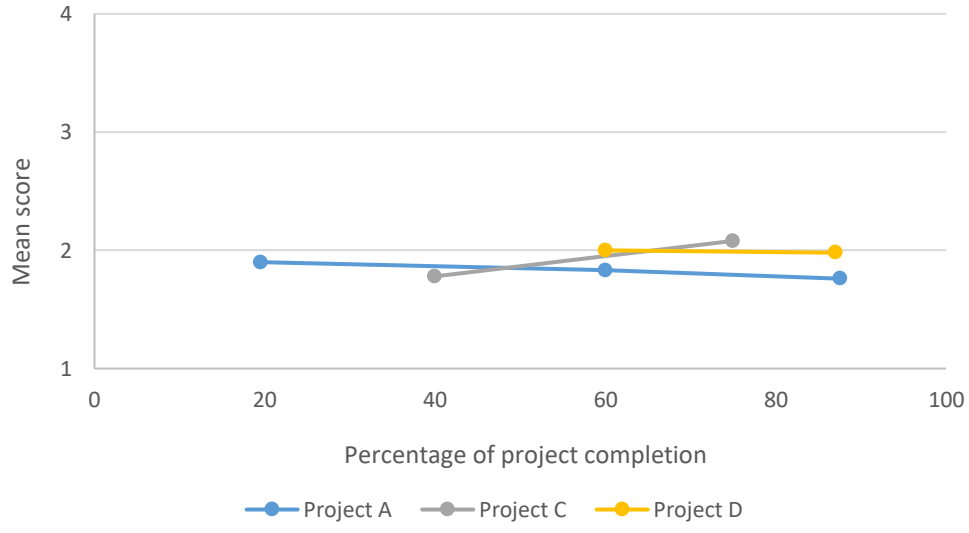


Figure 3.27: Perceptions of inappropriate banter over time

3.2.3.7 Respect at work according to project completion

Figure 3.28 shows high and stable mean scores for respect at work at the three Pilot Projects. Perceptions of respect at work decreased slightly at Pilot Project C as the project progressed. However, this decrease was small and the levels remained high.

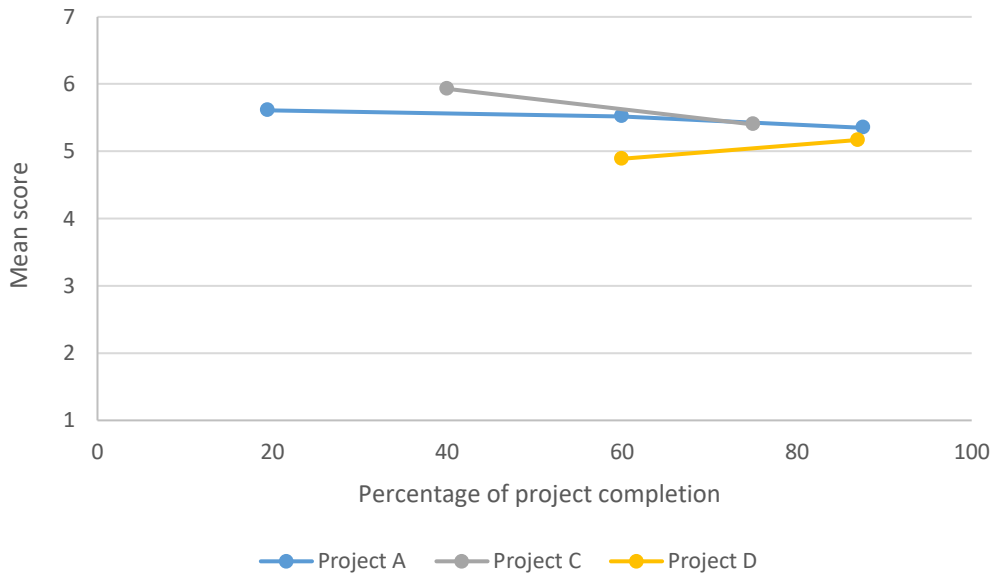


Figure 3.28: Perceptions of respect at work over time

3.2.3.8 Work engagement according to project completion

Figure 3.29 shows mean scores for work engagement were stable. There was a marginal decrease in mean work engagement scores at Pilot Project C as the project progressed.

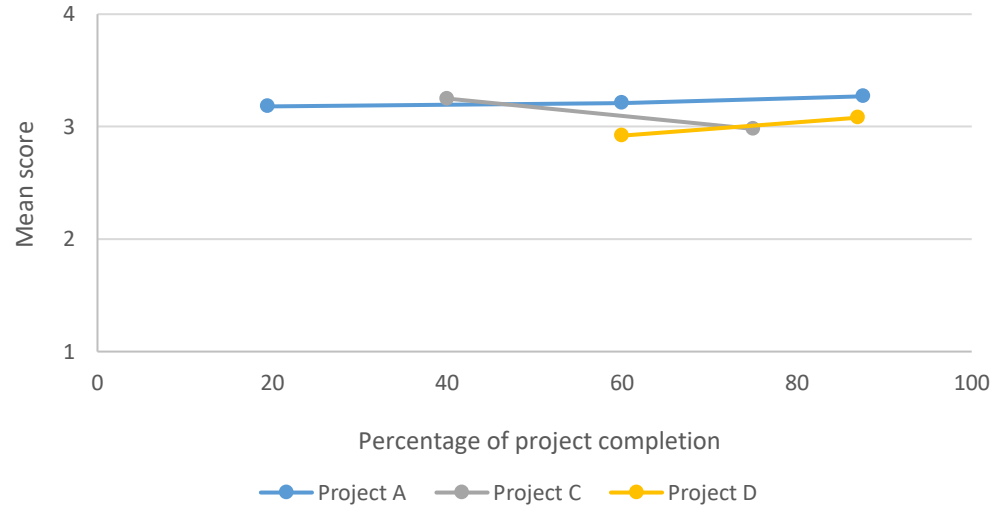


Figure 3.29: Self-reported work engagement over time

3.2.3.9 Mental wellbeing according to project completion

Figure 3.30 presents the average transformed sum scores for mental wellbeing at different stages of project completion for each project. Mean mental wellbeing scores did not vary considerably between Pilot Projects or as the Pilot Projects progressed towards completion.

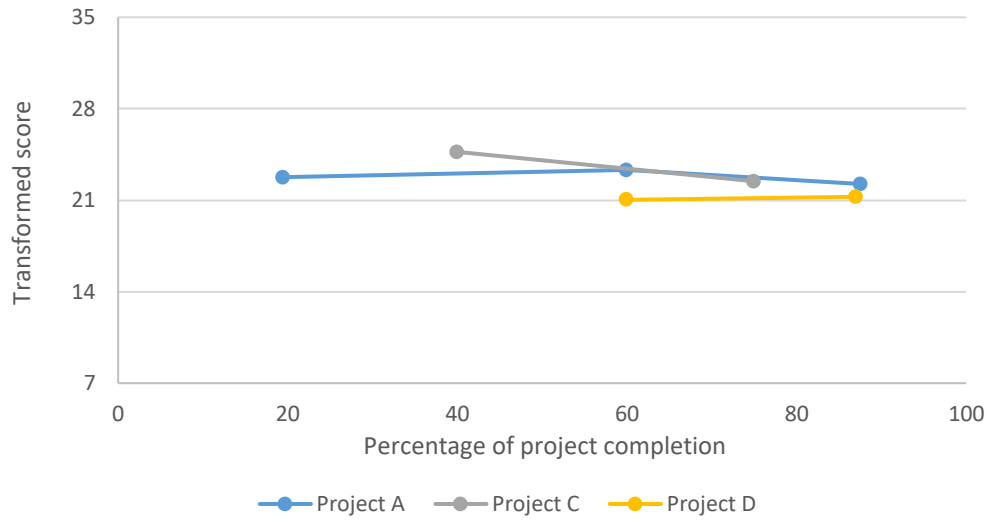


Figure 3.30: Mental wellbeing scores over time

3.2.4 Comparison with Non-Culture Standard projects

Survey data was collected from two construction projects that were not implementing the Culture Standard for the purpose of making a comparison about the impact of the Culture Standard relative to 'normal' conditions within the operations of the respective head contracting organisations. The comparison 'Non-Culture Standard' projects were being delivered by the same head contractors as those delivering Pilot Projects B and E. Comparison data from the Pilot Projects and Non-Culture Standard projects is presented below.

3.2.4.1 Pilot Project B and comparison project

Project context

The two projects were located in different states of Australia. At the time the surveys were undertaken, project completion was 35% at Project B and 50% at the Non-Culture Standard project. The head contractor indicated a strong focus on culture that is implemented across all projects.

Sample

180 participants completed the survey at Project B compared to 180 participants at the project at which the Culture Standard was not implemented. Characteristics of participants at the two projects are shown in Table 3.3.

Table 3.3: Characteristics of samples at Project B and the Non-Culture Standard project

Project B (Culture Standard Project)	Non-Culture Standard Project
Project completion - 35%	Project completion - 50%
180 participants (wave 2 data)	180 participants
90% men, 4% women	86% men, 7% women
18% directly employed, 81% subcontracted	8% directly employed, 86% subcontracted
87% waged, 9% salaried	86% waged, 10% salaried

[Note: percentages do not add up to 100 due to missing data]

Work hours

Figure 3.31 shows that a slightly higher proportion of participants at Project B worked 50 hours or fewer per week than participants from the Non-Culture Standard project (85.6% compared to 80.0%). A higher proportion of participants at the Non-Culture Standard project worked more than 50 hours than at Project B (16.1% compared to 12.2%). A Chi-square test indicated that the differences in work hours between Project B and the Non-Culture Standard project were not statistically significant (χ^2 (1, 349) = 1.271, p = 0.260).

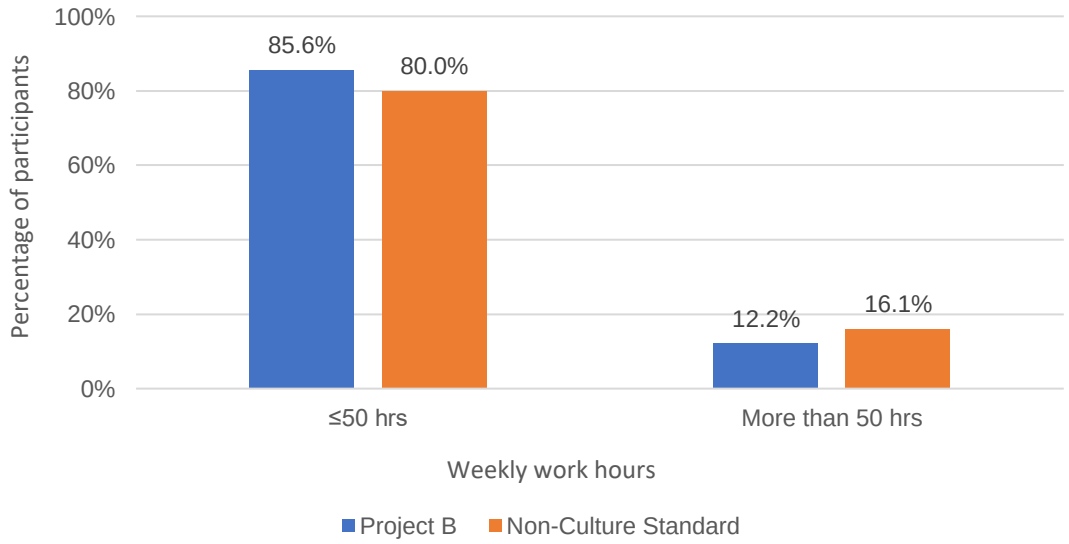


Figure 3.31: Comparison of work hours per week between Project B and Non-Culture Standard project

Figure 3.32 provides a more detailed analysis of hours worked at both projects. Overall, there was little difference in working hours between the two projects. A slightly higher proportion of participants from Project B worked 37-40 hours, 41-45 hours, and 46-50 hours than participants from the Non-Culture Standard project. In contrast, a slightly higher proportion of participants from the Non-Culture Standard project worked 37 or fewer hours, 51-55 hours, and 55 or more hours than participants from Project B. A Chi-square test indicated that the differences in work hours between Project B and the Non-Culture Standard project were not statistically significant (χ2 (5, 349) = 2.301, p = 0.806).

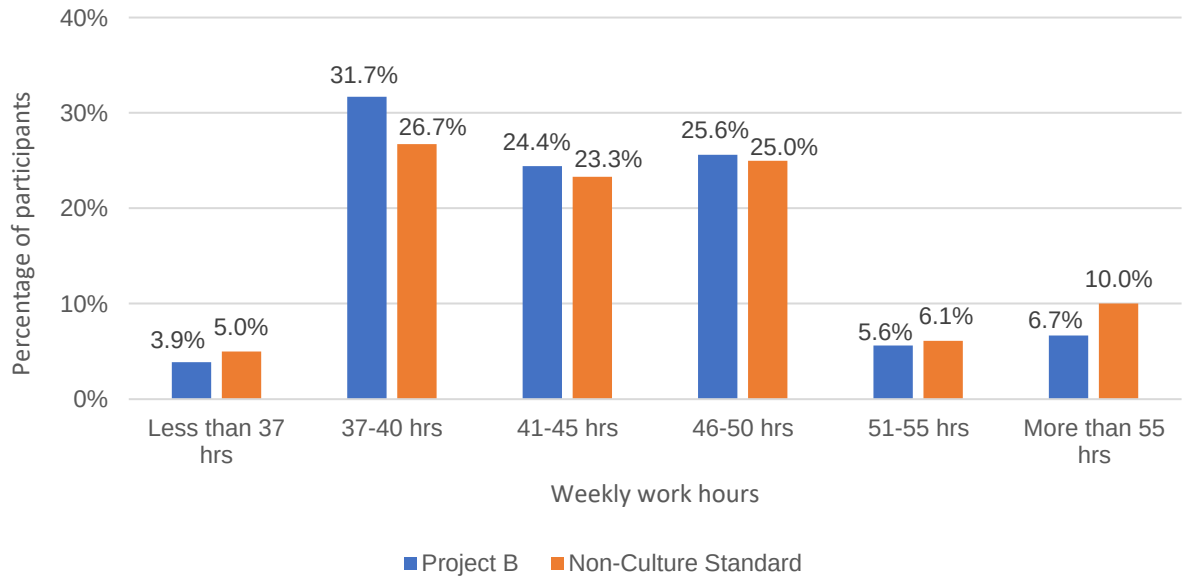


Figure 3.32: Comparison of work hours per week between Project B and Non-Culture Standard project

Preferred work hours

Comparisons between the two projects in terms of preferred work hours were also examined. Figure 3.33 shows the preferences of salaried participants at Project B and the comparison Non-Culture Standard project. Proportionally more salaried participants indicated a preference to work fewer hours in the Non-Culture Standard project compared to Project B (58.8% compared to 52.9%). Additionally, proportionally more salaried workers indicated a preference to work about the same number of work hours as they were currently working at the Non-Culture Standard project than at Project B (41.2% compared to 35.3%). In contrast, proportionally more salaried participants indicated a preference to work more hours at Project B than at the Non-Culture Standard project (11.8% compared to 0.0%).

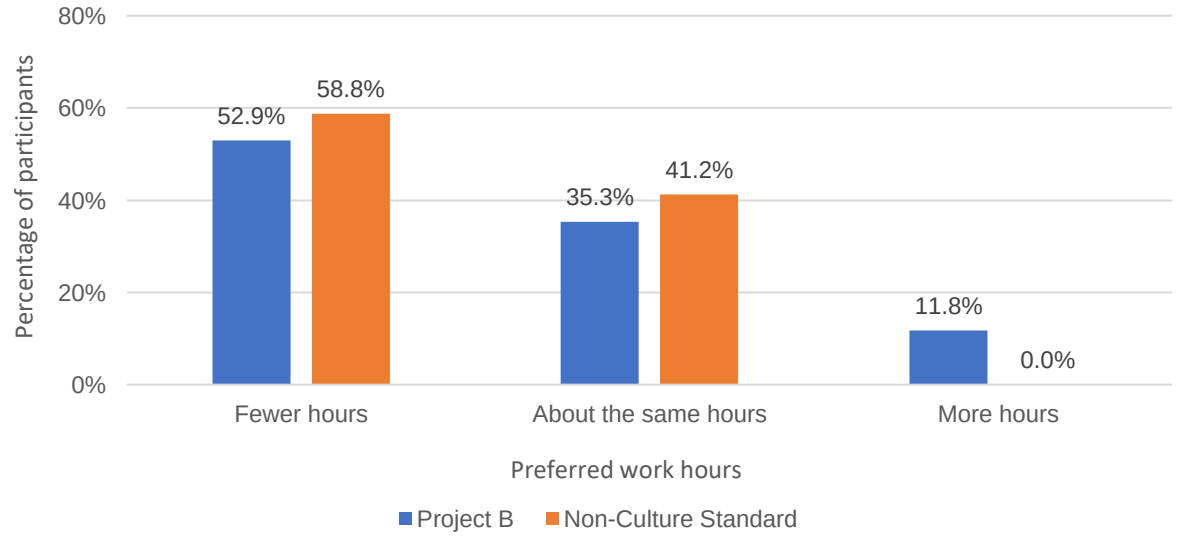


Figure 3.33: Comparison between Project B and Non-Culture Standard project work hour preferences (salaried participants)

Figure 3.34 shows the preferences of waged participants at Project B and the comparison Non-Culture Standard project. In the Non-Culture Standard project, proportionally more waged workers indicated a preference to work the same hours as they were working at the time of the survey, than did those at Project B (58.0% compared to 46.8%). Slightly more waged workers indicated a preference to work more hours at the Non-Culture Standard project compared to Project B (26.0% compared to 23.4%). Proportionally more waged workers indicated they would prefer to work fewer hours at Project B compared to those at the Non-Culture Standard project (29.9% compared to 16.0%).

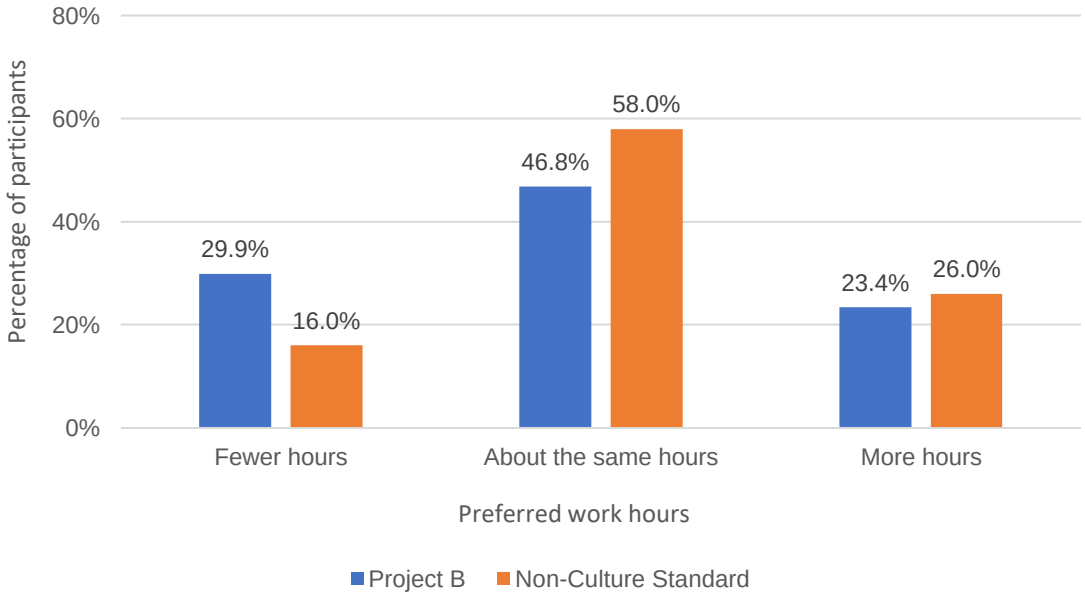


Figure 3.34: Comparison between Project B and Non-Culture Standard project work hour preferences (waged participants)

Preferred work schedule

Figure 3.35 shows the preferences for a 5- or 6-day working week among salaried participants at Project B and at the comparison Non-Culture Standard project. Proportionally more salaried workers indicated a preference to work a 5-day week at the comparison Non-Culture Standard project than those at Project B (94.1% compared to 82.3%). Only a small proportion of salaried workers indicated a preference to work a 6-day week at either Project B (17.6%) or the comparison Non-Culture Standard project (5.9%).

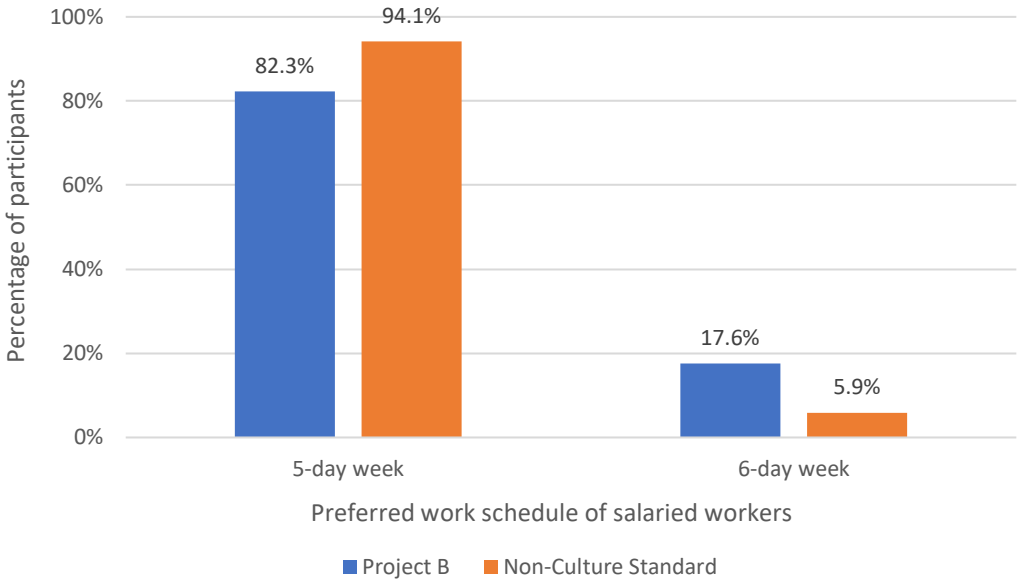


Figure 3.35: Comparison between Project B and Non-Culture Standard project weekly schedule preferences (salaried participants)

Figure 3.36 shows the preferences for a 5- or 6-day working week among waged participants at Project B and at the comparison Non-Culture Standard project. Proportionally more waged workers indicated a preference to work a 5-day week at Project B (74.5%) compared to waged workers at the comparison Non-Culture Standard projects (55.7%). 41.6% of waged workers at the Non-Culture Standard project indicated they preferred to work a 6-day week, compared with 23.5% at Project B.

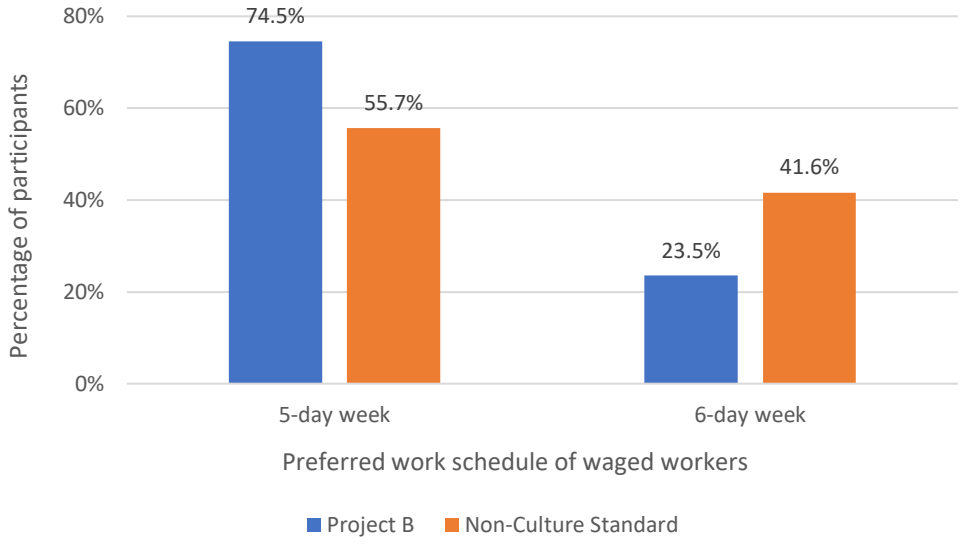


Figure 3.36: Comparison between Project B and Non-Culture Standard project weekly schedule preferences (waged participants)

Work experiences

Figure 3.37 shows a comparison of mean scores between the two projects relating to participants' assessments of their experiences at work. Work demands, workload, banter and respect were slightly higher at Project B than they were at the Non-Culture Standard project, whilst managerial support for work and family and work-life balance were slightly higher at the Non-Culture Standard project than at Project B. Independent samples t-tests revealed that the difference between mean scores reported for work demand, workload, managerial work-family support, banter and respect at work between Project B and the Non-Culture Standard comparison project were statistically significant (see Appendix F, Table 6.14).

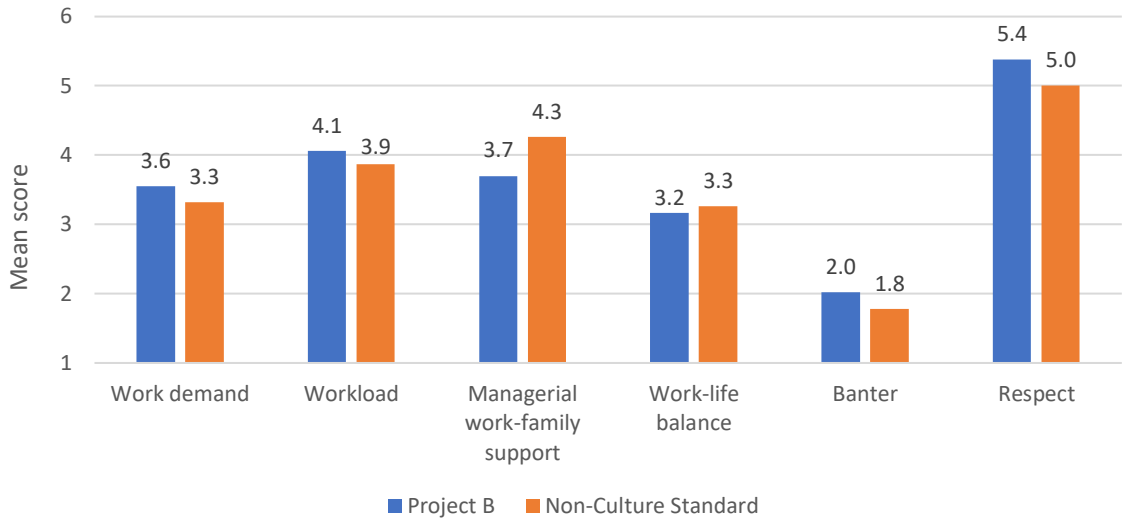


Figure 3.37: Comparison of work experiences between Project B and the comparison Non-Culture Standard project

Mental wellbeing

Figure 3.38 shows mental wellbeing scores between participants at Project B and the Non-Culture Standard comparison project. Mental wellbeing scores were similar at both of these projects and no statistically significant findings were found.

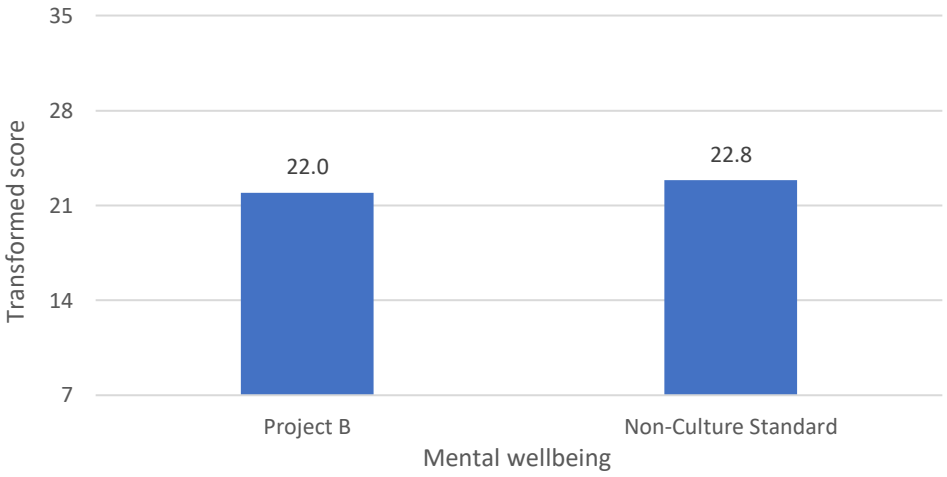


Figure 3.38: Comparison of mental wellbeing between Project B and the comparison Non-Culture Standard project

3.2.4.2 Pilot Project E and comparison project

Project context

The two projects were located in the same Australian state. At the time the surveys were undertaken, project completion was 35% at Project E and 85% at the Non-Culture Standard Project.

Sample

65 participants completed the survey at Project E compared to 51 participants at the project at which the Culture Standard was not implemented. Characteristics of participants at each of the projects is shown in Table 3.4.

Table 3.4: Characteristics of samples at Project E and the Non-Culture Standard project

Project E (Culture Standard Project)	Non-Culture Standard Project
65 participants (wave 1 data)	51 participants
85% men, 11% women	86% men, 4% women
43% directly employed, 48% subcontracted	24% directly employed, 69% subcontracted
49% waged, 48% salaried	61% waged, 29% salaried

[Note: percentages do not add up to 100 due to missing data]

Work hours

Figure 3.39 shows that a higher proportion of participants at the Non-Culture Standard project worked 50 hours or fewer per week than participants from Project E (58.8% compared to 50.8%). In contrast, a higher proportion of participants at Project E worked more than 50 hours than participants at the Non-Culture Standard project (46.2% compared to 33.3%). A Chi-square test indicated that the differences in work hours between Project E and the non-Culture Standard project were not statistically significant (χ^2 (1, 110) = 1.442, p = 0.230).

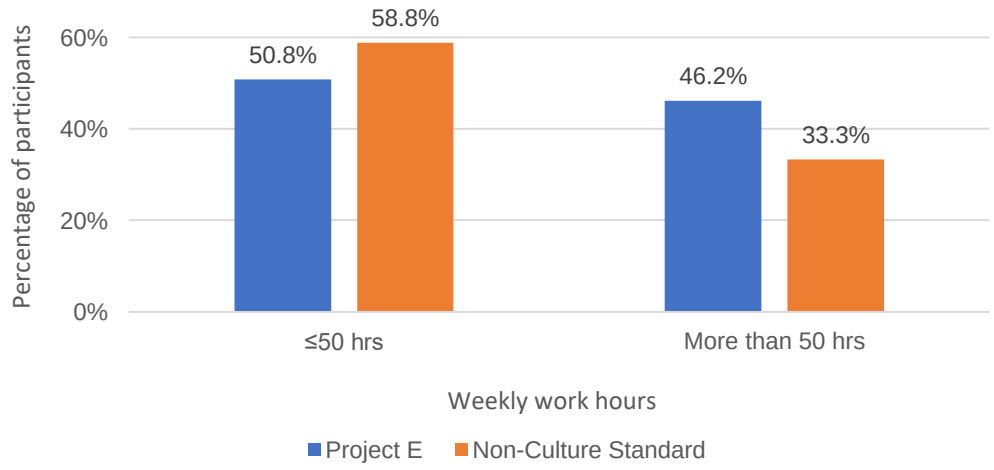


Figure 3.39: Comparison of work hours per week between Project E and Non-Culture Standard project

Figure 3.40 shows a more detailed analysis of hours worked at both projects. For all work hour categories, the proportion of participants was higher at Project E with one exception. A higher proportion of participants from the Non-Culture Standard worked 46-50 hours per week compared with participants from Project E (49% compared to 23.1%). A Chi-square test indicated that the differences in work hours between Project E and the Non-Culture Standard project were statistically significant (χ^2 (5, 110) = 13.000, p = 0.023).

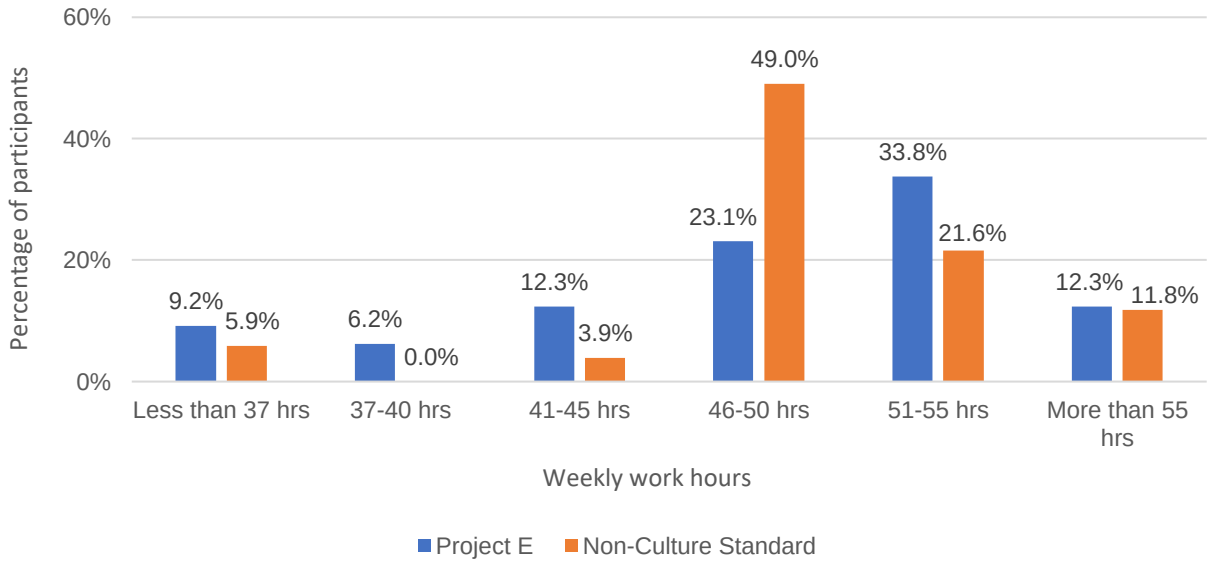


Figure 3.40: Comparison of work hours per week between Project E and Non-Culture Standard project

Preferred work hours

Comparisons between the two projects in terms of preferred work hours were also examined. Figure 3.41 shows the preferences of salaried participants at Project E and the comparison Non-Culture Standard project. Proportionally more salaried participants expressed a preference to work fewer hours at the Non-Culture Standard project compared to Project E (60% compared to 25.8%). Proportionally more salaried workers indicated a preference to work about the same number of hours work hours they were doing at the time of the survey at Project E than at the Non-Culture Standard comparison project (67.7% compared to 33.3%).

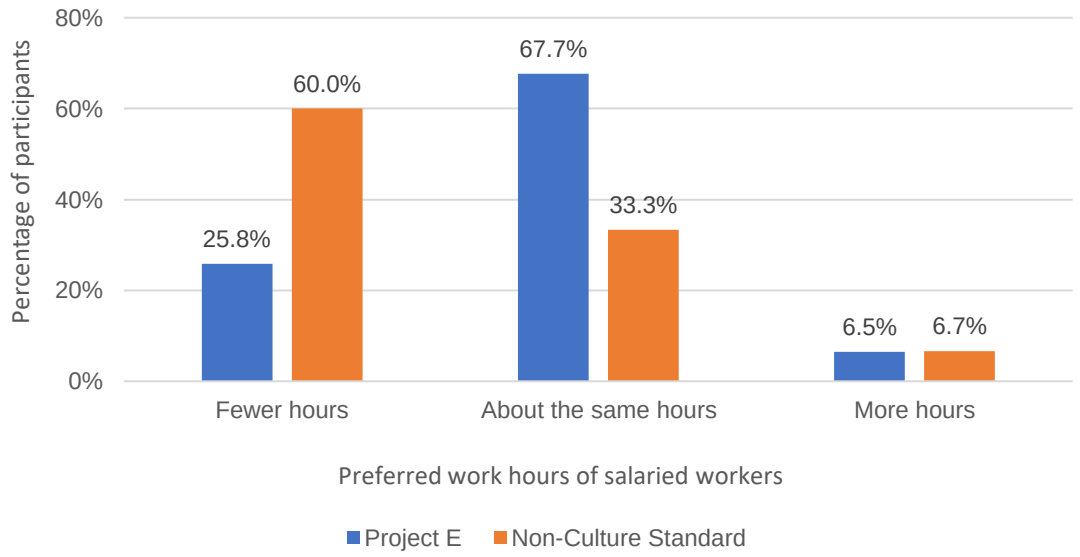


Figure 3.41: Comparison between Project E and Non-Culture Standard project work hour preferences (salaried participants)

Figure 3.42 shows the preferences of waged participants at Project E and the comparison Non-Culture Standard project. In the Non-Culture Standard project, proportionally more waged workers indicated a preference to work about the same number of hours as they were working at the time of the survey, compared with those at Project E (51.6% compared to 37.5%). Proportionally more waged workers indicated they would prefer to work more hours at Project E compared to the Non-Culture Standard project (37.5% compared to 32.3%). However, proportionally more waged workers also indicated they would prefer to work fewer hours at Project E compared to the Non-Culture Standard project (25% compared to 16.1%).

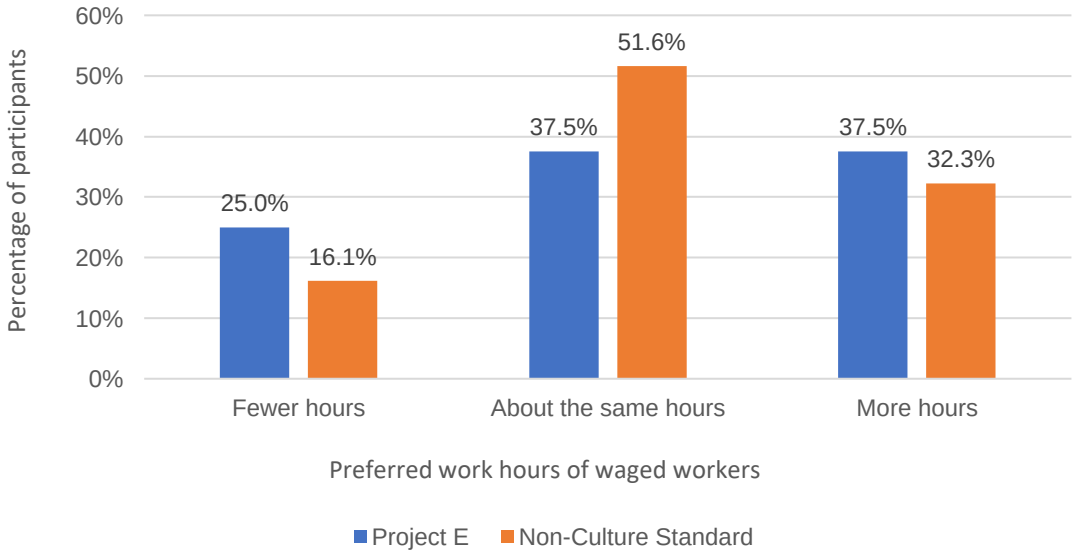


Figure 3.42: Comparison between Project E and Non-Culture Standard project work hour preferences (waged participants)

Preferred work schedule

Figure 3.43 shows the preferences for a 5- or 6-day working week among salaried participants at Project E and at the comparison Non-Culture Standard project. A similar proportion of salaried workers indicated a preference to work a 5-day week at Project E and the comparison Non-Culture Standard project (93.6% compared to 93.3%). Only a small proportion of salaried workers indicated a preference to work a 6-day week at either Project E (3.2%) or the comparison Non-Culture Standard project (6.7%).

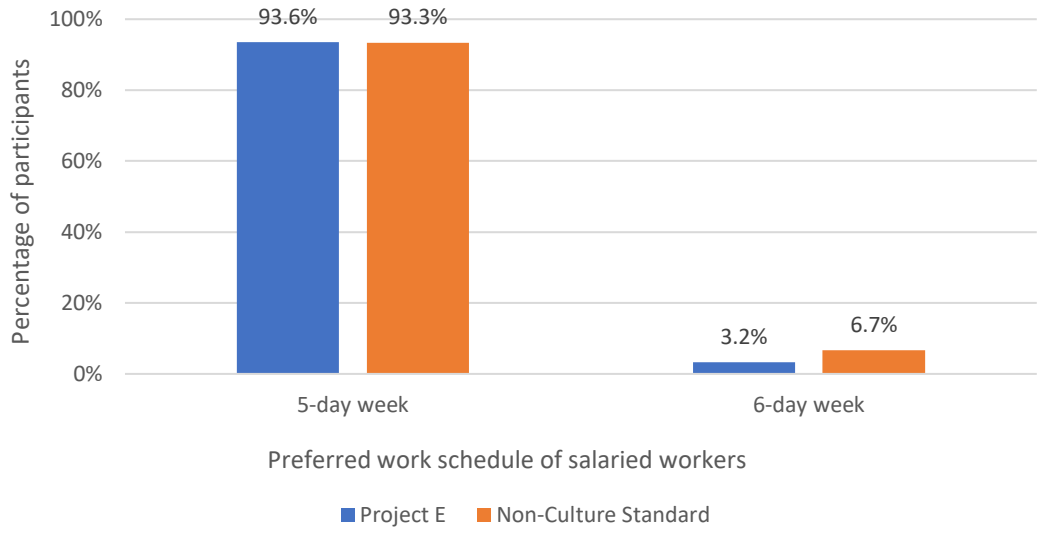


Figure 3.43: Comparison between Project E and Non-Culture Standard project weekly schedule preferences (salaried participants)

Figure 3.44 shows the preferences for a 5- or 6-day working week among waged participants at Project E and at the comparison Non-Culture Standard project. Proportionally more waged workers indicated a preference to work a 5-day week at Project E (75%) compared to waged workers at the comparison Non-Culture Standard project (60%). One third of waged workers at the Non-Culture Standard project (33.3%) indicated they preferred to work a 6-day week, compared with 15.6% at Project E.

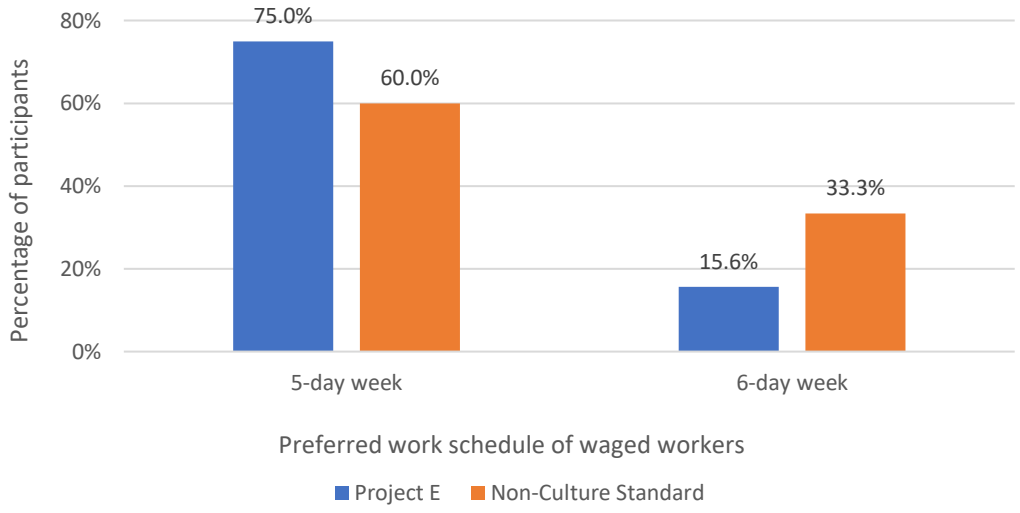


Figure 3.44: Comparison between Project E and Non-Culture Standard project weekly schedule preferences (waged participants)

Work experiences

Figure 3.45 shows a comparison of mean scores between the two projects relating to participants' assessments of their experiences at the projects. Work demands and workload were slightly higher at the Non-Culture Standard project than they were at Project E, whilst managerial support for work and family, work-life balance, banter and respect at work were all higher at Project E than at the Non-Culture Standard project. Independent samples t-tests indicated that the difference between mean scores for work-life balance and respect at Project E and the Non-Culture Standard project were statistically significant (see Appendix F, Table 6.15)

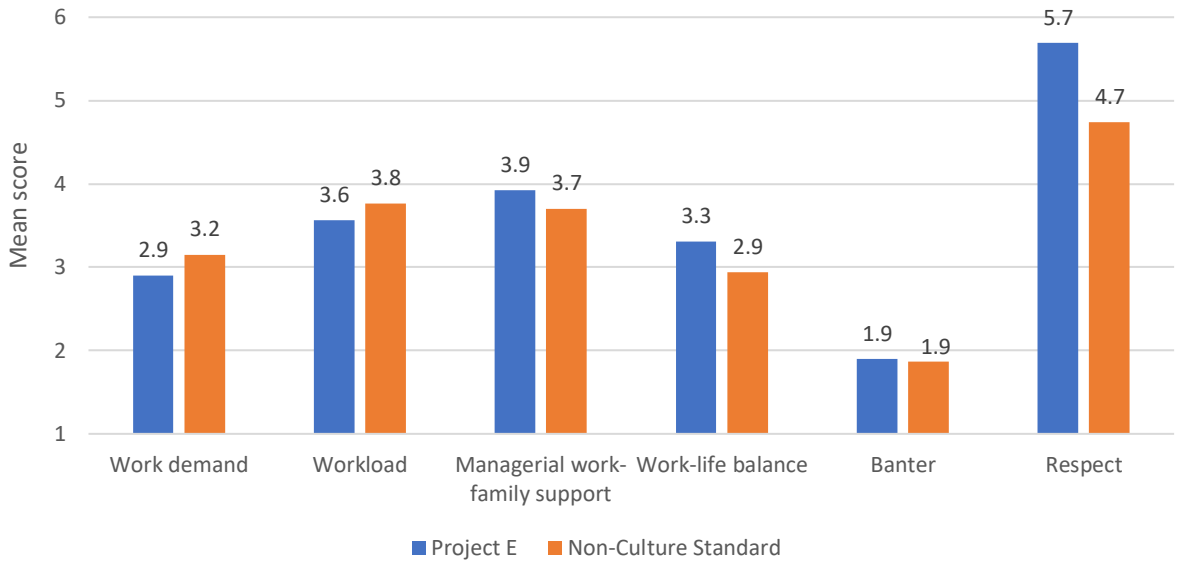


Figure 3.45: Comparison of work experiences between Project E and the comparison Non-Culture Standard project

Mental wellbeing

Figure 3.46 shows mental wellbeing scores between participants at Project E and the Non-Culture Standard comparison project. Mental wellbeing scores were similar at both of these projects and no statistically significant differences were found.

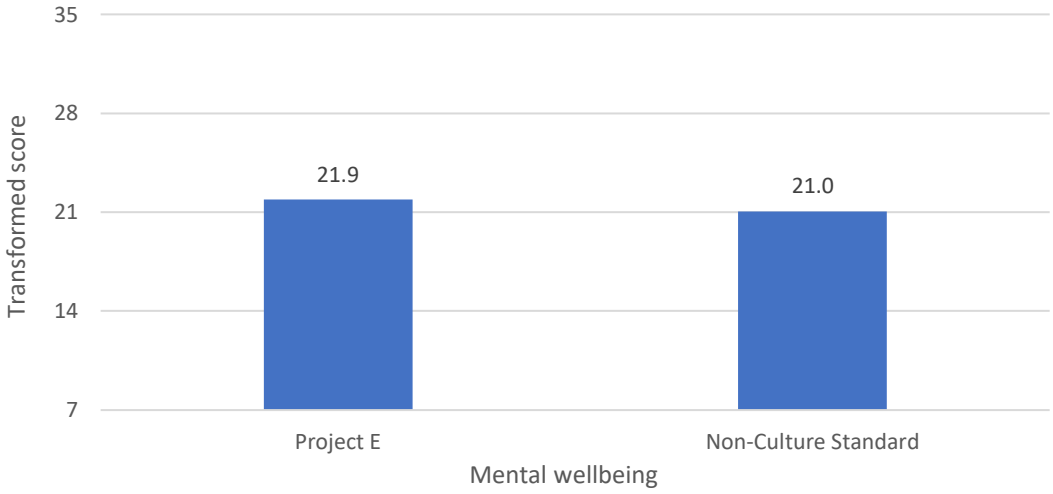


Figure 3.46: Comparison of mental wellbeing between Project E and the comparison Non-Culture Standard project

3.3 Pilot Project interview findings

This section of the report describes the interview findings according to key themes and uses illustrative quotes to evidence the themes.

Key themes described in this section are:

- time for life
- health and wellbeing
- gender diversity
- changing perceptions about the 5-day week, and
- the future of the Culture Standard

The interview findings detail the experiences and perspectives of the interview participants. It is important to acknowledge that only those time for life, health and wellbeing, and gender diversity initiatives mentioned by participants are described, therefore this section of the report may not consider the impacts of the complete suite of initiatives implemented at the five Pilot Projects.

In some sections, and where relevant, illustrative quotes are accompanied by demographic information about participants. In other instances, details (such as job role) are omitted to protect the participant's anonymity.

3.3.1 Time for life

This section is arranged under the following areas:

- work schedule changes
- work schedule preferences, and
- experience of flexible working

The end of the section includes a table summarising these areas.

3.3.1.1 Work schedule changes

Project A, Project C and Project E reported no changes to their initial work schedules. To recap, Project A utilised a 10-day fortnight schedule, with Saturday work undertaken every other week with a Monday RDO. Project C maintained a schedule with no weekend work, working no more than 11 hours per day with an RDO every fortnight. Project E implemented a 5-day roster of 11-hour days for day shifts with the option for workers to work on Saturday and/or undertake 10 days of night work per month.

Midway through the project, Project B and Project D adjusted their work schedule to reduce worker fatigue.

Project B

Project B initially scheduled a working week consisting of five 11-hour days with no Saturday work (except for specific tasks such as crane erection). However, during first round of data collection the majority of workers reported that they were working five 12-hour days, thereby exceeding the 55-hour

limit specified in the Culture Standard. Participants explained that, during these early stages, the project was essentially condensing six days of work into five days: "*They're still doing 60-hour weeks but they're just doing it five days instead of six*" (BP06).

During the first two rounds of interviews at Project B, some workers noted that they would rather work six shorter consecutive days than a 5-day schedule with longer daily hours. For some workers, this was due to feeling fatigued: "*I reckon, 6 o'clock finishes is probably a bit more strenuous for five days rather than doing a Saturday. I think that's more taxing on the body and the mind… doing 12-hour days for five days is more intense than doing a Saturday*" (BP06).

Another reason for preferring five shorter days and a Saturday was being able to spend time with family during the week: "*I believe we're coming up with a solution to make it work for us, but as it stands at the moment, I personally prefer a 6-day week over a 5-day week, because I finish at 5:00, and I can get home, spend time with the family"* (BP13).

By the third round of interviews at Project B, the working hours had been reduced to better comply with the time for life component of the Culture Standard. After work hours were effectively limited to stay below the 55-per week Culture Standard limit, participants indicated they generally preferred the 5-day schedule: "*Just that little aspect of doing 10-hour days and having Saturday off, it gives you a whole new day for you. It's incredible*" (BP24). A participant in a senior role described how the project had made a concerted effort to reduce and monitor working hours: "*Everyone's been allocated a number, confidentially, people put in their hours for the week. If there's too many hours that've been put in, we have conversations with that individual as to why. Do you want a day off in lieu? What are we going to do about it? But it's also about just monitoring on a day-to-day basis. Just being aware of it*" (BP26).

Project D

Project D's typical work schedule involved working 10- to 11-hour days between Monday and Thursday and 7.5 hours on Friday with an RDO every second Monday. However, an occupation programmed in the earlier stages of this project involved working six consecutive workdays, thereby deviating from the Culture Standard parameters.

Initially, the project had planned for more intensive 24/7-style occupations. However, due to the difficulty experienced in meeting the Culture Standard time for life requirements throughout the first occupation, the project ceased campaigns/occupations in its later stages and adopted alternative approaches for meeting project program requirements. A managerial worker explained:

> *"We're not doing any either (campaigns/occupations) from now on, we're doing one side of the road at the time. … we're managing it that way… it might roll into some Saturday work because of that, because it will be elongated, but now we're managing it so we're not doing any of these occupations or campaigns" (DP38).*

During the early stages of Project D, workers recognised that the intensity of long campaigns which involved night shifts was not sustainable, but that these work practices could be managed in shorter durations: "…*night shifts, working Saturdays again… it's not too bad when you know it's just a short period"* (DP32).

Work tasks were reallocated to Saturday without significant changes to the original work schedule or notable increases in work hours per week. Short night shifts took place on Fridays and Saturdays and extra crews of a small size were organised for the weekend work. Workers described this new organisation of labour as undertaking "mini occupations":

> *"… they changed the way that they were going to do the work so that we wouldn't have to do any other major occupations, but we still had to do spots of… mini occupations if you want to call it that, where they just would do switches, do the barriers and get the traffic going a different way… So that's the predominant night work that happens"* (DP39).

In the later stages of Project D, after long campaigns had been discontinued, most participants indicated higher levels of satisfaction with their work hours and work pace. A site worker described: "*(We work) five days a week. On Fridays we tend to finish a bit earlier. Just depending on the job and whether we've had rain days during the weekend and we're playing catch up, but usually Friday, everyone's knocking off at about 3.30 anyway… it's (the work schedule) beautiful*" (DP33).

3.3.1.2 Work schedule preferences

Across all five Pilot Projects the majority of workers expressed a preference for working a 5-day week, citing the time for life benefits of improved work-life balance, time for rest and recovery, a reduction in fatigue, and increased family time.

The additional time for family enabled by the 5-day week was identified as one of the most important benefits by participants across the five Pilot Projects:

- *"It's good to have a stable roster of when you have your weekends off. Previously, you never know which Saturday you'd have to work so you can't really plan like your life around that... Whereas now I can plan my family life and my social life much better because of the roster"* (AP15).
- *"I enjoyed knowing that I've got those two days of rest. When I used to work Saturday, I would come home and have a nap, so I've lost most of the day. It's nice to be able to have that little bit of a sleep-in in the morning and still have the majority of the day with the family"* (BP39).
- *"It's nice to not have that Saturday… you just get to spend the whole day with the kids that way, which I find valuable and is my favourite thing. So I really enjoy the 5-day week"* (CP23).
- *"I think the people who work five days are more relaxed than the people who work six days. Six days is tiring... And your family will be affected, your children will be affected... You can't be doing all your shopping, cooking, everything on a day. We surely need two days to have some rest"* (DP43).
- *"I think five days a week is really, really good because family is important. When it comes to kids, especially when they're very young, I always believe that parents should be around them and spending a lot of time with them because the children learn from their parents a lot"* (EP41).

Many participants noted that, in addition to the family-related benefits, the 5-day week enables workers to take care of domestic tasks:

- *"Five's enough because you need a minimum two days because one day you're spending like washing and cleaning ... and you've got one day to relax"* (AP18).
- *"I love it. Sometimes, for example, if you just have Sunday, it's not enough. You have to do housekeeping, or laundry, sometimes you have to go to the post office"* (BP38).

Some waged workers were less enthusiastic about the time for life benefits of the Culture Standard due to a reduction in their potential earnings. Some waged participants expressed a preference to maximise their income, regardless of the long work hours: "*I would work as much as I could. While you're still fit enough to get work, I suppose do it. (The 5-day week) is all right. But if Saturday's available, I'd be*

working it for sure" (AP01). This participant, a married man in his early 30s with young children, said that although his wife likes the extra time with him, she is supportive of him taking on as much work as possible: *"She likes seeing me more. (But) the whole idea was me coming down here was to work as much as I possibly could. She's all for it. If there's work available, she understands and she backs me in to work it"* (AP01).

Other participants observed that, although some waged workers would prefer to prioritise their earnings over the time for life benefits, the majority of waged workers were supportive of the 5-day week:

- *"I do the inductions, it's a positive induction. I actually go to the effort to tell them what's different about this project. 'No, you won't be working Saturday'... A few guys scowl at it because it's less overtime, but the majority of them, they like the idea"* (EP02).

- *"It depends who you talk to... obviously you do get quite a few blokes that are like, 'oh why aren't we working weekends?' They obviously need the money... But me personally, my crew that I've got working with me, no one ever really mentions it. I think they are quite happy working a 5-day week"* (DP04).

- *"All the feedback I've received from the site as well, everyone's so happy about it, even the guys on wages. They are missing out on an extra couple hundred dollars, but they say 'I get that time with my family and my kids'. It makes such an impact"* (BP38).

Work at Project E involved frequent night shifts due to environmental restrictions. The majority of workers considered working at night manageable due to effective planning. A site-based worker observed the shift rostering worked well for them: "*I did come here for a few night shifts early in the beginning. I've just slowly built up and now I'm here permanently on days and when it's night work I go to the nights. Which I quite enjoy working nights actually*" (EP29).

However, a minority of participants described how they work split shifts stretching from noon to midnight and indicated they found this arrangement challenging. A professional worker described his work schedule: *"I usually do split shifts if we have night shifts, because I have to do [work tasks] and nobody else can do that unfortunately… I come in at midday and leave at midnight, which is a very, very gross week when you're trying to do half days and then you come back to full days, it's not much fu*n" (EP07).

By the final round of interviews, most participants at the Pilot Projects indicated that, having now experienced the time for life benefits of the 5-day week, they would choose to work a 5-day week over a 6-day week:

- *"I would never do six days again; I would just find a different job. My reflection is that it's necessary for me, and that it's a really positive thing, that you need to enjoy work, you need enough time away"* (AP08).

- *"I won't ever go back to six days now that I've done the five days. I know a lot of the other people on site are exactly the same. The 5-day working week is just a Godsend to our industry and I think if we make it standard, it's going to change a lot for the better"* (BP09).

- *"I don't know how anyone here would go back to it [the 6-day week]... I mean, it doesn't make any sense considering here we are on a job where we've got it done, it's good, it's kind of on time, it's on cost, and it's been delivered on 5-days, and I mean, the 6-day means nothing, it never has"* (CP11).

- *"For the next project, I would definitely ask my managers that I'm not going to be working Saturdays and if they don't give me the job, it's fine. I'll find somewhere that I can work only five days… after this job, I don't think I'm going to work any Saturdays"* (DP43).

- *"I feel like [the 5-day week] should be compulsory. ... Everyone needs their time away from work"* (EP44).

3.3.1.3 Experience of flexible working

Workers at all five Pilot Projects enjoyed both formal and informal support for flexibility in their working time. Participants reported a general sense of flexibility regarding time for life adjustments to their work schedules:

- *"If I've needed to leave early, or if I can't come in because one of the kids are sick or anything like that, they're very accommodating"* (AP07).

- *"If we've got appointments, if we got to come in a bit later that day ... we can always change the flexibility. If I want to have a flexible day on Wednesday instead of Thursday, then I'll just change the date"* (BP09).

- *"If I've got to go and pick my daughter up from day care for whatever reason, there's no issues with me leaving early. I understand, at least on this project, there's been no issues with flexible arrangements"* (CP10).

- *"Obviously, if there are any issues at home, I'm given the time to attend to those issues. If I need to leave early for an appointment or have a day off or something like that for any emergency reason, the company is fine with that"* (DP04).

- *"They're very flexible. If I needed to go, say I had a doctor's appointment, they're very flexible around that as long as I give them enough notice that I'm going to an appointment"* (EP35).

Access to flexibility

Some participants believed that flexibility is becoming more acceptable in the construction industry context and the Culture Standard is helping to normalise flexible ways of working: "*Before… it would only be for one person saying, 'Oh, I need to leave early once a week', or whatever it is… But then it was never really formal. And then there may have been a bit of that, 'Oh, well, why does she get to do this?' Or a little bit of judgment from others... So I think that's the difference in the past*" (EP15).

Another participant similarly observed that flexibility had become part of the work culture, and was concerned about losing this flexibility on their next job: "*We don't have the walk of shame here... If I come in late, my managers are really understanding… To be honest I was telling one of my colleagues, once this project is finished, I don't know what I am going to do on the next because it's going to be same as my previous job. So they're going to force us to be there at 6.30 and finish 5.30 at the earliest*" (DP43).

A participant at Project A indicated that, although there was flexibility regarding their working times, workers had to be proactive to take advantage of that flexibility: "*I'm probably pushing it the furthest… it's like, 'You guys preach it, so I'm going to try to take you up on it'... I suppose what I'm trying to say is if you take them up on the workplace flexibility, then it's there for the taking… But you have to be actively taking it up... They don't say, 'Go home. No, really, get out of here. You must leave.' You have to be the one to instigate it*" (AP08).

A similar sentiment was expressed by a participant at Project E: "*I think it just depends on perspective to perspective, who's willing to ask for it, and if you ask for it, you get it, and then if you don't, then you don't"* (EP42).

Some participants noted that the use of flexible work practices could be inhibited if there were problems at work as it was expected that work should take priority: "*Although, as a business, we have got that support in place and it's understood that you can work flexibly, I think there's still that ingrained sort of expectation that when things aren't going so well that those things take second place because the project is the priority. And that's not an easy thing to deal with because you have emergencies [at home]*" (BP45).

A participant employed directly by the head contractor at Project B acknowledged that only some of the project team had access to flexible work arrangements. This participant believed that all workers, irrespective of employer, should have access to these initiatives: "*Now that we do have that flexibility, I can go and pick up my kids from school… But it shouldn't just be for [head contractor]. It should be for any person on site… It's not that we can't; we've shown we can do 5-day work weeks, we can do work from home, so why can't we do flexible days for parents who want to go and sit with their children?*" (BP09).

Manager support

Participants noted that the degree of informal flexibility experienced by workers varied depending on who their manager was: "*It depends who you're working under in the broad scheme of it. You can work for some people that don't like you taking the time off and stuff like that, but someone like [name removed] understands. He's got a family himself. I'll be totally honest with you, if I need to take time off for my family, I would just take it off and suffer the consequences from work later, because family is first to me, that's it"* (BP05).

Many participants reported that their managers were supportive and actively involved in facilitating time for life. A waged participant at Project C arranged their work schedule in consultation with their manager: "*My boss would be really good if you could only work so many days, he'd put you down for the days that you could work, like they are quite accommodating*" (CP05).

A manager at Project C explained that they are happy for all workers to take a flexible approach to their work schedule, as long as the work is done. In this participant's view, granting additional flexibility to workers has been mutually beneficial: *"I've said to everyone, 'it's not just those three coming back from maternity leave or who are part-time or whatever. I don't care what hours you work, or what days you do. If you get your job done I honestly don't care'… I haven't had to say 'no' to a single person's request for any sort of flexibility, any requests to work from home, as long as you get your stuff done. To be fair, I think it actually is working out for me, 'cause I haven't really had to call anyone out on it as well. I don't have to ring anyone and be, like, 'Where's this list of stuff?' People, I think in return, do what they promised. They see the mutual benefit*" (CP09).

Some workers noted that a general sense of flexibility can also stem from managers setting an example with their own behaviours: "*I think the biggest thing for me is the fact that people more senior to me get up at 4:00pm in the afternoon and say, 'Oh I'm picking my kids up from school today, got to go' and it's completely normalised, it's not hush. So when people use the flexibility that we have, it's nice to see the senior people doing it as well*" (CP02).

A manager at Project E explained that they consciously try to model flexible working practices: *"I do try and lead by example in that regard, so I'm out of here at 4:30 every day, and then there's some days that I have to come in a bit late, because I have to do drop-off*" (EP12).

A participant at Project B also noted that having a good relationship with their co-workers also helped with flexibility: *"With our crew, we're a pretty tight-knit bunch of boys… if anyone's into trouble or if they need to go for family reasons or anything, we cover them. It's pretty flexible within our compan*y" (BP43).

Working from home

Across all five Pilot Projects, participants explained that they or other workers are able to occasionally work from home:

- *"We're pretty flexible with working from home… that's been a really good, positive change, and I don't think it's really affected productivity"* (AP11).
- *"They're pretty okay with me only being here three days a week and then working from home too. All of that helps wellbeing"* (BP22).
- *"For me, I can't really. If I was to work from home, I wouldn't really be working... For other roles, I do know some people do work from home"* (CP33).
- *"I do work a couple of days from home… as long as the work is getting done, the flexibility is there"* (DP37).
- *"If I need to work from home, I can… A lot of people have a set day they might work from home... And it's all supported. I never have any pushback from it at all"* (EP08).

However, it was also noted that the practical ability to work from home is also impacted by workers' roles:

- *"We're site-based, so to do work from home is really, really difficult"* (BP09).
- *"You can only be so flexible when you work on a site that is there and is a physical thing that you have to be here for"* (CP24).
- *"… sitting at home on a computer from a safety perspective is not the same as being on site... It's still probably one of the few roles where, no, I really have to be on site"* (EP02).

Formal initiatives

Some projects implemented formal flexibility initiatives. For example, Project C utilised the "Flee by Three" initiative, in which workers were able to finish by 3pm once a week: "*From an office perspective there's plenty. From a site perspective it's limited… but what we try to do is an afternoon where we flee by 3:00pm*" (CP15).

In addition to the Flee by Three initiative, Project C also provided workers with three wellbeing days a year: "*We've got a "Flee by Three" roster, so one day a week you can leave by 3:00 which is, it's an additional bonus. We get three wellbeing days a year, which is great, so it's a day you can take just to do whatever you want"* (CP14).

A similar initiative supporting workers to finish early on one day per week was implemented at Project B. Participants explained that they had a "wellbeing board" which hung in the project site office and showed when people were taking some time for themselves. This board helped to promote the use of the flexible working options and communicated when team members would be unavailable on certain days or at certain times: "*We basically said that one day a week, you can either come in a few hours late in the morning or leave a few hours early. Probably, just an average of three hours less during the week, and we're just trying to work with the team so that we spread out the days and people don't all take off the*

same time. We've got a whiteboard going where you say, 'Okay, I'm coming in late Wednesday morning,' and then someone else says, 'I'm going to leave early on Thursday afternoon'" (BP21).

Project B had also instigated an initiative whereby no critical works were scheduled after 3pm on a Friday so that workers could leave early: "*What we're trialling at the moment is every Friday we do, past three o'clock there's no critical works. Actually, one of us or two of us will leave early on Friday as well as long as one of us will stay back just to cover. So that's another flexible day we have"*. (BP36)

Participants at Project E described seeing positive time for life outcomes as a direct result of conducting a formal flexibility workshop:

> *"They did a flexibility workshop a few weeks ago... I noticed the results on site. I know that today if I want to leave earlier, I can do it… They ask every single one of us, 'how do you want your work to be arranged or more flexible?'... It's something I actually saw and we try to practise this as much as we can on site"* (EP06).

Some participants at Project E mentioned 'My Time' which is an initiative implemented by the head contractor that encourages workers to be more flexible, such as leaving early one day a week. One participant noted that the effectiveness of My Time depends on a person's role: "*Some people have implemented their My Time quite well. It's quite dependent on your role in the project and how much your workload really requests from you. So like some people do work from home a couple of days a week, some people come in late, some people go early, and I think some of the roles support that quite easily and they've all had great success with doing My Time. There are other roles that I think it doesn't work*" (EP07).

3.3.1.4 Summary of time for life themes

Table 3.5 summarises the themes which have been described in this section of the report.

Table 3.5: Summary of themes relating to time for life

	Project A	Project B	Project C	Project D	Project E
Work schedule	• 10 working days per fortnight • Saturdays work undertaken every second week with a Monday RDO • Most workers worked 10-11 a day with rare instances of overtime work beyond 11.5 hours • Some occupations and night shift	• Targeted a 5-day working week, 11 hour days, no weekend work (excepting specific tasks e.g. crane erection) • Reported work hours for majority of the workers exceeded the work hour limits in the early stages of the project. This was changed to ensure hours were maintained below the Culture Standard threshold.	• 5-day working week, no weekend work • No more than 11 hours per day • RDO every fortnight	• Targeted 10-11 hour workdays Mon-Thu and 7.5 hours on Friday • RDOs were every second Monday • Early occupation involved six consecutive workdays, deviating from Culture Standard • Blue collar subcontractor rostered for no weekend work, and cap of 55 hours initially • White collar project staff had no weekend work, and a cap of 50 hours initially • Five wellbeing RDOs in a year for white collar project staff	• 5-day working week • 11-hour shifts during the day • Optional Saturday work and/or 10 days of night work per month
Work schedule changes		• Work hours reduced in later rounds of data collection recorded, meeting the project's initial targets		• Changes on roster arrangement of occupations in later stages of the project	
Workers' preferences	• Most workers preferred the 5-day week citing the benefits of improved	• Most workers preferred the 5-day week citing the benefits	• Most workers preferred the 5-day week citing the benefits	• Most workers preferred the 5-day week citing the benefits of improved work-	• Most workers preferred the 5-day week citing the

	Project A	Project B	Project C	Project D	Project E
	work-life balance, reduced fatigue, and increased family time • Some waged workers would prefer more hours than the Culture Standard allows	of improved work-life balance, reduced fatigue, and increased family time • Some waged workers would prefer more hours than the Culture Standard allows • In early interviews, some workers preferred working six shorter days than five long days • After work hours at the project were limited to below 55 hours a week, most interview participants no longer preferred a 6-day week over a 5-day one	of improved work-life balance, reduced fatigue, and increased family time • Some waged workers would prefer more hours than the Culture Standard allows	life balance, reduced fatigue, and increased family time • Some waged workers would prefer more hours than the Culture Standard allows • Many workers expressed dislike for long hours, nightshifts and weekend work during early occupation – later "mini occupations" were preferred by most interview participants.	benefits of improved work-life balance, reduced fatigue, and increased family time • Some waged workers would prefer more hours than the Culture Standard allows • Preferred not to work split shifts (e.g. noon-midnight)
Participants' experiences of flexible working options	• General and informal support for flexible work options	• General and informal support for flexible work options • "Wellbeing board" in office to nominate a day to come in late or leave early • No critical works after 3pm	• General and informal support for flexible work options • Flee by Three (leave early one day a week)	• General and informal support for flexible work options	• General and informal support for flexible work options • Flexibility workshops • The "My Time" initiative

3.3.2 Health and wellbeing

This section is arranged under the following areas:

- experience of health and wellbeing initiatives, and
- wellbeing culture

The end of the section includes a table summarising these areas.

3.3.2.1 Experience of health and wellbeing initiatives

Several different initiatives were implemented at the five Pilot Projects to support workers' health and wellbeing. Project A provided exercise facilities at the site which were well-received by participants: *"I've never seen [a basketball court] before, so that's great when you go out and just take your mind off things for a bit. We've only had it for probably a month now but I definitely use it around lunchtime and maybe after work. I think the table tennis table gets more use. There's one inside in one of the lunch rooms there, so you can always hear a table tennis ball going back and forth"* (AP11).

Participants at Project A and C spoke positively about an allowance provided by the project for wellbeing activities such as gym memberships, massages and personal training:

- *"We get an allowance of up to $1,000 towards our wellbeing, so mine this time round, it's around personal training or gym memberships. This one is around this wellness centre where I can go and do flotation tanks, I can do meditation, it's just around letting the mind stop and letting the body recover"* (CP19).
- *"I do group fitness. I've been there for a good couple of years now… and [head contractor's name] actually paid half your membership because they promote health and fitness"* (AP02).

Participants at Project A commented positively on the focus on physical safety and mental wellbeing during prestart/toolbox talks and strict adherence to fatigue policies. "*We do a lot of toolbox talks in the morning…we just had an occupation, so [talking] about being sleep deprived and taking care and taking a rest and being able to speak up if there's issues with that. If you're not getting enough sleep and stuff doing shift work. They definitely do care about your health and wellbeing I would say*" (AP24).

As discussed in the time for life section, Project B's "wellbeing board" promoted wellbeing by encouraging workers to nominate a day to come in late or leave early. *"We've put up a new wellbeing board for everyone, trying to get people to nominate either one morning or one afternoon every week that they either come in late or leave early to go and do something that's for their wellbeing. We've specifically made it visible so that everyone can support it, and if people say that they're going to do something on a certain day, we support that and try to make that happen"* (BP02).

As well as providing a wellbeing allowance, Project C also provided head contractor staff with the opportunity to leave early one day a week. One participant believed that these health and wellbeing initiatives contributed to a positive culture in which team members were happy: "*We all get along really well and I think all the other things, like we can 'Flee by Three contributes to the fact that we're all happy to be here"* (CP02).

Additionally, participants at Project C indicated they have access to an employee assistance program available for workers who need psychological support: "*We also have an employee assistance program*

support as well. So, if you're struggling with mental health, you have a free hotline to call and they match you with someone based on similar interests" (CP31).

Projects C and D also scheduled regular wellbeing days. A participant at Project D spoke positively about how their manager encouraged them to use the wellbeing days: "*[My manager] is a real strong advocate for the wellbeing days and making sure you use them wisely and appropriately. The last one I had my kids with me… We actually went out to the city and had a nice day*" (DP30).

Project D offered free health scans and consultations to its workers which were spoken about positively in interviews: *"[Project D] engaged a consultant that comes out every week for eight weeks. He does an assessment on your body and your physicality and all those types of things and we get a weekly update on strategies to help improve something in your life, whether that be weight reduction, reduce alcohol intake or whatever it is, so [it's] really good*" (DP15).

Project D also ran some R U OK day promotions. However, when asked if there had been any initiatives in relation to mental health, one participant suggested more could be done in relation to protecting workers' mental health and wellbeing: "*They acknowledged R U OK Day and like had people come and talk and that sort of thing but it's, I don't feel like it's been a huge area of focus*" (DP40).

Participants at all Pilot Projects indicated they are provided with regular 'wellbeing' gatherings, such as barbeques, shared meals and group activities held to promote wellbeing at work: "*They've got all these little sessions that they do, like events or barbecues and the morning teas and the team bonding sessions. We went to bowling one time"* (EP45).

Participants at the Pilot Projects also observed that the frequency of wellbeing gatherings was higher than they had experienced at previous projects, which they appreciated:

- *"There's probably a few more barbecues and those kind of things. Those come together on a Friday. Those cultural things they've put in place that are probably more prevalent than previous projects"* (DP38).
- *"We've had a fair amount of… site barbeques and all that sort of stuff, it always keeps that morale and culture that bit higher because they don't have to do that, there's nothing written anywhere like you need to supply four barbeques per year or something. It's stuff they do off their own back"* (CP23).

Projects A, B and E provided access to mental health advisors and first aiders and promoted the availability of this support to workers: "*We have mental health advisors on our project as well. They're up on our main board in the main compound their names, their phone numbers, and they're also very accessible through the office as well. All over the site there's things about mental health, and there's always help here, and also give a shout if you're feeling you're not comfortable about something, we can speak up about anything. There's always everyone here that we can speak to*" (AP11).

Participants indicated that they were aware of the mental health support available: "*There's some support for mental health first aiders or phone numbers you can call. I haven't utilised any myself, but they make you aware that they are available if you need them*" (BP21).

One participant at Project A explained that, even though they weren't taking part in any initiatives themselves, the consistent messaging about wellbeing ensured that they were aware that support was available should it ever be needed: "*They have a lot more assistance programs. I haven't used them personally, but I know that they're available and they communicate that a lot. We have like mental health*

champions and stuff like that on the alliance and on the project as well, so if I ever wanted to reach out, I know there's plenty of resources available" (AP11).

Project E also used an employee engagement website to identify areas for improvement regarding wellbeing: "…*there is a tool, you are maybe familiar with Culture Amp. It's a website culture questionnaire sort of platform… that can track trends and provide output and recommendations for targeted areas of a development… The AI that's built into that package will say where the areas of development need to be"* (EP01).

3.3.2.2 Wellbeing culture

Focus on health and wellbeing

Participants at all five Pilot Projects described their health and wellbeing as being valued and well-supported. It was widely recognised that the support for health and wellbeing at the Pilot Projects went beyond the industry norm, with many participants comparing their current work culture favourably to previous projects where the Culture Standard had not been implemented:

- *"There hasn't been any mental health conversations at all in my previous jobs, but this has been the one that's different for me"* (AP22).
- *"[Project B name] have things in place to deal with the mental side of stuff… [if you] need a chat, there's somebody here. Other sites have it but it's not as accessible. Depending on which sites you're on, it's push, push, push. Mental health gets swept a bit. [Project B name] takes it seriously"* (BP05).
- *"[Head contractor's name] is a lot better than my previous organisation. They have a lot more focus on the health and wellbeing. Like the Flee at Three, the wellbeing allowance, wellness days as well"* (CP31).
- *"It's better than a lot of other projects that I've been on. They do worry about your health and your mental health mainly... and they can tell when I'm in a mood. They're like, 'Are you all right? Do you need to talk about it?'"* (DP31).
- *"This is certainly the most focused project towards health and wellbeing I've been on, and it's actually front of mind that they actually communicate that to the whole team, there's a lot of conversations around that, lots of toolboxes around that. I think you just feel like the support is there"* (EP07).

Leadership

Participants considered leadership to be a critical factor in shaping the wellbeing culture at each Pilot Project. Participants generally reported that health and wellbeing were well-supported by the project leaders: *"I do still find that health and well-being is important to the project. It seems to be well supported from the top… from project manager, from the Alliance leadership team"* (AP08).

A participant at Project C had a similar view of their project's leadership: "*We've got a good project manager, he's fairly flexible… so that's good. I don't feel that there's any pressure; you don't really get pressure from upper management*" (CP14).

The approachability of managers was cited by several participants as a key factor in supporting health and wellbeing at work: "*I think my Project Manager is very conscious of supporting wellbeing. He's really approachable. I think that I had an issue or anything, I could go to him with it, and he'd help me. I think that's probably the main thing*" (CP02).

A participant at Project A described how their manager was a good listener and was understanding when they needed a wellbeing break from work: "*Here you're able to have a chat to your own manager and they'll be more understanding; immediate managers… We're able to talk, bring our own point. Sometimes you're not able to have a chat to your manager, you're worried how it might come across... but they would totally understand where I come from. There is a discussion if I need a bit of time off or I'll be like, maybe I just need to take a break. It's become quite too much right now. Is it okay? And that part of it is understood. That's the thing*" (AP22).

At Project B, a participant described their managers' communication skills and described how they 'check in' on the wellbeing of workers: "*We've got a management here that, they're good communicators. So, basically, if they see that you're struggling at any time with anything, they'll pull you aside and say 'How you going? What's up?'. So, they have that mentality which is really good and that's why I like working with the crew I'm with at the moment*" (BP08).

Some workers described how they were comfortable enough with their managers to discuss non-work-related issues that were negatively affecting their mental wellbeing. For example, a participant described how their manager was very supportive and made it clear that the participant should prioritise their wellbeing over work tasks: *"I can speak to my one up manager and just have a chat, even if it's about shit at home or shit with mates. I can have a chat, blurt my stuff out, clear my mind, go again, refresh, regroup, go again. He says to me multiple times, if I need to tap out, tap out… being functioning normal people is more important than a building site"* (BP13).

A participant at Project D also explained that project leaders demonstrate consistent concern about wellbeing, particularly as it relates to managing workload: "*Just the people above me, the general care about the hours, the efforts and consistently doing it as well. Not just a one-off sort of thing. I guess making sure you're not overworking"* (DP11).

Positive impacts of a wellbeing culture

At Project E, a participant noted a reciprocal relationship between working hard and leaders' support for workers' health and wellbeing: "*They're very supportive. I've had really good project managers, which it makes the world of difference. And I think it's also what you put in, you get out. So I've always tried to make sure I go above and beyond what's expected. And I feel like they recognise that. And it's reciprocal, really*" (EP15).

This relationship was also noted by a participant at Project B who described his team as "family": "*The culture on this project, with the people that are here that I've worked with for the last 10 years, is a family… It was more the care factor. You really wanted to do well, because it felt like if you didn't do well, you were letting down a brother, or like… an older brother, father kind of figure… So we're all about helping out each other"* (BP50).

Participants noted that prioritisation of health and wellbeing contributes to increased retention of workers. One participant, aged in his 60s, indicated they felt confident that they could work for another five years due to the wellbeing policies implemented at Project A: "*I'm 63 and I can stay here for another five years if I wanted to. They make it so that I am able to do that"* (AP10).

A participant at Project E observed that, although their project had experienced some turnover, this was not attributable to poor health or wellbeing: "… *the people, for everything I can see, seem to be a lot happier, the culture's pretty good. We've had a little bit of turnover, but that's really senior people going off and feeling supported enough to follow their dreams"* (EP31).

A participant at Project B felt that the increased focus on wellbeing would attract younger workers to the industry: *"I think it's definitely a great thing for the building industry… it helps to attract younger people into the industry as well… sometimes the hours and things that steer people away… if we can come closer to what other industries work… and promote the working from home or whatever else for wellbeing, I think it just promotes better, and greater attraction, and definitely better for the industry, moving forwar*d" (BP03).

3.3.2.3 Summary of health and wellbeing themes

Table 3.6 summarises the themes which have been described in this section of the report.

Table 3.6: Summary of themes relating to health and wellbeing

	Project A	Project B	Project C	Project D	Project E
Experience of health and wellbeing initiatives	• Site facilities support exercise • Emphasis of physical safety and mental wellbeing in pre-start and toolbox meetings • Mental health first aiders • Wellbeing gatherings • Allowance to support workers' wellbeing expenses	• Mental health advisors • Wellbeing catch-ups and gatherings • Wellbeing gatherings	• Wellbeing days • Allowance to support workers' wellbeing expenses • Wellbeing gatherings • Employee assistance program	• Fortnightly RDO's/wellbeing days • R U OK day promotions and conversations • Free health scans and consultations • Wellbeing gatherings	• Mental health first aiders • Wellbeing gatherings
Wellbeing culture	• Participants felt their health and wellbeing valued and supported • The support for health and wellbeing at the Pilot Projects was perceived to be greater than the industry norm • Leadership behaviour was seen as contributing to the positive culture for health and wellbeing • Improved health and wellbeing can help to improve attraction and help retention of workers				

3.3.3 Gender diversity and inclusion

This section is arranged under the following areas:

- gender diversity in construction roles
- gender inclusion and support, and
- inappropriate language and behaviour still occurs.

The end of the section includes a table summarising these areas.

3.3.3.1 Gender diversity in construction roles

Interview participants commented on the higher-than-normal representation of women in site-based roles at the Pilot Projects: "*I think there's just general level of inclusiveness. We have a lot of female engineers here and even the onsite staff, there's good contingent of females there… I know there just is a good inclusion and participation level of women in this project, which has been good"* (AP11, man in professional role).

Another worker at Project C observed the representation of women to be above average at the project: *"It seems like there's a lot more women on the project… probably has a lot more than a typical builder. So yes, there's definitely more"* (CP29, man in a supervisory role for a subcontractor).

A woman at Project A indicated that the presence of other women in the workplace was a source of support to her in her operational site-based job role: "*Just having female engineers in this team for me has made a phenomenal difference… It's just nice to feel supported by your fellow females. That's definitely a big difference for me… you know, it's like a social thing as well. It's just nice to have the girls there"* (AP15, woman in professional role).

Participants at all five Pilot Projects observed that there were very few women in trades roles, which was indicative of an industry-wide low levels of gender diversity in the trade-based workforce: "*We typically don't have many females in our trades… But there's definitely discussions around it and how to improve it… at the end of the day we can request for as many females as possible, but the reality is there's just not many out there in our service trades right now*" (CP29).

Given the shortage of women in trades, some projects found it challenging to reach the diversity performance levels set out in the Culture Standard. For example, a participant commented: "*Culture in Construction have a target that we want a certain percentage… And that's one of the targets. So in that sense that is a good thing. But it's hard. It's like you're asking someone when the whole industry is 20% and then you force it to be 40%... I think we need to increase the talent pool first before having that target for the project*" (DP18, woman in professional role).

A manager at Project C observed that promoting construction careers in schools can help in the recruitment of women into the sector: "*As the builder, we've got women in our office but the women in trades is probably the side of thing that might need a bit of a push… we can try and implement things at our level to bring women across but it starts from school, so the schools probably need to assist in that to bring the construction industry forward*" (CP01, man in managerial role).

Project D ran a TAFE/school outreach program with the aim of helping to attract more women into the industry: "*At this project we've done a sponsorship with Chisholm to promote female graduates. I also*

know they will be sponsoring high school as well, so embedding the engineering culture for the younger generation so that more females can go into the industry" (DP12, woman in professional role).

At Project B, a specifically employed Female Participation Advisor was tasked with collaborating with subcontractors to better understand the barriers to attracting more women into their organisations: *"[the Female Participation Advisor] has done two subcontractor forums for our site... we're trying to figure out what their implications are. What's stopping them getting women in their trades? and stuff like that*" (BP09, woman in professional role).

Although women at the Pilot Projects were generally very supportive of the gender diversity initiatives that were being implemented, some felt concerned about perceptions that they were favourably treated because of their gender:

> *"I do get more opportunities because I'm female. Like opportunities to network, involvement in more mentor programs, invites to go to industry events and all sorts of things that expand your career generally. You know that you're an in-demand commodity. We have control. They don't really care how competent you are… it is a hard thing when you change jobs and you wonder if they hired me because I'm female or because I'm good at my job. So you got to prove yourself once you're there. But like to get a job as a female in construction is not hard. Which I have issues with itself because it's a really complex thing… I am aware that I am a positive commodity for a company to have, but I also really want be good at it"* (CP24, woman in professional role).

One woman described feeling conflicted that she decided to stop participating in activities specifically implemented to support women: "*I want to be treated equally. I don't want to be pulling away and going on luncheons or going to meetings just because I'm a female. I work just as much as the men. So why are they not getting, oh, well, what about men in construction? They're doing a great job too, but for us it felt like we were getting special treatment. Look, I didn't want keep doing that. I didn't want to keep being segregated. I'm in a team, so it doesn't matter if I'm male, female or whatever you want to identify yourself as. I work just as much as the men*" (AP02).

While the Culture Standard has been effective in addressing issues relating to gender diversity, there was also a belief that change requires higher level executive leadership support within organisations in the sector, including smaller organisations in the supply network: "*It's more the people that in the higher positions of these tier three, tier four companies that need to make this initiative and really look out for the changes that really is required in the industry. Because it's always going to trickle from the top down. It's never going to be from the bottom up. We can have marches, we can have strikes, but if it's not going to move the principals and the directors and the CEOs then it's really not going to really do much*" (CP09).

3.3.3.2 Gender inclusion and support

All Pilot Projects indicated a commitment to creating inclusive workplaces for women. Interview participants shared their experiences of the initiatives they were aware of at each project.

Project A established clear policies regarding inappropriate behaviour in worker contracts and inductions, which resulted in some women feeling more confident in reporting experiences of inappropriate behaviour: "*I know that there's a zero tolerance for sexual harassment and bullying. That's made clear in your contract but also in the site inductions. So from a policy point of view there are things in place and I feel very comfortable that if somebody had done something that I could report that and something would be done about it*" (AP08, woman in professional role).

A tradeswoman at Project B felt that she wasn't sexualised at work and would report any inappropriate behaviour as she was confident that it would be dealt with appropriately which helped her to feel safe at

work: "*I don't get sexualised… and if they did, I'd probably pull them up. I'd be like, 'You can't talk to me like that' first warning. Second time they do it, straight to (the organisation) … They'd be like 'See you later.'… So that's why I like being here, I feel safe*" (BP49, woman in trade role).

A 'women in construction' steering group was established at Project A, which resulted in some women feeling supported, particularly those in site-based roles: "*People have definitely extended me opportunities to be part of the women in construction steering group and things like that. So I feel supported to make a good change and we have good representation here… it's just basically aimed at addressing any residual problems that exist on site. Mainly for our women in labouring jobs and things like that, so trying to help them feel supported as well*" (AP03, early career woman in professional role).

Toolbox talks at Project A also addressed the importance of maintaining a welcoming working environment for women: "*Our union delegate does a little toolbox meeting. We had one where when I joined the project, and there's one other labourer lady here… he got all the labourers and everyone in to welcome myself and her, and how good it is to have a couple of women in here, and that we need to look out for us, whether there's truck drivers coming in with derogatory and smart arse comments, or harassment, anything, to always to pull it up*" (AP02, woman, labourer).

Project B appointed a Female Participation Advisor to address issues experienced by women at the project and advocate for increased diversity in the industry. Project B also created a WhatsApp group run by the Female Participation Advisor. The WhatsApp group allowed the women working at the project to connect with and support each other. It was also a mechanism through which the Female Participation Advisor was able to share information with them.

Project C adopted the use of gender-neutral language where possible: "*We have just changed all of our [role names from] foremen to site supervisors*" (CP01, man in managerial role).

Project C also provided flexible part-time options for women returning from maternity leave: "*We've got three different female site members who work three days a week or who are returning from maternity leave, and work one of those three days from home*" (CP09, woman in professional role).

Despite the positive impacts of the Culture Standard on women's participation in construction, one participant at Project C still felt that the industry's culture remains challenging for women with young children: "*It's still very difficult for mothers to work in site roles I think. It's doable, but at what cost? [The Culture Standard] definitely helps, but I still think it's a pretty cut-throat, pretty consuming industry. I don't think a husband and a wife in my situation, could raise three kids, both of them in construction doing the same role for instance*" (CP15).

Project C included standards of behaviour related to respect at work as a requirement in subcontract agreements, ensuring that all workers at the project were held to the same standard of respectful behaviour in the workplace: "*We've built it into our sub-contractors' contracts to say we must adhere to this so, so should you*" (CP19, woman in a professional role).

Of the five Pilot Projects, Project C was the only one to report no instances of harassment against women until the final round of interviews, in which one woman participant described an incident that was swiftly dealt with. A participant at this project described how the head contractor delivering Project C had established a reputation for zero-tolerance for harassment:

> *"It's an interesting point because they're the same subbies. Like different builder working with the same subbies. But I think that they [subcontracted workers] all are aware of where they're working here. I think that [Project C] comes with a reputation of what it will allow and what it won't. And I think they cracked down quite hard at the beginning. And I really noticed it… [the project]*

> *had a zero-tolerance policy for any sort of graffiti, which was everywhere on any construction site I've ever been on. And it came to [Project C], it was gone and I never saw it… I noticed a real difference in that kind of thing here."* (CP24, woman in managerial position).

Flexible maternity leave options were also provided at Project D: "*[the project] has got a very good maternity leave program, I think 18 weeks you can get full pay. There's things in place, I think it's called 'Keeping in Touch' day… they are flexible in supporting you to start off on a part-time basis, like you don't have to come back full-time*" (DP12, woman in professional role).

Project E held a fortnightly women's lunch for both office and site-based workers, in addition to a women's mentoring program implemented by the head contractor: *"I know that [head contractor organisation] have quite a few things for women in construction, lots of mentoring programs, events that they go to. And then in terms of just like project-specific, we have a girl's lunch every fortnight, so that's a nice way for us all to be able to catch up. That's all the office people on the site, labourers as well. So that's good*" (EP07, woman in professional role).

The fortnightly women's lunches at Project E were identified as being helpful to women, who can use this forum to raise concerns about unacceptable language and/or uncomfortable interactions they may experience, which can then be dealt with in an appropriate manner:

> *"… the men sometimes say inappropriate things. We've set up this lunch thing every fortnight. And the girls feel quite comfortable talking to me about it. And then I'll go and deal with it if it's an issue... We've managed to nip most of it in the bud before it escalated. I think there was one incident and it happened while I was away… I think had I been there and spoken to this girl, then we probably could have avoided the situation. We are looking at formalising that now. Even when it does happen, it's being dealt with. It's not put under the rug, it's not continual. It's dealt with straight away*" (EP08, woman in administrative role).

At all of the Pilot Projects, women described the site amenities as being suitable for a gender-diverse workforce with additional accessible toilets and private spaces available. Specifically, some projects provided a mothers' room, women's change rooms, sanitary bins and free sanitary products. The Pilot Projects also provided personal protective equipment (PPE) in women's sizing. For example, Project A ensured that the nightshift PPE was provided in women's sizes: "*I think they made a good effort in that space… they noticed that all the nightshift, the whites and even the orange were just a sort of 'one size fits all' ready-made design for men, so they made an effort to go their supplier and get specific items tailored to women*" (AP11).

3.3.3.3 Inappropriate language and behaviour still occurs

While the majority of women who participated in the interviews indicated that they mostly experienced a supportive and respectful work environment, some instances of inappropriate language and behaviour by men towards women were described by women in both site-based and professional roles. For example:

- *"…one of the guys on-site said, 'you look really good in those pants today. They make you look really good'… The same guy, he used to always ask me questions about me and my partner. How is our relationship? Do you think it's going to last between us?... I said, 'that's none of your business'… I say it to him in a way that I'm not upset about it. I just say it nicely and then we just laugh it off and it's forgotten about... I don't let it affect me too much. It might affect other people more. I feel I'm kind of tough. [But] that shouldn't happen in the first place"* (BP17, woman in traffic control role).

- *"…young girls… they probably do feel vulnerable in some sense and you have to sort of a thick skin sometimes. Because you do get the occasional rude people. I mean maybe the tandem driver*

sometimes, the truckies can be a bit rude sometimes but you've just got to learn." (DP25, woman in traffic control role).

One woman in a site-based role described her experience of being harassed by a male co-worker: "*He was very upfront. I was in the ladies and he paged me over the two way to see where I was. When I came out of the ladies, he was standing right there at the doorway and wanted to sniff my hands...really creeped me out. That's probably the only incident that has really got to me, in being a female in this industry*" (AP07). This woman described how, after raising her concerns, the perpetrator of this harassment was asked to leave the project. She chose not to make a formal complaint and was satisfied with the way the issue was resolved.

Women in professional roles were also observed to be exposed to aggressive and challenging behaviour in the workplace: *"... it can be a tough industry for women. My last site engineer was a woman and you do have to have some thick skin when it comes to money and programming stuff. A lot of subcontractors will try and step on your toes. They'll put in variations and all this sort of stuff and hit you up for money. You have to have stamp your authority sometimes and say, 'No, pull your head in.' Which can be tough for women, I suppose, to have those conversations with big, strong, tough construction men"* (DP06, man in supervisory role).

Women described initially not knowing how to respond to instances of inappropriate language or behaviour when they first joined the industry: *"Even when I first started I was very timid and I just didn't know how the kind of approach situations*" (BP16). One woman in an apprenticeship role decided not to report the inappropriate language and behaviour she had experienced as she did not want the 'drama'. Her way of coping had been to stay away from the perpetrators: "*Us girls know about it but I haven't brought it up with anyone yet because I don't need that drama in my life. I'll just stay away from those people*" (BP30, woman in apprentice role).

Another woman in a site-based role chose not report instances of inappropriate behaviour because she did not want to be labelled as a "troublemaker". Furthermore, this woman felt that, if she lodged a formal complaint, it would jeopardise her employment: "*There's been instances where I don't necessarily feel like HR are well-equipped to deal with complaints, and I feel, honestly and it's the same in every company, it's not a [head contractor] thing. I feel like HR in general companies are there to protect management, not really look after the staff. So I'm never comfortable going to HR with complaints because I feel like they're going to go 'she's a troublemaker, get rid of her, we won't keep her for another project, she's a troublemaker'. So, you put a target on your back if you complain, that's the way it feels everywhere you go*" (DP40).

A woman in a professional role told her team about being harassed by a man in a site-based role. While she felt supported by her team, she was concerned about the lack of proof and credibility of her account: "*I didn't have any proof or anything*" (BP42).

Women reported widespread use of sexual humour and comments which, although not necessarily targeted at them, are inappropriate and make them feel uncomfortable: "*Sometimes like in passing. Usually not directed at me but you hear the boys talking, saying stuff and you just kind of like if that's the conversation they want to have then that's the conversation they want to have, keep moving kind of thing*" (BP30, woman in a site-based role).

Some women also indicated they think that sexualised banter and comments are a 'normal' part of construction workplaces, and that they join in with such banter in order to build relationships and fit in at work: *"I have really great banter with the guys on site and that's how I've built my relationship with them, like it's a respect thing but it's also a banter thing. Some other women might find the conversations I have*

with those guys very inappropriate but that's just who I am and how we've built our relationship. … There are some things that are so deep-rooted" (BP30, woman in a site-based role).

3.3.3.4 Summary of gender diversity and inclusion themes

Table 3.7 summarises the themes which have been described in this section of the report.

Table 3.7: Summary of themes relating to gender diversity and inclusion

	Project A	Project B	Project C	Project D	Project E
Gender diversity initiatives	• No formal initiatives identified by participants	• Female Participation Advisor tasked with collaborating with subcontractors to bring more women into trade roles	• No formal initiatives identified by participants	• School outreach program to increase female representation	• No formal initiatives identified by participants
Gender inclusion and support initiatives	• Policies clearly stated in contracts and inductions • Steering group meetings and toolbox talks • Night clothing tailored to women • Inclusive site amenities	• Appointed specialised staff member focused on promoting inclusion and diversity • Subcontractor forums • Inclusive site amenities • WhatsApp group for women	• Respect at work behaviour standards built into subcontractor agreements • Shift to adopt gender-neutral language in job role descriptions • Flexible employment options for women returning from maternity leave • Inclusive site amenities	• Flexible employment options for women returning from maternity leave • Inclusive site amenities	• Women workers' lunches and meetings • Inclusive site amenities
Inappropriate language, and behaviour still occurs	• Some women in site-based roles continue to experience inappropriate language and behaviour from men • Project C stands out as having the very few experiences of inappropriate language and behaviour • Some women feel confident to report unacceptable behaviour, while others do not. Perceptions of likely managerial response to reporting is a factor, i.e. will they be treated seriously and the issue dealt with appropriately, or be labelled a trouble-maker?				

3.3.4 Changing perceptions about the 5-day week

Experience of Pilot Project participants

As described in Part 2, where possible, data was collected from the same participants at the Pilot Projects in multiple waves of interviews. In total, 79 waged and 123 salaried people participated in interviews across the Pilot Projects. Of these, 18 waged (22.8%) and seven (5.7%) salaried workers indicated that they did not fully support the shift to a 5-day work schedule in their first interview. Reasons given included concerns about income (waged workers) and concerns that the 5-day week could not be sustained over the lifecycle of the project (salaried workers).

However, eight (44.4% of the 18 waged participants who did not initially support the 5-day week) indicated in subsequent interviews that that they had changed their minds and were supportive of the 5-day week.

The waged workers who changed their mind indicated that they appreciated the benefits associated with working a 5-day working week once they had experienced it. For example, in the third round of interviews, a waged worker, who previously did not support the 5-day week, commented: *"I definitely think that people should just get on board and actually go through it. Like me, I was always thinking I needed to work Saturday until this job, and now I won't work another Saturday unless I, like I said, I have to help out someone"* (BP24 – man, waged, early 40s with dependent children).

Another waged worker indicated that she initially wanted to work six days: *"I'd be definitely keen to work a Saturday, even to the 1:00. Yeah, absolutely, I would love to".* However, by the final round of interviews, when asked if she liked the 5-day working week, this same participant responded: *"I do, yeah. I like five days"* (AP02 – woman, early 40s with dependent children).

Five salaried participants (71.4% of the seven who did not initially fully support the 5-day week) also indicated that they had changed their minds about the revised work schedule in subsequent interviews.

The salaried workers who changed their minds indicated that the Pilot Projects had adhered to a 5-day work schedule throughout the project lifecycle, thereby proving this program could be sustained. For example, one salaried worker observed: *"… now that I've done the five days, I'll never go back to six days, ever. If it means I have to change project, then it means I won't go, I won't do weekends ever again… I know a lot of the other people on site are exactly the same… Even the site manager's like, 'No, can't do it again.' And I think he was probably one of the hardest ones to sway as well, at the very beginning, because he's done this for 30 years; it's just normal for him. And even he was a bit sceptical, but now, he's the same, he won't go back"* (BP09 – woman, early 40s).

This participant went on to explain that the 5-day week was likely to bring about positive change in the industry: *"The 5-day working week is just a Godsend to our industry, and I think if we make it standard, it's going to change a lot for the better"* (BP09).

Other salaried workers echoed this view. For example, a manager described interacting with subcontracted workers who left Pilot Project C in order to work a 6-day work week: *"The subbies who have left the structural trades, a lot of them actually all went up to a job on the corner, that's a 6-day project. [I] bump into them at the shops and they're all whinging. They're the people who whinged about doing a 5-day week at the start. So, if you want to talk about change, the people who came here and weren't happy about being on a 5-day work week, and then they worked here for six months and now they don't want to do anything different. They want to do five days only"* (CP08 – man in early 30s).

He continued: *"I thought people would obviously like it, but it went from people complaining to people, in some instances not wanting to leave. You talk to people, their next job's a 6-day work week or whatever, and they're like, 'How am I going back to working six days?' They were the people who were complaining when they got here six months earlier"* (CP08).

One of the reasons for the change in subcontracted workers' perceptions was believed to be the realisation (learned through experience) that the modified work schedule had minimal impact on their weekly earnings: *"…we keep the site open from 7:00am to 6:00pm at night and people, if they are driven by how much money they take home at the end of the week, there's hours available there to work between Monday and Friday, and they still don't have to come in Saturday"* (CP08).

It was a common view that people have to experience the 5-day week themselves in order to develop a realistic understanding of the costs and benefits associated with the change. For example, a managerial participant explained: *"I think everyone has got to just experience it, to be honest, to show that it works. That's probably the biggest thing from the subcontractor perspective is just people turn up, they're a little bit hesitant to change, and then all that starts to go away and those people actually start to live the initiatives and the positive impact that's having on their life"* (CP08).

Another participant observed: *"…things have changed, and for the better. You don't know any different [when working on a Saturday]. That's why you think that people are weak and need the 5-day work week because they're not born tough anymore. But you don't know any better, that's all you did, until you start experiencing the 5-day work week"* (BP09).

Despite this evidence that many people changed their opinions, some people (n=10, 12.7% of waged interviewees who had participated in more than one interview) remained opposed to the 5-day week throughout the duration of the Pilot Project data collection period. This was often due to specific family circumstances. For example, one waged worker at Project A explained that she would rather work on alternate weekends when her children are with her ex-partner. She indicated she liked being busy and wanted to earn additional money. *"…because I don't like being at home. I'd rather be at work. I'd rather be busy and working rather than, especially on the weekends that I don't have the kids and they are not there to distract me. Yeah, that affects me. [I prefer a 6-day week], financially and mentally"* (AP07 – early 40s, shares custody of children with ex-partner).

In the fourth round of interviews, this worker still held this preference: *"I prefer to work every Saturday".* In the fifth interview round she further commented that co-workers who have joined the Pilot Project would also prefer to work a 6-day week*: "So everyone that I've spoken to, and they're like, 'Why aren't we working this Saturday?' and I explain to them about the 50-hour week… And they're like, 'What is that bullshit?'"* (AP07).

A salaried worker also at Pilot Project A noted that many waged workers are on the project for too short a duration to experience the benefits associated with the 5-day schedule: *"… a lot of the guys that I'll induct, they're only here for a little time, probably 40% odd people that come through the induction may be here for two days a week, even two weeks... And then they've gone to another job…and/or on a Saturday go to another site… So they don't get exposure to get the benefits of the 5-day week"* (AP06).

A waged worker at Pilot Project A stated his intention to look for additional Saturday work in the second round of interviews: "*I'll probably find myself finding a Saturday here and there on another site and not doing this 5-day week".* When he was interviewed again in the fourth round of interviews, this worker's views had not changed: *"Suppose I've just had time to actually see how this is affecting me monetarily, so not having the option to work the extra Saturdays if you want is not something that I'm really all that keen on, to be honest"* (AP13 – 40s, married with dependent children).

When asked if they had been working other jobs on Saturdays, he responded: *"A couple of times, yeah… I think we're at the point now in our lives where you've only got so much time you can be working and making money… I think this is sort of taking away from that a little bit"* (AP13).

Another waged worker at Pilot Project A indicated a similar desire to make as much money as possible: *"Coming from what I was doing, the money's better here, but I'm happy to work more hours"* (AP01 – married, late 20s with dependent children).

In the fourth round of interviews, this worker indicated that that he would still like to have the option to work Saturdays and explained this in terms of the impacts of escalating costs of living: *"You'd still have it optional. If the work's there you can work. I would for sure… Yeah if the work's there I'll take it. Cost of living is ridiculous at the moment"* (AP01).

By the fifth round of interviews, this worker maintained his view, explaining that he wants to earn as much money as possible whilst he is fit and able to do so, especially as he has travelled for work: "*I would work as much as I could. While you're still fit enough to get work, I suppose do it… I think most people want to just be while they're working and make the most money they can, you know what I mean? You are not going to be working forever. You're coming down this way, so why not? Well, for me anyway, I'm traveling. So if I'm here to make money, I'll stay"* (AP01).

A waged worker at Pilot Project E stated that, while he would prefer to work a 5-day week, he believes people in other circumstances, e.g. younger people with dependent children, need to make as money as possible to cope with rising costs of living: *"I'm all right, but my partner works full-time. We don't owe much… that's only because of my age. I speak to a young fellow that I work with. He does not want to go home early. He relies on the overtime to get that extra dollar. He's trying to buy a house. He's 25 so got a young family. He's locked down to do that whereas I'm not. I could walk away from this tomorrow if I really wanted to"* (EP28 – 38 years old, partnered with no children).

Views of key decision-makers

In addition to Pilot Project participants, some KDM participants also shared their views on changing perceptions about the 5-day week. We have added their views to this section.

One of the participants in the Stage One KDM interviews (a state-based trade union leader) described how site-based construction workers who are paid a wage would need some time to adjust to working a 5-day week. This participant described how these workers would be initially sceptical based on the expectation that their wages would be reduced:

> *"Somebody said to me, 'You've got to understand, I live on a budget. Me working Saturday is the payment on the new car for my family. Everything's budgeted. $400 that I earn on Saturday is budgeted for that car.' We've sat down and explained "Listen, if you work it out, you're going to work a little bit longer hours during the week. It'll work our almost the same but you're going to have more leisure time with your family". And once you explain…they almost look at you like 'What's the trick? What's the game here?'"* (KDM10)

This union leader expressed the belief that once workers had experienced working a 5-day week, they would change their minds: "*People don't like change. You've got to drive it and you've got to show people and give them a little bit of a taste of it…You've got a person that's used to working every Saturday all of a sudden working a little bit longer and then having that Saturday with their family and doing things with their kids they normally wouldn't have done except once in a blue moon when they have a Saturday lockdown weekend. And they get a taste of it, and I think it just puts a whole new perspective on it*" (KDM10).

Another state-based union leader who represents members who have tried a 5-day week similarly explained: "*We weren't sure how our members would react, particularly some of the older members we thought might be against it. We were proven wrong there. The majority of them, once they worked on a job that was a 5-day week and they're at home on the weekend and there's no loss of money there, they were over the moon with it*" (KDM18).

3.3.5 Future of the Culture Standard

Pilot Project interview participants were asked about potential for future implementation of the Culture Standard across the broader industry, and several themes emerged:

- government and union support
- private clients and contractors
- project leadership, and
- cost and time pressure

3.3.5.1 Role of government and union support

In their role as the client of many construction projects, government agencies are perceived to play an integral role in implementing the Culture Standard more broadly across the construction industry. One way is mandating that programs are tendered on a 5-day work week:

- *"It's such a cost-driven industry with such tight margins. There needs to be something from the clients to help incentivise it or mandate it, because otherwise it's going to be very slow to pick up because well, why aren't we working six days, we'll finish the job that much quicker and save on overheads". (EP21, Utility Supervisor)*
- *"I think it will be pretty quick if it comes from the top. When I say it needs to come from the top, your whole construction program is based on the timelines that you are given or the times that you give them. So, we work on government jobs, with the government projects. If the government says "'You have to make your program so that there's no Saturday at work', so you can't work Saturday. So, if it is made into overall contracts that you can't work Saturdays, then it will change in no time" (AP18, Project Engineer).*

Some participants perceived that, if all government-funded projects are scheduled on a 5-day week, industry, take up of the Culture Standard is likely to be quick: "*I think all the government jobs it won't take long. A hundred per cent. ... And I think with the government being so interested and invested in this, I don't think it's going to take long*" (AP15, Site Engineer).

A site manager commented that the government and industry had to work in partnership to lead the implementation of the Culture Standard more broadly: "*Government, it should be from the top, that support from the top. It's communication between the industry with the government. If everyone helps each other to be honest, better lives, better Australia, better everythin*g" (CP06).

Another participant highlighted that support from both the government and unions was required to implement the Culture Standard more broadly: "*The buy-in from the unions and the government. I think that would be the major buy-ins because one kind of drives the othe*r" (AP04).

3.3.5.2 Private clients and contractors

Participants observed that some contractors are already tendering for projects on a 5-day week, often in response to government client requirements. However, they noted that private clients are less inclined to support a 5-day a week construction program due to an expectation that this will increase project duration: "*Over the last couple of years I've heard there's a few builders taking on 5-day responsibilities or they are tendering for 5-day working weeks to compete. I believe a lot of government work wants five days a week so, for them to be able to get the jobs they need, to change their programs. So [I'm] hoping that can continue happening. I know when you are talking about private clients, for them they don't really care much about that, they want the job done faster. I believe when it comes to government work it might be a good way to go but when it comes to private work, private clients, it's a hard field to change*" (CP20, Crane Operator).

Another participant similarly observed: *"It'll be getting private builders and clients on board with it. I know that a lot of government agencies like [government client name], they've embedded it into their tenders like an option to bid for 5-day working week. In New South Wales, the majority of their projects are 5-day working week. You're getting that backing from the top end and you get them pushed down, like start from the client, pushed down to the managing contractors. They'll be able to set the standard and example, but I think just the private sector would be a bit difficult"* (CP31).

Participants also observed that, for the Culture Standard to be adopted more widely across the industry, this needs to be client-driven: "*It shouldn't be left up to the contractors to decide because there's overall pressure for you to deliver in short amount of time because everyone wants things done quickly*" (AP18, Project Engineer). Without client intervention, participants believe that only the largest construction companies will engage with the Culture Standard: "*The tier ones can lead it, and they're more or less adopting it now*" (BP26).

Participants observed that many small to medium-sized construction companies have little or no knowledge of the Culture Standard: *"I think you'll find a lot more of the builders in the tier one, tier two space, that's the people who deliver to hospitals and schools, the bigger companies. I think they're more susceptible to implementing the change. It would be [tier 1 company name]. I think it's going to take everyone to get exposed to these projects at some point in time for the pendulum to really swing. We're talking about a pretty small portion of the subcontract market being exposed to it [the Culture Standard] at this point in time. I think it will take a while*" (CP08, Project Manager).

This is despite the fact that participants also acknowledged that industry-wide implementation of the Culture Standard would require all stakeholders within the supply chain to be engaged in the implementation process: "*They [tier 1 companies] recognise that there needs to be an industry change. It can't just be [tier 1 company name] because you're relying upon the supply chain*" (AP20).

3.3.5.3 Project leadership

At a project level, those in leadership roles were perceived to play a critical role in enabling the implementation of the Culture Standard. In particular, "old-school" management thinking was considered to be a potential barrier to wider adoption of the Culture Standard: "*Mostly I would say mindset of the managers who are running the project, it's got to be changed. The old-school managers prefer things to be done their way for a number of good reasons, but probably it will be harder for them to get onto that train of the Culture Standard and the 5-day week*" (EP48, Planner / Programmer).

Project management commitment and leadership was identified as being crucial to effective implementation: *"I really think it depends on the project manager driving it and the team. I think if you don't have the project manager on board, then it's really hard for the rest of the team to get on board.*

And I think those initial conversations where we did that time for life session really made sure that we were all on the same page. But we also had a great group of people. So if you had the same conditions, it [adoption of the Culture Standard] shouldn't take long. But if you had a Project Manager that isn't onboard, then it would be difficult" (EP15, Contract Administrator).

3.3.5.4 Cost and time pressure

Cost and times pressures were also identified as potential barriers to the industry-wide acceptance and implementation of the Culture Standard. One participant anticipated that delays in project delivery would be unacceptable to many stakeholders, including government agencies: *"Money talks. If you want to have a 5-day week, if you don't want someone to work on Saturday, how's the project going to look like if they're not going to be finished in that amount of years. Is the government going to be okay with that? Is that stakeholder going to be okay with it? Is the public okay with that? So, I don't know, tunnel, bridge and road will be delayed by one year just because the crew want to have Saturday off*" (EP48).

Other participants similarly perceived that cost and schedule considerations would act as a barrier to the adoption of the Culture Standard outside large government contracts*: "I'm sure with the government projects, yes, you will get across the line without a doubt. I'm talking about your schools, possibly hospitals and all that. But I don't think it would go with your commercial side of things. I think the client itself and the high demands of everything, I don't know, I'm just guessing, sort of what I think will happen and obviously the constraint of the program and timeframes"* (CP28).

Some participants suggested that more information is required for the industry to better understand the impact of the 5-day work schedule on labour productivity, project timeframes, and cost: "*In order for that to happen, there will probably be the research on it to prove that it's more productive, or same level of productiveness but much better wellbeing. And also I think the main driver, obviously, for lots of things, is money*" (CP33).

This same participant went on to explain that, if it is clear that the 5-day week has no negative impact on project delivery then others in the industry would potentially be more willing to implement the Culture Standard: "*Say the NSW Government is doing a school and would only take tenders from builders that are doing a 5-day work week and can prove that under a 5-day work week, you can meet the program, and cost targets and budgets. I feel like if we do a few more jobs and it goes really well, and a bit more research it will definitely help, just to prove to the industry that it works and it really doesn't negatively impact project delivery*" (CP33).

3.4 Analysis of costs and benefits associated with implementing the Culture Standard

This section of the report outlines key findings from the cost benefit analysis undertaken by Frontier Economics. Findings are reported under the topics of:

- project cost and time
- quality of life
- turnover and absenteeism
- worker remuneration
- health and safety impacts

- women's representation, and
- travel cost savings

3.4.1 Project cost and time

The impact of the time for life provisions on a project's overall cost was difficult to determine. This is because it was not possible to define a reliable and robust 'counterfactual' against which to compare or benchmark the costs of delivering the Pilot Projects. The costs of large scale, bespoke construction projects are affected by numerous factors including the specific scale and nature of the work, the state of the economy, level of activity in the construction sector more broadly, weather and environmental conditions among many other factors. Controlling for these various factors in the context of the cost benefit analysis was not possible. Hence the cost benefit analysis did not provide observable evidence to suggest that the application of the time for life provisions in the Pilot Projects would either increase or decrease the cost of delivering these projects.

However, there was also no clear reason to expect the Pilot Projects were delayed on the basis of implementing the Culture Standard time for life provisions, given there was only a small change in scheduled hours worked. If labour productivity and worker utilisation remained unaffected, then working the same number of hours - albeit at different times - should not be assumed to lead to an extension in project program or substantial increase in cost.

Indeed, although the findings of the cost benefit analysis undertaken by Frontier Economics found no evidence to suggest that the Culture Standard improved cost and time performance, neither was there any evidence to suggest that the time for life provisions adversely affected the cost or time required to deliver the Pilot Projects.

3.4.2 Quality of life

Majority of workers prefer a 5-day week schedule

Frontier Economics argued that workers themselves are in the best position to judge whether the time for life provisions, and the Culture Standard more generally, improved their quality of life. In considering different work schedules and hours, workers will necessarily consider both the impact of the provision on their take home pay and their activities and relationships outside of work. Findings from the Pilot Projects indicated that the modified work schedules implemented under the Culture Standard, including increased flexibility, were preferred by the majority of workers who participated in the surveys and interviews. This was true irrespective of a worker's family structure and irrespective of whether they were salaried or waged workers. This stated majority preference suggests that these changes improved their quality of life. All things being equal, if the majority of workers prefer the revised scheduling arrangements and there are no wider costs for society, then the Culture Standard time for life provisions can be considered to drive value, reflecting a positive outcome.

However, it is also worth noting that preferences were not universal and, unsurprisingly, varied between individual workers. In particular, the survey results suggest that preferences were less clear in respect to hours worked, with the majority of participants suggesting they would prefer to work about the same number of hours at both the Pilot Projects and the Non-Culture Standard projects that were surveyed for comparative purposes.

The preference of some individuals to work more hours should also be expected. This likely reflects the economic climate and the cost-of-living challenges being experienced at the time of the Pilot Projects. However, more generally, preferences should be expected to vary depending on an individuals' stage of

life, with some workers looking to save up for big expenditure items such as buying a house or a wedding. In this context it is the flexibility provisions that can really be expected to drive value as they enable workers to self-select and either choose to work more or less depending on their preferences. A critical feature of the Culture Standard is that it allows participation in project-based jobs that is not predicated on the requirement (and workers' ability) to work a 6-day week.

Flexibility related provisions are likely to be as important in driving value for workers

It is reasonable to expect that workers value flexibility and that giving individuals the option to adjust their hours in line with their individual circumstances will drive a significant portion of the value of implementing the Culture Standard.

There appeared to be significant uptake of the programs put in place by the Pilot Projects to enable flexibility to meet the time for life requirements. Frontier Economics would expect these provisions to be material in driving worker preferences and views. Increased flexibility in the hours workers can choose to work creates benefits.

Firstly, enhanced flexibility enables workers to self-select into the work hour/schedule that best suits them and their circumstances and drives the most value for them as an individual. When individuals are able to select the working option that best delivers value to them, this helps the Culture Standard drive value more generally (subject to this not creating negative impacts on other parties i.e. driving up workplace accidents or affecting the efficiency of the program of works more generally).

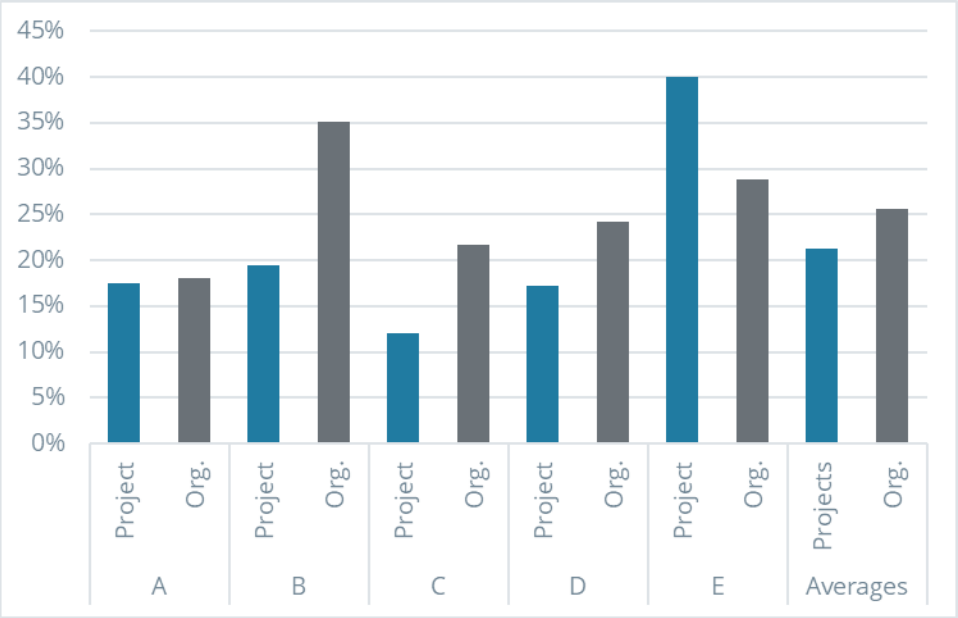
Secondly, it creates an options value i.e. it provides workers in the sector with a future option to adapt their hours of work in the face of circumstances which can be expected to change over time. This creates additional value and would be expected to encourage workers to remain in the sector and drive additional productivity benefits for society.

3.4.3 Turnover and absenteeism

While absenteeism data was inconclusive, the Pilot Projects typically experienced lower levels of staff turnover when compared to average head contractor organisational outcomes.

Turnover

With the exception of one project (Project E), the difference in employee turnover rates was notable across Pilot Projects. The figure below shows how average annual turnover rates differed across the Pilot Projects. Average annual turnover amongst staff employed at the Pilot Projects was around 21.2% whereas average annual turnover within the head contractors' total workforce was averaged around 25.6% per annum, as summarised in Figure 3.47. This result implies that, on average across the Pilot Projects, turnover in head contractors' staff employed at the Pilot Projects was 4.4% lower in absolute terms compared to the average of the organisational workforce.



Source: Frontier Economics analysis of head contractor data

Figure 3.47: Annual average turnover rates amongst staff employed on the pilot project vs the wider applicable organisation

This difference in turnover can be valued using the avoided costs of onboarding new staff incurred by contractors. Estimates from head contractors suggest that this could be in the order of $13,000 to $25,940, with the latter figure also being consistent with government estimates that suggest the cost of staff turnover to an organisation is approximately 30% of a worker's weekly earnings.

To give some context to the significance of this change, if this same reduction in turnover could be achieved across the NSW and Victorian sector as a result of the industry-wide rollout of the Culture Standard, then this would generate avoided costs for the industry of between $386 -771 million dollars per annum.

Absenteeism

Using data provided by Pilot Project head contractors, Frontier Economics also sought to identify whether there was an observable difference in the levels of absenteeism among employees working on the Pilot Projects when compared to average estimates for the head contractors' organisations more generally over the same period of time. Specifically, Frontier Economics measured the differences in the average hours of sick leave per employee. Ultimately this analysis was inconclusive. Levels of sick leave were higher at two Pilot Projects and lower at two Pilots Projects when compared to organisational data for the same time period. One Pilot Project was excluded from analysis due to a lack of data provided by the head contractor.

3.4.4 Worker renumeration

By virtue of there being minimal change in hours worked, it is unlikely that waged workers experienced a significant change in renumeration as a result of altered schedules on the Pilot Projects. This is based on the assumption that overtime rates are the same from Monday to Friday and at the weekend. Similarly, salaried workers are not understood to have faced any change in renumeration when working at the Pilot Projects. This was expressly tested at one of the Pilot Projects with the adopted schedule resulting in

near equivalent gross annual wages to those that would be expected under typical working arrangements.

3.4.5 Health and safety impacts

There are a few pathways through which Frontier Economics would expect the time for life provisions to cause a change in safety incidents, and therefore incident or injury-related health and other outcomes. Examples include:

- fatigue – a longer rest over the weekend could lead to a reduction in fatigue and less fatigued workers may be less likely to be involved in a safety incident. There is evidence to suggest working fewer hours in a week would reduce fatigue, but less evidence in relation to change in shifts
- stress and mental health – having a larger block of time off could reduce stress levels, and less stressed workers may be less likely to be involved in a safety incident, and
- change in behaviour – working more hours across fewer days may cause workers to engage in riskier behaviour to finish work on time, and this behaviour may increase the likelihood of a safety incident.

Fundamentally, work health and safety outcomes will depend on how worksites and workers implement the time for life provisions. For instance, workers may be less likely to need to work at a fast pace and rushing their work if the head contractor has considered and made allowances for the time for life provisions when programming the works. On the other hand, worker fatigue may not decrease if workers start working another job in response to lower income (i.e., fewer hours and less overtime) or more time available.

Data from the Pilot Projects suggests that work health and safety was not likely affected by the scheduling changes implemented on the pilots. Average total recorded injury frequency rates[5] were lower at Pilot Projects when compared to both industry averages and the average levels for the pilot organisations as a whole. If accurate, this could contribute to avoided costs for industry, workers and society as a whole.

3.4.6 Women's representation

Using data provided by head contractors for the Pilot Projects, Frontier Economics analysed whether there was an observable difference in gender diversity amongst the head contractor's staff employed at the Pilot Projects as compared to average estimates for the head contractors' organisations more generally. Specifically, Frontier Economics measured differences in the average proportion of staff employed that identify as female. With the exception of one Pilot Project, the proportion of staff that identify as female was higher at the Pilot Projects. On average 32% of staff employed at the Pilot Projects identified as female, compared to 24% within the head contractors' workforces more generally.

The Culture Standard is intended to, among other things, improve the gender diversity of the construction industry through increased participation of women. Furthermore, the time for life provisions are expected to address some of the barrier and rigidities in work hours and practices that are a cause of low attraction and retention rates of women. Given this, the Culture Standard can reasonably be expected to improve retention in the sector and the matching of skills to jobs. In doing so, it can also be expected to contribute to improve productivity in the sector and the economy more generally.

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5 It is acknowledged that relying on total recordable injury frequency rate at project level is statistically p[problematic so this data must be interpreted with caution.

When workers are not matched to the jobs for which they are best suited, this creates inefficiency in the economy. Improved labour market matching, where workers are able to find and stay in a job that is best suited to their skills and knowledge drives productivity in the economy. Where this is impeded by barriers to entry or rigidities in employment, the optimal matching of skills to jobs is constrained.

As noted by the Productivity Commission interventions that lead to an increase in the labour supply pool (such that labour is less scarce) can potentially promote productivity growth where they:

- increase the availability of labour with particular in-demand skills — This can enable businesses to more quickly fill labour or skill gaps, and therefore more fully utilise their other assets, and
- remove barriers to the increased participation of highly productive workers that are not in the labour market, or that are working in a lower capacity than their skills and expertise would allow.

In addition to leading to productivity improvements, this could also help address worker shortages in the sector that may be constraining output and driving cost escalation.

It seems reasonable to expect that the culture of long hours, overtime and extended work weeks may be contributing significantly to the departure of all workers already in the construction industry, and most acutely women because they are more likely to have or expect to have caring responsibilities. Long overtime hours are also seen as a way for construction workers to demonstrate commitment and increase their chances of promotion and even their job security. If women are less willing (or able) to work these long hours (for example due to gendered expectations and non-work responsibilities), then their career prospects may be limited.

Career opportunities and the potential for career advancement are strongly linked to a worker's actual organisational commitment, which is a predictor of employee turnover. The implicit requirement that construction workers are willing to work long overtime hours to be considered for promotion is likely both preventing women from joining the industry, as well as pushing already employed women out of the industry at a rate higher than their male peers.

If highly productive workers or workers with in-demand skills are not in the labour market or are not fully utilising their skills and expertise, then removing any barriers to their increased participation would drive productivity growth.

Unfortunately, it is not possible to robustly identify the impact of the time for life provisions on gender diversity more broadly. This is because the provisions of the Culture Standard would have driven an intentional shift of women to the Pilot Projects from other projects. However, in the absence of the diversity targets, for the time for life provisions to be effective in retaining and attracting women into the sector they would need to be applied more broadly within the industry.

3.4.7 Travel cost savings

A direct benefit of a shorter work week is a reduction in transport costs incurred by construction workers. Working one less day means that workers save on travel costs including time spent travelling (where there is an opportunity cost to this time). Society more generally also potentially benefits from reduced vehicle emissions. It is possible to estimate these values based on publicly available data on construction workers' work and travel patterns and Australian Transport Assessment and Planning monetisation values.

Assuming the Culture Standard is rolled out across the industry and is effective in reducing the number of days worked each year, this will result in benefits for NSW and Victoria totalling $52 million per annum as a result of reduced travel-related costs.

The largest component of this benefit is travel time savings, followed by vehicle operating costs and a modest reduction in emission-related costs. Of this, impacted construction workers in Victoria will save $500pa— $202 per annum in reduced vehicle operating costs and $298 per annum in reduced travel time cost.

3.5 Questions arising from key decision-maker Stage One interviews

In this section of the report, key challenges or questions identified by key decision-makers in the first round of key decision-maker interviews are examined with reference to the data collected during the Pilot Project surveys and interviews and cost benefit analysis. These challenges or questions are:

1) Were the expected benefits associated with the implementation of the Culture Standard observed at the Pilot Projects?

2) Were the anticipated costs associated with the implementation of the Culture Standard observed at the Pilot Projects?

3) Is it possible to implement the Culture Standard in horizontal projects?

4) Is it possible to implement the Culture Standard in the current commercial conditions?

5) Do current procurement and tendering practices impact the viability of the Culture Standard?

6) What happens to RDOs?

3.5.1 Were the expected benefits associated with the implementation of the Culture Standard observed at the Pilot Projects?

In the Stage One key decision-maker interviews, participants indicated they would like more evidence about the benefits and costs associated with implementing the Culture Standard before deciding whether or not they would support the more widespread adoption of the initiative. The extent to which expected benefits were perceived to have flowed from the implementation of the Culture Standard at the five Pilot Projects is considered in the following section according to the following themes:

- increased productivity
- more time with family
- better health and wellbeing, and
- recruitment and retention

3.5.1.1 Increased productivity

> *"I think a lot of that is going to get down to the whole productivity of wages, right? So, if you limit people to 50 hours a week versus 60 - not that I'm in favour of people working 60. But can you get the same quantum of work done for less work hours? I don't know the answer to that. I sit here hopeful that some of the studies that are being done or being suggested indicate that actually productivity improves, safety improves and wellbeing improves, and you don't have a consequential loss of output, I think that would be fantastic*" (KD05, Construction contracting organisation CEO).

Several key decision-maker interview participants observed that the viability of the Culture Standard is conditional on the extent to which labour productivity is improved, or at least unaffected by the changes to work schedule. In the Pilot Project interviews, the majority of participants did not find any negative impact on their self-reported levels of productivity, while some perceived improvements in productivity.

Rest and recovery

Interview participants described experiencing less fatigue working at the Pilot Projects than at previous projects which they attributed to having a two-day weekend. For example, a male project engineer commented: "*Reduce that fatigue, so less stress. Just more time to recover from the week and more time to enjoy things outside of work would probably be the main ones… you'd be more refreshed and you probably perform better in your role if you had more time off and more time to yourself*" (AP11).

In contrast, working a 6-day week was identified as contributing to fatigue: "…*if you would work Saturday thinking that you are going to be more productive having a whole day, but then you only have one day for yourself. And you're going to be probably more stressed. You only have 24 hours to switch off work and so you come back on Monday and you are already stressed. So I feel mental health wise, it would have an effect on you which will affect your productivity, which will make you less productive. I reckon five days is your optimum productivity*" (EP46, male site engineer).

Another male professional worker explained: "*I think we're more productive. I think the less hour you do, the more productive you are because you're not burnt out. You've got more energy, you've got more motivation"* (BP36).

Participants commented that being well rested after a two-day break improves their productivity: *"Because if you work 6 days then you're still tired on Monday because you haven't had time to wind down. You need to have time to recharge. If you work six days and then you've got no time to do your own stuff at home, let's say you're just working six days, Sunday off, six days again, then no, you're not feeling fresh. … Your work order needs to be logical. If you're burning yourself out and then not fresh, then there's more prone to mistakes and then you will take more time to do it, so your productivity will go down, as opposed you thinking clearly"* (AP14).

A managerial participant observed: "*I find we get more productivity at the workforce level because you get time to relax and just have time for yourself. It's been good. Shows on the project as well. We're up to date with everything"* (BP43).

Planning and organisation

Participants explained that they were able to organise their time to complete their allocated work in five rather than 6-days a week. For example, one participant explained: *"There's no detriment to productivity at all. I think because what we do is very task-based, it's not just how many hours you put in more work. I don't think there's any difference… you don't get any less done doing five days. You still have that*

deadline that you have to get stuff done. It'll be a date and if you've got three days to do it or you've got two days to do it, you've just got to do it in that time. You're probably just more effective, I think" (AP12).

Another observed: *"If I had to work an extra day, I wouldn't like it, number one. You tend to manage with the five days. If it was six days, you'd spread the work out. Then again, you might get busier and you might need the sixth day. For me now, I only work five days a week and manage my workload"* (AP10).

Participants described managing the 5-day week through more careful planning and better organisation: "*Knowing that I don't have a sixth day makes me, you know, not want… not that I waste time, but like makes me really think about every single day, what I have to do for the day, all the things I have to prepare in advance. So in that way I do think it's made me more productive"* (AP15).

Participants frequently indicated that if they knew they would have to work on the weekend, they would be less efficient between Monday and Friday: *"Whereas when I'm on a 6-day project I'd probably go I'll just leave all of that filing, I'll leave that for Saturday, for my Saturday job. I think I'm probably more productive, and it's just because I think I don't want to have to do anything over the weekend"* (BP15).

Another participant observed: *"I would say people being more accountable in what they do [working five days a week], thus saving time and being more productive at the end of the day. I think that's one of the things that I learnt, having a compressed week, and then even so, we are still able to deliver the project on time"* (AP28).

Saturday

Several participants described how Saturday work is often unproductive in the construction industry:

- *"Saturdays are never productive. … They've never been productive as long as I've been on a construction site"* (BP41, Labourer).
- *"I don't see that we're any less productive with one less day because Saturday is a bit of a joke of a day, I'll be honest"* (BP12, Project Manager).

Salaried workers did not get paid overtime for working on a Saturday and were less inclined to put in the same intensity as they would during a week day:

> "*Saturday there is a general kind of culture of 'I'm here, that's enough. I'm not going to sit down and do six hours of intense work like I would on a Tuesday', because you're not getting paid extra, you're just there because you have to be. So there's a different feel on a Saturday. It's just like 'I'm here to supervise in case anything goes wrong, but let's just get it done and get out of here*'" (AP08, Project Engineer).

Another salaried participant also indicated that she was less productive on a Saturday, and noted that she had often carried across work which could have been completed on Friday to the Saturday:

> *"Generally, when we worked the six days previously you'd sort of finish early on a Friday and then Saturday would only be like a 7 to 2, 7 to 3 day. I feel like it was always hard to be fully motivated on both those days if you're working them back-to-back because you go, 'oh, you know, I'm working tomorrow, I'll do a bit more tomorrow', so you'd do less on the Friday. And then you get to Saturday and there'd be a small crew, and you'd go, 'oh, there's less to do', so not as motivated to do stuff on a Saturday. ... Like do a full day Friday and then just think of it as another full day rather than two sort of half days where you're not as into it. And like on Saturday feel like you're sort of missing out on things as well"* (AP11, Project Engineer).

A woman, also in an engineering role, reflected that she was enjoying work and was more productive because she did not have to work on a Saturday: "*I enjoy work more and I'm more passionate about it because I don't resent it. You know having to look at it for 65 hours a week. And definitely more productive especially knowing I don't have to go in on a Saturday. I think, for instance, if I knew I was going in on a Saturday, maybe I'd take it a bit easier on the Friday and be like, 'I'll just save this work for tomorrow.' Whereas I know I've just got to pack it into the week, to get it all done. Which is definitely good for productivity*" (CP02).

Waged workers in site-based operational roles similarly indicated that they experienced lower levels of stress and fatigue. A male waged supervisor observed: "*I seem to sleep better; I seem to be less stressed at home. Not so much at work but at home I seem to be less stressed, less arguments at home… But if you can imagine, it seems like we get more done. And I think that's because everyone is rested and everyone's not run off their feet. It's funny because no one seems to be running around like a mad person, but we're getting more done. So I think it's just better planning. I think it comes back to the culture, I really do. I think it comes back to not being so stressed... If you can imagine not being stressed at home makes it better for when you get up and come to work*" (EP38).

3.5.1.2 More time with family

"*We had very clear feedback from a member last week around, 'Why can't we move to a 5-day work week? My subbies are struggling to come to work. They're not seeing their families. They don't want to be like their fathers before them'… So, I feel like there just needs to be a conversational shift towards that, you know, much more family-friendly, go and see son's footy game, you know, on a Saturday. You won't miss out on this – you know, that kind of stuff*" (KD11, CEO, industry peak body).

At all five Pilot Projects, participants indicated that the work schedule that they were working under the Culture Standard allowed them to spend more time with their families. A managerial worker who is the father of two children described the benefits of working a 5-day week for his family: *"I've got my two kids on Saturday, my wife works, so the 5-day work week for me is quite amazing. It's changed my life really… if I did have to come in, then we'd have to arrange a babysitter or family to look after the kids"* (CP29).

A woman in a site-based professional role (with dependent children) similarly observed: *"As soon as I walk out of here on Friday I know that I've got the whole weekend to spend with my family. So I can make plans like weeks in advance as well for Saturdays, whereas usually you wouldn't want to set any plans or book anything just in case you might have to work…Whereas now I'm comfortable, like I can just make plans on Saturdays, on the Sundays knowing that I have time for that. There's no stress of like 'oh no, I might have to work, or let's not book this'. It's been good"* (AP15).

For many participants spending time with children was the most significant benefit associated with working a 5-day week (and having weekends free): *"As I'm getting older, since the family come along, I have been anyways taking a Saturday wherever I can off … before you know it, they're 21 and you missed all those years. You missed all the fun and sometimes you will regret it, to be honest with you … obviously my kids being that age, everyone's got sports activities or musical activities, so I get to go take them to that or go to watch them play, so it works out better. And the wife's enjoying that, and I get to do stuff at home as well. Their feedback would be: 'Oh, so Dad's at home on a Saturday, can I ...,' as soon as they wake up, they know I'm home … they are like, 'where can we go today? Dad's home.' So that's the little feedback"* (CP28 - man in a salaried role with dependent-age children).

Male participants frequently observed that they had missed out on important family time while previously working a 6-day week. A man in a managerial role explained: *"Before like—it's a funny story—we worked on the projects even Sunday – so my wife gave birth during that period. I missed that six months with my*

son, like I hadn't seen him ... Come back late. So we leave early, they sleep, we come back, they sleep, you don't have the chance to see them, so it's a big impact" (CP06).

Men working at the Pilot Projects described the benefits of building relationships with their children: *"Your Friday afternoon, you get your whole Saturday, your Saturday night, and you get your Sunday. You can achieve so much in those days, too. I take the kids to the playground every Saturday. My daughter wakes up and, generally, first I ask, 'What do you want for breakfast?' She wants pancakes, yeah, we'll make pancakes, no dramas. I think that helps with trying to build core memories with the kids as well and having that time rather than … 'Dad's at work' … she's starting to realise what the weekend is now. She's always happy for the weekend, because we're normally going out to playgrounds … she'll be like, 'Dad, can we go to the beach?' 'Yeah, we can on Saturday. Not a drama.' It does open up a lot more avenues to enjoy life. And I really do hope it sticks, I really do. I hope I don't go to another 6-day-a-week project after this! I really hope there's another 5-day-a-week"* (CP23 – man in site supervisory role).

Participants without children also described benefits in being able to strengthen relationships with their domestic partners: "*Since we've got no kids, I think it gives us more time to be together. If I'm working on the weekend, then we've only got one day together basically and then that day we won't be spending time together, just in general tasks…At least we have one full day to ourselves and do whatever we need to do as opposed to working six days"* (AP18 – man in professional role).

Men in waged roles also highlighted time with family as an important and valued benefit of working a 5-day week:

- *"I'm home, so the weekends are busy because you're trying to hang out with the kids". (AP01 – man in labourer role)*
- *"I've got a young family. I don't get to see them Monday to Friday. I spend the weekends with them, which is great and awesome"* (BP13 – man in a general foreman role).
- *"Your family or your parents aren't here forever and they can go at any given moment, but we spend our whole life at work. So from my perspective, the last three Saturdays I've had off, I share it between my parents and my daughter. It's not my time, it's my family's time and that makes me happy"* (BP41 – man in a leading hand role).
- *"They're [work hours] the same but at least getting the Saturday and Sunday with the family and that's awesome. You can't buy your time back, you know. Yes, liking this 5-day working week"* (BP43 – man in a scaffolder role).

Some waged participants who now valued having the weekend off work to spend with their children no longer wanted to work on Saturday. For example: "*It's a bit tiring the last hour [of the day], but you push through because you're rewarded by having the two days off. Saturday and the Sunday. And you just you look forward to having that. … At the start it was hard, but now I was actually asked, 'Oh, do you want to work on a Saturday?' I said, 'No,' because I'm already in that mind frame and that's my day to spend with my daughter. … Whether it's sports, or dancing, or whatever it is*" (BP41 – man in a leading hand role).

3.5.1.3 Better health and wellbeing

> *"I would anticipate that you have a greater self-reported wellbeing amongst the participants, you have a greater benefit in their families and the wellbeing of those around them. I would expect to have lower mental health challenges"* (KD03, State Government CEO).

Pilot Project interview participants described positive effects of having more time to spend with family on their personal health and wellbeing: *"I have more time to see my parents in that they live in the North, so it's a bit of a drive. So now I usually go and see them on a Friday night, just stay the night, whereas I wouldn't have that option if I had to work the six days. I think it has had an impact on my health and wellbeing in the fact that I have more time for my family, which is really important for me"* (AP15).

Another participant observed benefits to their mental health: *"It's good that I can get that [work around the house] out of the way [on Saturday] and have at least one day a week to myself with my wife and go for a drive down the coast, whatever you want to do. It's good psychologically"* (BP08).

Pilot Project participants frequently described the benefits of having more time for rest and recovery associated with the modified work schedule: "*I think sometimes you can feel quite tired the first day and sort of catch up on sleep. But I definitely think you end up getting one and a half days of good rest. Good time off*" (AP03).

Another participant observed: "*Recover, catch up on sleep. Hang out with my husband and my family, catch up with friends, all that sort of thing. I'm really enjoying the 5-day week*" (BP10).

A labourer also noted that having two consecutive days off enabled him to rest and enjoy time with family without feeling tired. This participant felt this contributed to his mental health and happiness: "*I find with the Monday to Saturday, like I don't mind doing big hours from Monday to Friday. Less than that Saturday you've had that time to rest up and then Sunday actually get time to do family things and you are not tired, you are not knackered you know. So it obviously improves your mental health as well and stuff like that and happiness. Yes, it does help there definitely, I found that anyway*" (DP32).

A project engineer explained that having only one day off did not enable her to wind down and relax. She much preferred the two days off as it enabled her to stop thinking about work and enjoy her time off which contributed to her quality of life: "*I love it, because construction is the area that is too much stress. When you work six days a week, on Sunday you don't turn off. You still think about, so we work in your mind on Sunday as well. So when you have two days, you just turn off Friday, when I leave work. I stop thinking about work. And then I want to enjoy my weekend, I can hang out with friends, go out for a coffee so I can turn off. You have a better life, a better quality of life*" (CP22).

3.5.1.4 Recruitment and retention

"*I would say that the whole 5-day work week and working hours issue is quite linked to the question of a few things. The sustainability of work in the industry. Gender diversity in the industry is terrible. So it's not an end in itself, but it's linked to those goals. And I think the 5-day work week and the working hours is one way to get there… One of the things that I would really be looking for, particularly now we've got this as part of our mandate and part of our own aspirations, is looking at the number of women you can get into the industry. If so, how many women could you get working on projects, and how many of them remained in that role all the way through*?" (KD06, Government agency leader)

Section 3.4.3 outlines findings of the cost benefit analysis undertaken by Frontier Economics in relation to turnover and absenteeism. The Pilot Projects typically experienced lower levels of staff turnover when compared to average head contractor organisational outcomes. See section 3.4.3 for more details. In addition, Section 3.4.6 outlines findings of the cost benefit analysis which indicate that the time for life provisions are expected to address some of the barriers and rigidities in work hours and practices that cause low attraction and retention rates among women. Given this, the Culture Standard can reasonably be expected to improve recruitment and retention in the sector.

Interview results at the Pilot Projects also suggest that the Culture Standard may help organisations to better recruit and retain employees. For example, some women who participated in the interviews indicated the 5-day work week influenced their decision to work in their current role. A woman worker in a professional role commented: *"I haven't worked a 6-day, my expectations of having to work a 6-day week, I wouldn't actually be working for this company if that was the case. I think coming in and working, I've been corporate my whole life, just a 5-day week"* (DP01). This worker recently moved into the construction industry from another industry. Another woman in a site-based role also indicated that she joined the construction industry because she could work between Monday and Friday: *"I came from hospitality, and I was an operations manager there, where I was predominantly a lot of nights and weekend work. I got into this industry, in this job in particular, because they actually said it's going to be a Monday to Friday, and obviously, you don't work nights … so that was really appealing to me"* (DP05).

Other participants who have worked in construction for some time, indicated they strongly preferred to work a 5-day work week. A professional woman described the 5-day week as a "dealbreaker" for her in terms of remaining in the industry: *"I've worked on maybe four different jobs previously, and all of them have been five days. But for a couple of years there I was working 60-hour weeks, just in five days. … I would never do six days again; I would just find a different job. My reflection is that it's necessary for me, and that it's a really positive thing, that you need to enjoy work, you need time, like enough time away"* (AP08).

Interview participants also described flexible work as a key feature affecting the retention of women in construction roles: "*I think flexibility is probably the main one isn't it, for women?. … [W]omen want to go to a job where they can see long term prospects of having a family"* (P20 – male managerial worker). It was observed that women who have children find it difficult to join or return to work after childbirth because of their caring responsibilities. One woman explained: *"[M]y daughters are both… one's 20, she drives, my other daughter's 16, nearly 17, so she catches public transport to school which is not far at all. They're very independent which is hence why I've just sort of started to get into this industry. I would have liked to have got into it a lot sooner, but with having young kids… [It was not possible]"* (AP02).

Women whose domestic partners are also in construction find participating in construction industry roles particularly challenging: *"My partner is [an]… engineer as well, and he's working full-time. Since my younger child now joined school, I feel comfortable to join the [construction] industry"* (AP20). Importantly, the Culture Standard includes requirements for organisations to develop and provide a flexibility plan to support and promote flexibility for people in both office and site-based roles (Culture Standard Part 2.2). A woman in a supervisory role explained: *"When I came back [from maternity leave] they [the project leadership team] understood if I wanted to come back early or said if I wanted to come back late. So I think it's been very great for me. 100% great. And they even brought up the conversation of where I can do career development, even if I'm part-time and what do I want to do in the future? I think it's pretty good".* (AP04). Another woman worker in a professional role observed: *"And then with kids and stuff in the middle of it. I don't think long term unless it's a massive shift towards shorter hours, more flexibility that I will be in the industry for that long"* (AP24).

Participants observed how the implementation of the Culture Standard would provide more opportunities in the industry for women with caring responsibilities, who may otherwise perceive that they will not be able to pursue construction careers if they have children: "*It would be a very good, I guess, standing point for obviously females thinking of having families. It's definitely opened up doors for opportunities for us to obviously, don't get scared of actually having a family and being accepted as being mothers"* (P09).

Men who participated in the interviews also described the Culture Standard as attracting them to work at one of the Pilot Projects: "*I just previously come off of another major project and where I was supervisor, and I was just worked into the ground. So, when it came to moving on ... I basically had to court four*

options. And this one appealed to me the most because I would have time back for myself. Instead of working 70, 80, 90 hours a week, they were saying it would be capped at 55 a week. I'd have my weekends, my RDOs. Basically, a life again. So, that did entice me to this project" (DP04 – subcontracted worker in a supervisory role).

A man in a managerial role similarly commented: *"…the company I was previously at still do the 6-day working weeks. But there's an element within the 6-day working weeks was, there was a perception that it wasn't the whole company doing it. There was only select people who did it and it wasn't even really the whole site that did it. And so there was that element there that it felt unfair in a way. So definitely coming here, there was the 5-day working week was a major influence"* (CP26).

Another man in a professional role explained: "…*we used to be called on site on Saturdays as well, never on this project so far. So, if there is something planned, like nightshifts, which was a few times, it was discussed prior … a few weeks prior so you know aware of that, but I don't remember any Saturday works, which is amazing for me. That was the main reason for me to join that particular project with this particular company"* (EP34).

Site-based workers compared the different sectors of the construction industry and observed that some sectors of the industry currently only work 5-days a week. The 5-day week schedule at the Pilot Project was a key factor in this person joining a major public infrastructure construction project: *"…I suppose the [work schedule] aspect was told to me quite early as well, an appealing part of me joining the organisation around the 5-day working week…I've had the exposure to the residential medium density construction sector which was a lot of hours and working for the principal builder, you're opening sites and closing sites. … And so when it was told to me that we were doing a 5-day week, and I'd just come out of an industry for the last 15 years that only worked on a 5-day week, being residential medium density construction sector. And that was one of my stepping-stones to get out of that area of construction profession"* (AP06).

When asked whether they would prefer to work under the Culture Standard in future projects, the majority of interview participants indicated a strong preference to continue working under the time for life provisions of the Culture Standard, which cap weekly working hours at 50 and require individual workers to work no more than 55 hours per week, being distributed over five days in every seven (Culture Standard Part 2.1). A man in a managerial role explained: *"To me, I think I wouldn't work another 6-day program. I don't know, I don't think there's any benefit, personally. I think it's huge benefits not working a 6-day week, for people. And I don't think there's any real damage to the overall value given back to client"* (BP03). Another man in a site supervisory role observed: *"If I was to get put on a 6-day project again, I'd have to reevaluate [whether to remain in that job]"* (CP15).

A professional woman worker similarly commented*: "I don't know how I could go back to the 6-day week. This [project] has definitely set a benchmark for me"* (BP03). Another woman in a managerial role shared similar intentions: *"I think it's generally, for the whole team, it creates a more cohesive environment. There's not that divide with people that are working Saturdays and feel like they're working harder or more, or feel like they're entitled to more, so I would definitely look to work a 5-day week [in the future]"* (BP10).

3.5.2 Were the expected costs associated with the implementation of the Culture Standard observed in the Pilot Projects?

The extent to which expected costs were perceived to have flowed from the implementation of the Culture Standard at the five Pilot Projects is considered in the following section according to the following topics:

- excessive fatigue and reduced productivity
- waged workers affected by loss of income, and
- projects cost more/take longer to complete

3.5.2.1 Did workers experience excessive fatigue and reduced productivity?

"*If you're looking at the people who do the majority of the work, and that is the construction, the heavy construction critical contractors, and I talk about bricklayers, concreters, steel-fixers and form-workers…they'll tell you that they will not get more productivity or output from their employees past eight hours a day because they go hard. So the two hours extra or two and a half hours extra, whatever it is, on the site in many cases I understand the subcontractors say, 'Well, past 3:30 I don't get more bricks laid really', so they just go home. They're spent*" (KD22, Peak industry body).

As relatively few workers in 'heavy construction' roles participated in the interviews, it is not possible to assess how the 5-day week impacted their productivity. However, those site-based construction workers who did participate in the research reported a favourable response to the 5-day week.

A scaffolder indicated that he felt more productive as he had more time to rest and that his work was up to date: "*I find we get more productivity at the workforce because you get time to relax and just have time for yourself. It's been good. Shows on the project as well. We're up to date with everything*" (BP43).

A bricklayer commented that he felt well-rested and was motivated to do things to support his own health and wellbeing: "*It's definitely enough rest because before I used to... So I've lost in the last three months, it's been on this job as well, I've lost 27 kilos. ... Just feel more motivated to do stuff*" (BP39).

Participants in other physically-based roles also agreed that the 5-day week did not have a negative impact on their productivity. For example, a carpenter felt less exhausted by the end of the week due to having two days to rest and recover and prepare for the following week of work: "*I feel a lot less exhausted by the end [of the week]. Fridays are a lot better when you know you're not working on Saturday. You feel like you never really had that the last couple of years but now it's like when you get to Friday, it's a good push to get to Friday. You know you're going to be able to have two days off, so it's good"* (BP46). A plumber reported working more efficiently and productively over the 5-days: "*I'd much rather do longer days and have the more days off. It's definitely you got to work faster. You should ask my boss. … I just do it better and quicker*" (CP23). A crane coordinator similarly reported that a 5-day week helped to overcome fatigue: *"I'm happy with a 5-day working week. Being a craney, you're always first on site, last to leave, and six days of that, you're very fatigued by the end of it* "(BP05). A sprinkler fitter did not believe there was a difference in productivity between a 5-day and 6-day week due to the fatigue associated with long hours: "*I'd say it's about the same because I think, no matter what, people start getting tired anyway, so they might be here doing more hours, but for the last few hours of it, they're probably doing less work. Just because of fatigue I suppose"* (BP52).

In contrast, a supervisor had observed that workers in physically-demanding roles did get tired from working longer hours over the 5-day week and that productivity was impacted: "*I don't think you get the productivity as what you did before. I actually think it's worse, productivity-wise. On the sheer, simple fact that people get fatigued after the day. … The guys actually physically doing the work, they get more fatigued by doing the longer hours during the day. … And so you notice, maybe on a Thursday, Friday, they're looking at bit weary, gradually getting wearier*" (BP13).

Section 3.5.1.1 addresses the issue of productivity from a broader sample of interview participants and considers this under the topic of rest and recovery.

As there was limited Pilot Project data on the experience of the 5-day week from bricklayers, concreters, steel-fixers and form-workers, additional information was sought from these workers and is presented in Box 2.

Box 2: Impact of the 5-day week on physically demanding occupations

During the key decision-maker Stage One interviews, a question was raised around the viability of a 5-day week for occupations engaged in physically demanding roles, particularly concreters, steel-fixers, form-workers, and bricklayers. As our interviews did not cover the issue in depth, we asked these occupations working at Project B to share their experience of working a 5-day week under the Culture Standard. The head contractor of Project B asked these occupations the following questions:

Did they deliver the work in the same number of hours as they would have estimated at the time of tender?

- Were actual hours the same as estimated, or different?
- If the same number of hours were worked as estimated, how was this achieved?

Did their crews work longer hours from Monday to Friday? If so, how many hours per day?

Did they put more workers on to the tasks for fewer hours, or were they able to achieve productivity improvements (in which case hours worked may have been fewer than estimated)?

Concreters

The estimated work hours at the tender stage is exactly what has been worked to date at Project B by concreters. On non-Culture Standard projects, the usual working hours of concreters is 10-15 hours on most days, therefore the 10-hour workday at Project B has not been significantly different from the concreters' daily work hours on other projects. The working schedule preference of concreters at Project B is for a 5-day working week. The concreting company has a fatigue management policy in place which they use to ensure that their workforce is safe and alert. The concreters report that all pours have gone reasonably well and any delays that have occurred were due to concrete supply being slow on the day. The concreting teams on the ground are efficient and working well.

Steel-fixers

The estimated hours tendered are very similar to what has been worked at Project B by steel-fixers. There may have been a few extra hours required but not a lot. The steel-fixers have been working 10 hours from Monday to Thursday and 8 hours on Friday. The additional hours worked on Monday to Thursday have caused some additional fatigue, however, the company has been managing this and it is not long lasting. The site supervisor stated that this program was preferred by the team and the preference is for 5-day work weeks.

Form-workers

Form-workers have required more hours than originally tendered due to program overrun and variations at Project B. The form-workers have worked from Monday to Thursday for 10 hours and 8 hours on Friday for 90% of the contract period and are now currently doing 8-hour days. There have been fatigue issues within this workgroup as they have not been getting home until late. Workers would be happy with 9-hour days from Monday to Friday. Some form-workers prefer the 5-day program, while others prefer a 6-day program due to the double time available on a Saturday.

Bricklayers

Bricklayers at Project B have been working the same hours as per the tender submission. From November 2023 to March 2024, the bricklayers were working 10 hours a day five days a week. Extra workers were added to the project to meet the program. The bricklayers' preference is for 10-hour days, five days a week. The project management team have noticed higher productivity as a result of implementing the 5-day week program.

3.5.2.2 Were waged workers affected by loss of income?

"*Most of these guys – a lot of them are earning a lot of money. Like, our tunnellers are earning over $300,000 a year. And they look at the money they earn, they would look and say, how much is this going to cost me? because… if I've decided that this is the direction that I want to take and this is my career path, and I'm young and I'm able to put in a lot of these hours and you're restricting me from earning money, there will be some people that are pissed off with that. There will be other people that say, it's not going to be that much, and I get an extra day off a week, I'm pretty happy with that. But I think something like this could take a generation*" (KD13, Trade union leader).

To find a compromise between capping workdays at five and minimising loss of income for waged workers, each of the Pilot Projects scheduled regular overtime over the five days. As a result, the majority of waged workers experienced minimal impact on their weekly income.

Participants commented that working overtime from Monday to Friday and not working on Saturday had not had a substantial impact on their income. For example, a traffic controller commented that his income had been slightly impacted but the time off was worth it: *"[On previous jobs] we used to finish up at 5 o'clock and now we're finishing up at 6. You usually did 6 hours on a Saturday, so really you're actually gaining 5 hours Monday to Friday from the 6 hours that you've lost for Saturday, so you're dropping an hour. If I left here at 5 o'clock every day I'll drop $225 per week because the majority of it is tax. So for me the 225 doesn't matter for the quality of life that I will have*" (BP07).

Similarly, a site manager explained how the extra hours worked during the week offset the loss of income of Saturday: "*We're doing some overtime during the week, so it's not really a big impact to be honest. They (teammates) are on wages. For them, no, they haven't got impact that much because every day they're doing these two extra hours, so it's makes up like that Saturday*" (CP06). A leading hand/plumber noted that income was similar when working overtime hours from Monday to Friday versus no overtime during the week and working on Saturday: "*They're quite similar*" (CP23).

A plant operator also explained: "*That was exactly the same as the previous project. I would've got an extra couple of hours for a Saturday, but the tax man hits you for a Saturday anyway*" (EP27). Similarly, another traffic controller commented: "*Because we do the long days Monday to Friday, like for me that is enough overtime. And then because we are not working Saturday, we are not getting taxed as much either*" (BP17).

Some participants noted that they there was minimal impact on pay when they factored in travel expense savings when not working on a Saturday. For example, a bricklayer commented: *"I think it sort of works out the same. There's probably only a little bit of a difference but I'm trying to work out – there's only a little bit of a difference with the travel for the day. I don't really know how it works but I'm not too worried about it, the $40 or whatever. To get off the Saturday I'm happy to spend $40*" (BP39).

However, it is important to also note that some waged workers – at all Pilot Projects - were concerned about the loss of income associated with the 5-day week. For example, one site supervisor noted: "*Let's*

be more honest. So you work five days and you work six days, there's totally different pay because I'm on hourly rate. So you're losing that amount on Saturday because we get double pay" (CP16).

A labourer/traffic controller who is a single parent similarly commented: "*As a single mum it is a significant difference compared to working six days a week and working between 10 and 12 hours a day, it's a significant amoun*t" (AP07).

For some participants, increased cost of living was cited as a reason why they would like to work additional hours, including Saturdays. For example: "*You'd like to keep it five [days], but the cost of living going up too high and all that, people that would like it are going to be forced to work more*" (EP28).

Some participants noted that their income can be impacted when the site was closed during the week , for example due to rain, and they were not able to make up for the lost income on a Saturday: "*Usually if we get rained off during the week or something, you could always work Saturday to make it [income] up but you know because we can't work every Saturday, only the ones where the RDOs are or whatever, sort of you miss out on that a little bit*" (BP05, crane coordinator).

However, for many participants, the drop in income was considered to be worth it, given the extra time this provides with family and to rest and recover:

- *"If you could work a Saturday, I probably would for money purposes. But it's good [not to work Saturday], you take advantage of taking a Saturday off, you get to see the kids for another day and they have swimming, so you take them to their things that they do"* (AP01 – labourer).
- *"I'm definitely in the middle. I can go without the money. I need my alone time. Me time"* (DP42 – traffic controller).
- *"Sure, it's a bit less money. The [money] offset out of that [no Saturday work], it's incomparable. The time I'm having with my wife now and getting home on a Friday afternoon and Friday's become more significant"* (BP208 - coordinator).

See also Section 3.4.4 of the cost benefit analysis findings which considers the impact of the Culture Standard on waged workers' income.

3.5.2.3 Did projects cost more/take longer to complete?

"*On the cost, simply, it's going to take longer to build these bits of key infrastructure. That means they're more expensive, less benefit to taxpayers, a long time before they're in service. They're all big negatives"* (KD16, Government agency leader).

The cost benefit analysis undertaken by Frontier Economics found no evidence to suggest that the Culture Standard adversely affected the cost or time required to deliver the Pilot Projects. Refer to Section 3.4.1 which outlines findings from the cost benefit analysis in relation to cost and time. See also Section 3.5.5 which considers the variance between a 5-day and 6-day tender.

3.5.3 Is it possible to implement the Culture Standard in horizontal projects?

"*If you're working in (a) live road environment, given you've got traffic on it… you're not going to be digging up the road at 9AM on a Monday morning at peak hour… you'll be doing night works and you'll be doing weekend works and you'll probably be doing works over holiday periods, because that's when you can get access. And the same in the rail space. In fact, more so in the rail space. You know, you're not*

going to close the rail network down in normal business hours, because that's when people want the rail network to be operating" (KD12, Government agency leader).

During the first-round key decision-maker interviews, some stakeholders questioned whether it is feasible to implement the Culture Standard in 'horizontal' construction projects, i.e. in the construction of civil engineering infrastructure projects such as railways, roads, bridges, tunnels etc., which often require periods of high intensity work, night shifts or 24 hour/seven day week operations.

Although the Culture Standard encourages projects to operate from Monday to Friday, it is important to note that this is not prescriptive – if working on weekends is demonstrated to be necessary for a project's viability, organisations can implement alternate working schedules. The Culture Standard's time for life component requires that: a) no workers work more than 55 hours per week and, b) all workers work on a 5-day per week program. Working within these parameters, organisations can program their projects in a variety of different ways.

Importantly, the Pilot Projects at which the Culture Standard was implemented included both horizontal projects (A, D and E) as well as vertical projects (B and C).

The Culture Standard was implemented differently at each Pilot Project, but all three horizontal projects successfully programmed several periods of high intensity work (campaigns/occupations) while maintaining the Culture Standard requirements (for full details see 3.2.1).

However, implementing the Culture Standard at the horizontal projects was not without its challenges:

- some workers at Project A indicated they exceeded the 55 hours per week limit during an early occupation
- at Project D an occupation programmed early in the project lifecycle involved working six consecutive workdays followed by three days off, and
- Project E had to plan night work in the context of significant environmental restrictions.

Notwithstanding these challenges, management teams at each of the three horizontal Pilot Projects adapted their work schedules to meet the requirements of the Culture Standard's time for life component.

Several participants at Project A commented that the occupations they had experienced at the Pilot Project were better managed and less disruptive of their non-work lives than those they had experienced on previous projects. A site-based worker explained: *"Whereas on previous projects if there was like a night shift or an occupation we're kind of expected to be there, whereas this one, I had my close friend's little one, his baptism on the Sunday, so I said to everyone 'I can't miss that, it's really important to me.' There was no judgment, they just said, 'Okay, are you comfortable doing the Friday night shift?'… And I said, 'Yes, that's fine'"* (AP15).

A professional worker, also at Project A, observed: *"Yeah it was pretty well planned… like normally an occupation you just work 24 hours a day, every day of the occupation but we actually had a break the first week on the weekend. So we didn't work the Saturday or Sunday which is different… just a two-day break, because most nightshifts I've done in the past have just been like four on and one off, so having two was good"* (AP11 – man in site-based operational role).

Another professional worker explained that the occupation they experienced at Project A was better than an experience he had at a previous project due to different planning and rostering: *"Ah, I think (the most recent occupation was) better in the fact, once you're on nights, staying on nights is better than doing*

days and nights, because the previous big one we did was in [other project name] and I think a lot of people said this, speaking to them, and my opinion was the day/night, day/night transition was too hard" (AP12).

The more positive experience that workers had of the occupations at Project A were attributed by participants to good planning and prior notice that was given to people of changes to their shift patterns. A professional man in a site-based operational role commented: *"Yeah, it was well planned. We had plenty of notice so my family was prepared"* (AP15).

To manage occupations at Project D, the number of workers on site was increased during occupations. One subcontracted worker in a supervisory role explained: *"We definitely ramped up for the campaign. Because of the rostering, the labour tripled. We had three labour crews instead of just the one. We had a few extra supervisors and foremen to come on to help for that period"* (DP13).

A worker in a project administration role similarly observed: *"During the campaign, they engaged another group of professional engineers. We have a campaign manager, we have campaign engineers that we hired on-board also, independent contractors solely for the campaign"* (DP02).

In its later stages, Project D opted to forgo major occupations in favour of Saturday "mini occupations". This change was supported by the majority of interview participants.

The rearrangement of rosters and addition of workers helped ensure workloads were managed during periods of high-intensity work. A subcontracted worker observed: *"There was extra peggies [cleaner] so we had extra support. So it went really well. I wasn't feeling like I was overworked. It was just long days that's all"* (DP05).

At Project E, the environmental restrictions imposed at the project reduced the amount of night shift work that could be undertaken. A managerial worker explained: *"The night shift is easy to manage. We've got an EPL now that restricts us to only three nights a week. Two consecutive nights, three nights maximum a week and ten nights maximum a month. ... And that's with no weekends"* (EP01).

When asked whether they would like to see the Culture Standard be implemented across horizontal construction projects in the future, the majority of participants at the three horizontal projects indicated they would. For example, a site supervisor at Project D commented: "*Oh a hundred percent, just for people's general wellbeing. I'm sure there's lots of people out there that enjoy the money side of it, six days a week gets you a higher income. How that affects people long term, do they burn out? do they have broken families? marriages?...I'm sure it affects a lot of people. I definitely see the benefits in it. I'd rather it continued…I can see these pilot initiatives are a good way of seeing how it can run, which obviously I think it can, but I don't know whether it's going to continue or not"* (DP04).

3.5.4 Is it possible to implement the Culture Standard in current commercial conditions?

> *"And every single one of our projects that's exposed to the elements in Sydney is – we've lost two months in the last six months. And so, now, we're under enormous time pressure, the risk of LDs [liquidated damages] etcetera, etcetera. So, you know, a 5-day work week just is not going to cut it"* (KD09, Construction company CEO).

During the first round of key decision-maker interviews, some stakeholders expressed the view that long work hours cannot be changed in the context of financial penalties for time overruns.

Some participants in the Pilot Projects agreed with this key decision-maker's concern that it will be difficult to adopt the Culture Standard more broadly throughout the construction industry due to the prevailing

conditions and commercial arrangements under which construction projects are delivered. One participant explained: "*The way the industry is structured, with deadlines and LDs and all that, I can never see it always maintaining because it's just the same as any other industry when there's deadlines, people work bigger hours and do that too. But construction's rife with it, just the way the market is with demand while others don't see it. If we can work in that model then by all means, but for a blanket industry-wide, I see that as pretty unlikely*" (CP15).

Another participant similarly observed that the project delivery approach would impact the viability of the Culture Standard: "*I've seen different types of cultures and depending on types of delivery models…If a project is construction only versus an alliance versus design and construction, you know we have financial pressures if you have time delays, approvals, lots of factors that will still impact that and override what you're trying to do, because they will still want it to happen this way*" (AP16).

Notwithstanding these concerns, the cost benefit analysis (reported in Part 3.4 of this report) found no evidence to suggest that productivity is significantly reduced when working under the Culture Standard.

3.5.5 Do current procurement and tendering practices impact the viability of the Culture Standard?

"*But you look at a lot of these infrastructure projects, often they're delivered in very tight timeframes…So, unless governments, when they procure those projects, factor in those longer time frames or different types of working arrangements that may add a year or two to a project, and they're prepared to cop that politically, but also potentially the cost ramifications of that, if the treasury department's prepared to cop that, that's where I see there being some real challenges going forward"* (KD09, Contracting organisation CEO).

During the first round of key decision-maker interviews, some participants perceived that the procurement practices adopted by client organisations could encourage contractors to reduce costs and timelines in order to win work. It was argued that these systemic pressures to compete on cost and time performance would create a challenge for the implementation of the Culture Standard, in particular the time for life elements.

Some Pilot Project participants shared their concerns that current tendering practices could be a barrier to adoption of the Culture Standard. For example, one participant explained: "*Look the issue's going to be the competitive tendering element of it because everyone wants to win the jobs and the lengths that people go to win these jobs, we've already got a precedent in place to work 6 days, to me if everyone was doing 5 days you're still going to get the builders who go 'I'll do it, I'll do 6-day work weeks', you can take four weeks off the program or whatever. So that element to it is going to be, it's not a roadblock but it's probably a barrier to it progressing*" (CP26).

Another observed: "*I think when they do tender an estimation, maybe they go under budget or maybe less timing. They would promise, 'oh, I'm going to deliver this project by 2025'. And then they would've estimated some Saturdays. So that will add up to working all of the Saturdays because they haven't estimated properly*" (CP23).

However, the Pilot Project analysis also showed that, when projects are procured and tendered on the basis that people will work a 5-day week, it is possible to maintain the Culture Standard across the project lifecycle:

- *"I'm sure everyone in this team here, now that we've experienced it, I've experienced it, the job's work being delivered on a 5-day work week. If you have a plan in place from the start, as long as your*

program incorporates that from the get-go, you're not putting yourself under undue stress from the start trying to make up that extra day, 6 days in a 5-day period. I've fully bought-in to projects can be delivered on the five days" (CP08, Project Manager).

- *"I think that comes down to, during the tender phase, making sure the construction program is done correctly, so that we've made allowances for the 5-day week. We haven't, at the tender stage, gone with a really tight program, an unrealistic program, and then said "We're going to do the 5-day week". The project has always been based on a 5-day week and so, no, we won't be doing that [work on weekends]"* (BP14, Construction Director).

- *"There was no difference between the 5- and the 6-day. I suppose you plan around 8 hours a day, Monday to Friday, and 6 hours on a Saturday, so that's 46 hours. And then what happens is under the Monday to Friday program, you actually plan 10 hours Monday to Thursday and 8 hours on a Friday, so realistically, if you just looked at it on paper, you actually gain 2 hours a week, because you've got 48 hours instead of the 46. ... you probably couldn't say gained 2 hours and put it onto the end of the program, but what I'm saying is 5 versus a 6th day, there shouldn't be any impact on the overall program, it shouldn't prolong it, going to a 5-day program"* (BP03, Project Manager).

At Project E, the project was scheduled from Monday to Friday, and Saturday was used as a catch-up day. At this stage of the project, the project manager was less definitive about maintaining the 5-day week across the project life cycle. "*Well the way that we actually tender the job and the way that we price and plan is we do schedule a 5-day week in our construction program and all the productivities are based on a 5-day week and we rely on a Saturday as your catch-up day, as contingency. So if you do get a wet day or more rain than anticipated then you've already built in or if something slips and say they can't come it's a contingency and we build that in for the Saturday. And we typically work every Saturday to catch up on that time or get ahead where possible*" (EP01, Project Manager).

At Project D, it was noted that the 5-day week had not been maintained during the project life cycle due to program delays: "*When I came onto the project, what I was actually originally promised and what has actually happened probably hasn't come to fruition. We've probably done a lot more days, hours than what I was originally sold in coming here but again I think that's just the nature of the beast. I think deep down I probably always knew that that was going to be the case because it's construction. What it always comes down to is hitting goals, hitting targets, hitting dates. Program blows out, dates don't change but tasks fall behind*" (DP04, Supervisor). A leading hand from Project D indicated that while the program was based on 5-days, the program was tight and there was a sense of always feeling behind: "*Our program is based around 5-day weeks so you look at it and you think there's no way we can meet that program. And then we get thrown you know, 100 curve balls and then all of a sudden you're nowhere near the program but quite quickly we can get back on track. But you do feel like you're behind the eight ball a lot, you know you stand out there some days and you just look and you're like where are we, like how have we built this road. You know, so quite often our program is so tight that you look at it a week out from even starting and you've got that negative mindset that we're never going to meet this*" (DP14).

A male supervisory worker observed: "*I think if it's programmed correctly the 5-day working week works fine. I think if the program isn't done properly then, and if we're trying to push for 6 days a week, then I think we haven't done our job properly in the background*" (DP04).

Good planning was also identified as critical in managing specific work task interdependencies in the 5-day work week. For example, site managerial worker explained: "*Well, it's a bit of planning, a bit of managing, like planning ahead. So sometimes we're pouring [concrete] Thursday instead of Friday... So, it's worked out. It's all about planning... So far, it's very good* (CP06).

Site-based workers engaged in direct construction activity also observed that good planning of work and adequate resourcing supported their ability to work a 5-day week: "*The guys here are very good at planning out their work. You've got loads of help, loads of helpers, I think here, I know it's early stages of the project, but it's a nice little setup*" (EP27).

Of the three projects at which data was collected right through to completion, hours did not significantly increase towards the end of the project. However, it is acknowledged that there was strong client support for the Culture Standard at all of the Pilot Projects and this is likely to be critical to the successful implementation of the Culture Standard in the future. Pilot Project participants perceived this would be easier to achieve in public compared to privately-funded projects: "*I feel like it'll be getting private builders and clients on board with it. I know that a lot of government agencies, they've embedded it into their tenders like an option to bid for 5-day working week, and majority of their... in New South Wales, majority of their projects are 5-day working week*" (CP23).

3.5.6 What happened to RDOs?

"*What we've seen there, if there's any talk – I'll be honest with you, when we have toolbox meetings on site to discuss a lot of these sort of issues…, if everyone's half asleep at seven o'clock in the morning at the toolbox, as soon as you talk about taking their RDOs, everyone's all of a sudden alert and ready to go to war… As soon as you say, 'We're going to take your RDOs off you,' they – It's a real sensitive issue, probably because of what they went through to win it*" (KD10, Trade union leader).

During the first round of the key decision-maker interviews some stakeholders (mainly trade union leaders) questioned the compatibility of the Culture Standard with provisions in existing Enterprise Bargaining Agreements (EBAs). Rostered Days Off (RDOs) were singled out as a practical problem associated with implementing the Culture Standard, particularly among union officials.

Notwithstanding these concerns, the Culture Standard is not prescriptive in relation to the nature of work schedules beyond suggesting that a 5-day week between Monday to Friday is preferred but where this is not possible, organisations are to ensure that no individual works more than 50 (maximum 55) hours per week across five in every seven days.

It was observed that no changes were made to the RDO provisions at the Pilot Projects, other than the extension of RDOs (in some instances) to salaried workers, who typically do not benefit from RDOs. RDO provision for waged workers was not impacted by the implementation of the Culture Standard.

The Pilot Projects adopted different work schedules in order to accommodate RDOs in their respective jurisdictions. It was noted that in NSW the EBA included two calendars, one based on a 5-day week and one based on a 6-day week. At Project E (NSW) a waged worker in his twenties with three young children commented: *"So that's why it's good like here, this is probably the best project I've been on where like you work Monday to Friday. It's usually the weekend with your family which is really good, and then obviously every second [week] with the RDO, it's usually a 3-day [weekend] which is great"* (EP32). This waged worker further described RDOs as an opportunity to catch up on domestic chores and personal administrative tasks: *"[The] RDO is pretty much a catch-up day I find. Anything I need to get done or anything like that. Saturday is more of a relaxed day, Sunday is playing with the kids and that RDO is just kind of catch up on things*" (EP32).

In the two other NSW-based projects (B and C), several waged workers described being able to 'bank' RDOs to take in a block when they want to take an extended period of time off work:

- *"We don't take them. You just secure those and if you do want to have a holiday or something… instead of using your annual leave, you use your RDOs instead… Most of us, most of the boys don't take them, they just ignore them"* (BP08 – waged worker).

- *"I bank them. They build up, so it's almost like having an extra whole bunch of annual leave… They still continue to bank up, but at the end of this job, I might have like 100 and something hours because I'm not using them"* (BP30 – waged worker).

- *"I obviously bank mine… Because I only do a 5-day work week and then last year because I had so much leave, I had a 6-week holiday in Europe"* (CP05 -waged worker).

In Victoria, the Pilot Projects adopted different working time arrangements, but both retained the RDOs. One project (D) maintained RDOs and worked a 9-day fortnight. The other Victoria-based project (A) worked a 10-day fortnight and on the week of the RDO (on a Monday) the site worked the following Saturday, ensuring that waged workers always got two consecutive days off to rest and recover.

Some waged workers at the project at which a 9-day fortnight was adopted indicated that they felt this was too much time off, particularly during Winter months when the working days were shorter. One participant expressed a preference to work a 10-day fortnight: *"Although I love spending the time with the family on the weekends, it would be better for that balance if there was no RDO on the Monday… having every second week as a 4-day working week, in an industry that has historically been a 56-to-65-hour week, I still feel exactly the same; It's not enough in one week. The 5-day working week is great. During Summer it's fantastic, because you're doing five 11-hour days. During Winter, we had five RDO days pretty much, I'm still definitely not in favour of the RDO. A 9-day fortnight to me, it's too much time off"* (DP14).

At Project A, salaried workers were also permitted to work from home during the RDO Mondays. Several salaried workers spoke positively about this policy. For example, one explained: *"Every second week having an RDO where you work from home is awesome. You're still working the day, but you can sleep in because you don't have to drive to work, you don't have to start at 7, generally start about 8, so that's actually a really good routine so far"* (AP08).

In the first round of interviews, a salaried worker described the 10-day fortnight schedule in very positive terms, believing it to be the optimal arrangement: *"It's awesome. It's f***ing great. Especially being on salary knowing I don't have to work that Saturday or you've got that Monday off, that RDO. Whereas technically they don't have to give us that RDO. I'm not entitled to it. So now they don't even want to do training and stuff on a Monday anymore which is f***ing great. Full support of this 5-day work week. It's awesome. It couldn't be any better to be honest"* (AP14).

By the fourth round of interviews, this participant noted that, although they were still enjoying having the RDO Monday off work, the working week (Tuesday to Saturday) following each RDO was challenging because they only got the Sunday off: *"… the RDO; that's awesome. But I feel that following week is... it's quite a grind, especially now at the tail end. Tuesday to Saturday, one day off, back in Monday…"* (AP14).

At Project D, salaried workers also indicated they were able to work from home during the fortnightly RDOs, which are not typically available to salaried workers: *"RDOs is a big one. They're fantastic. It just gives you that extra day every two weeks to get the chores done at home, get the stuff you can't do during the week. The RDOs are fantastic and they push that. If we don't have much on then take the RDO, which is great. I haven't had that before"* (DP06).

Another salaried participant explained that RDOs allow a good opportunity to catch up on work tasks that are hard to complete when the site is fully operational: *"[There are] no site works going on. So, you don't*

get any phone calls, from the site just asking for your presence or any issues like that. So, it's really just a quiet time to just catch up on things" (DP10).

3.6 Key decision-maker interviews – Stage Two

This section of the report outlines results from the key decision-maker (KDM) interviews – Stage Two. This part of the report covers the following areas:

- sample
- the changed political and economic context
- polarised views on the Culture Standard
- the importance of procurement as an implementation mechanism
- attracting more women into the industry
- concerns remaining about work hour reductions and pay, and
- next steps.

3.6.1 Sample

Nineteen key decision-makers across construction contracting organisations, peak bodies, unions, and state government clients were interviewed for Stage Two between August and October 2024. Stakeholders who took part in a Stage One interview were contacted for the Stage Two interview. Of the 22 participants who completed the Stage One interview, 11 took part in the second interview. The remaining 11 participants were not available, including two of the three union representatives interviewed in Stage One. Eight new participants took part. Three were replacements representing the same organisation represented in Stage One. Five new participants were sampled from government agencies and peak bodies. Table 3.8 summarises the location and employing organisation type of the sample. Eleven of the participants were male and eight were female.

Table 3.8: Key decision-maker interview sample – Stage Two

Organisation type	Location			Total (N=19)
	NSW	Vic	Other	
Government	5	5	1	11
Construction company	1	1	1	3
Industry peak body	1	2	1	4
Trade union		1		1

3.6.2 The changed political and economic context

At the time of the second round of KDM interviews many participants, particularly in government roles, emphasised the ways that the industry context has dramatically changed since the first round of interviews. Changes that have been observed are the emergence of a housing crisis, the signing of a National Housing Accord and an agreement between the Commonwealth and states and territories in August 2023 to build 1.2 million new well-located homes over the 5 years from mid-2024. Participants observed that this has exacerbated an existing shortage of labour and created an environment in which it is critical for the construction industry to be better able to attract people from demographic groups currently under-represented in the construction industry, including women.

Many government participants indicated that concerns that they previously expressed about the costs of adopting the Culture Standard have now been greatly diminished. A key reason for this change in perspective was a concern about the industry's ability to meet proposed construction targets under the National Housing Accord which, in combination with an existing significant pipeline of infrastructure projects, has heightened the urgency of the labour shortage and the necessity of attracting new workers to the industry. Importantly, some participants in the second round of KDM interviews also indicated a greater awareness of the health and social costs associated with long and inflexible hours of work and argued that, even if there are cost implications associated with implementing the Culture Standard, these should be considered similar to costs associated with other social procurement policies, i.e., costs incurred in the interests of generating value above and beyond the value of the construction being procured.

KDM interview participants in government roles also observed that requirements consistent with those of the Culture Standard have been incorporated into some Federal Funding Agreements (FFAs) relating to infrastructure construction projects. For example, the Land Transport Infrastructure FFA (2024-2029) outlines that state and territory governments agree to support initiatives which enhance construction sector culture and participation, including but not limited to:

- "enhancing flexibility and work-life balance arrangements
- improving personal wellbeing, including physical and mental health
- attracting and retaining diverse sector talent, focusing on workforce and skills growth through tangible increases to women's participation across trades and non-traditional roles, and
- undertaking trials or research in partnership with industry to support development of further learnings and programs" (Government of Australia, 2024).

The reference to culture and issues of diversity, health, wellbeing, flexibility and work-life balance were seen as indicating a shift of priority in governments at Commonwealth, as well as state and territory levels since the first round of KDM interviews.

It was also noteworthy that the eight new participants in the round two KDM interviews indicated that cultural change in the industry is necessary to ensure that the industry improves its ability to attract and retain a diverse workforce and thereby ensure its long-term sustainability and productivity. Unlike participants who were interviewed in the first wave of KDM data collection, these new participants started from a position of seeing the Culture Standard as an attractive solution to a pressing industry problem, rather than something that could create additional cost and therefore that needs to be tested prior to its acceptance.

Many of the second round KDM interviewees, particularly the government participants, argued that the industry should implement the Culture Standard as soon as possible, whilst there is still a strong momentum behind the idea.

"We learn that in government when there's momentum behind something, and you want to change something, don't hang around… you've got this kind of momentum behind it. So, what are you waiting for? ... it's not going to be perfect for sure. But if you let it linger, they will lose interest at some point ... you just want to kind of grab the opportunity when it's there." [06]

3.6.3 Polarised views on the Culture Standard

Notwithstanding the majority support for the Culture Standard among participants in government roles, overall, KDM interview participants remained divided in their views. On the one hand, many participants representing construction contracting organisations (as well as the government-affiliated participants whose views are described in 3.6.2) were strongly supportive of the Culture Standard. Participants who had observed the experiences of people involved in the Pilot Projects within their organisations described these experiences as being overwhelmingly positive. These participants suggested that productivity and wellbeing improvements reported by people working at the Pilot Projects were 'not surprising' as it makes sense to expect that people who are well-rested after a 2-day break are likely to come back to work fresh and work more productively. The historical low levels of productivity on Saturdays were also cited as a reason why people may feel more productive working a 5- rather than a 6-day week. It is noteworthy that KDM interview participants who, in the round one interviews were sceptical that the Culture Standard was feasible or would produce the expected benefits, had changed their minds by the time they participated in the round two interviews. The eight new participants were similarly positive compared to their counterparts who were interviewed in the first round.

However, another group of participants (primarily peak industry bodies and some contractor representatives) who participated in both rounds of KDM interviews remained opposed to the implementation of the Culture Standard. If anything, the opposition of this group of participants had increased between the first and second round of interviews. These participants are still concerned about the lack of flexibility afforded to organisations in scheduling work if a 5-day week schedule is to be prescribed. One executive leader with a contracting organisation indicated that the extreme weather effects associated with a changing climate can create pressures as available workdays will be substantially reduced. It was posited that, were a 5-day week to be mandated, this could create challenges for construction companies in managing production according to required project timelines. These participants also indicated that mandating that projects work between Monday and Friday is problematic for brownfield sites in which roads and infrastructure need to be disrupted during construction. These concerns remain, despite the evidence from the Pilot Projects indicating that transport infrastructure projects were able to manage rosters during intense periods of working to maintain the working time provisions in the Culture Standard for individual workers (while sites operated 24 hours, 7 days a week). Other outstanding concerns related to the compression of the work week and the potential impact this has on workers' fatigue and/or ability to participate in family life on workdays. Peak industry body representatives were also concerned that capping work hours and moving to a 5-day week may result in the loss of workers to other sectors (e.g., mining) in which waged workers could earn a higher income working longer hours.

In particular, it was expected that young workers without family commitments, want to work long hours to maximise their earnings. The impacts of young workers' health and wellbeing associated with working very long hours and 6-day weeks were not considered. Some of the KDM participants also noted the tension between providing healthy working time arrangements, while also ensuring waged workers are able to make sufficient money to be attractive to recruit them to and retain them in the sector. For this reason, one government agency representative suggested the Culture Standard target of 50 and maximum of 55 hours each week was 'very sensible'.

> *"I think it is good that we try and keep people working five days and they have two days off. And ideally Monday to Friday… I think the target of 50, maximum 55 is, is very sensible." [02]*

3.6.4 The importance of procurement as an implementation mechanism

The round two KDM interview participants identified procurement as the most effective mechanism through which the Culture Standard could be implemented. In particular, government representatives identified the need for public sector agencies to include requirements to comply with the Culture Standard in their construction contracts and, importantly, then verify that contractors are adhering to the requirements. One government representative suggested that, rather than mandate compliance with the Culture Standard, government clients could ask contractors to indicate how they align with the requirements of the Culture Standard at the tendering stage and then monitor this alignment as the project progresses.

> *"… we (could) ask contractors to demonstrate how they can align with the Culture Standard, as opposed to mandating it. How they can align with it and deliver it. And that might be an evaluation criteria… you know, there's reward if you can get very close to the Culture Standard, right? Because if we send that signal, eventually, you know, our contractors will respond." [02]*

Consistent inclusion of the Culture Standard in procurement across government agencies within (as well as between) states and territories was seen as critical to creating a 'level playing field' and ensuring that the benefits of the Culture Standard are fully realised. Partial or 'patchwork' adoption was seen to be a risk because it would result in companies defaulting to 6-day (or even 7-day) weeks in situations in which the requirements to follow the Culture Standard are looser in some jurisdictions or types of project compared to others. Some KDM interview participants argued more strongly that 6-day week programs should be removed as an option in the tender process.

3.6.5 Attracting more women into the industry

Some of the round two KDM interview participants suggested that, in order to attract more women into the construction industry, flexibility in relation to part-time work (reduced hour contracts) are needed.

> *"One of the questions that we asked is how do we get more women into the industry? And there is absolutely one theme, and that is flexibility of employment. That is we're being told clearly." [09]*

While flexible work options are also a requirement under the Culture Standard, the creation of a gendered split between people in full-time and reduced hours roles could potentially perpetuate gender inequality, rather than improve the position of women in the construction industry.

Some participants regarded women as an important group of workers to fill the worker shortfall the industry is currently experiencing. Key stakeholders from government and industry generally agreed it was a good thing to increase women's participation in the construction industry. However, there was little consideration by participants of how to transform the sector to achieve equal and equitable participation of women, which is one of the key pillars of the Culture Standard.

3.6.6 Concerns remaining about work hour reductions and pay

Notwithstanding the majority view among the round two KDM interview participants that the Culture Standard should be implemented without delay, there remained some questions about how the costs associated with implementation should be equitably borne. It was suggested by some that productivity improvements could make it feasible to further reduce work hours (recognising 50 to 55 hours per week is still high). However, the majority of stakeholders understood that this would result in an unpalatable

reduction in earnings for waged workers and the question of 'who would pay' for any additional reductions was unresolved. One union executive observed that, even with increased productivity, increasing waged workers' hourly rates of pay to maintain income while reducing hours further would not be favoured by contractors or clients.

> *"…how do we transition to less hours without less money? ... I'm yet to find any government or principal contractor that whilst they still say, "Yeah, we get more productivity with less hours", I don't know any of them that have preferred to pay more for less hours… I truly believe getting a better quality of work time, work-life balance is important. But when we speak to members on it, the money seems to be always important." [05]*

At present it was acknowledged that the Culture Standard seems to have achieved a compromise between the expectations of waged workers and a redistribution of work hours such that people are able to have two full days off work each week.

3.6.7 Next steps

The KDM interview participants were asked to reflect on the next steps they saw in adopting the Culture Standard. Some of the participants highlighted the need for implementation tools and resources to support this process. Several participants also identified the need to engage more effectively with sectors of the construction industry that may know little about the Culture Standard, or who are currently ambivalent or opposed to it. In particular, smaller construction businesses, subcontractors and peak industry bodies were identified as groups with whom further engagement is required. It was also noted that a critical next step is in clients, contractors and unions getting together to agree on the ways in which the Culture Standard can be effectively implemented in projects of different scales and types, including very large construction projects at which a union executive observed the Culture Standard has not yet been trialled.

Part 4: Discussion

4.1 Addressing excessive work hours

Long work hours are a risk factor for work-related illness and death. The World Health Organization (WHO) and the International Labour Organization (ILO) Joint Estimates of the Work-Related Burden of Disease and Injury calculate the numbers of deaths and disability-adjusted life years (DALYs) that are attributable to selected occupational risk factors, including long hours of work (Li et al., 2020). These estimates indicate that exposure to long working hours (defined as ≥55 hours/week) contributes to a large number of deaths and DALYs through ischemic heart disease and stroke (Pega et al., 2021). Moreover, long work hours were identified as the occupational risk factor with the largest attributable burden of disease (Pega et al., 2021). The recognition that long work hours are a significant occupational/work health and safety risk factor is important, as previous research suggests that workers in project-based construction work often work more than 55 hours per week. One Australian study found that the average number of hours worked each week was 63 among site-based participants in direct construction activity and 56 among workers based in a construction project office (Lingard & Francis, 2004). Project-based work is also subject to fluctuating demands and unexpected events that can result in periods of high intensity work in which work hours exceed 55 per week (Lingard et al., 2010).

While KDM Stage Two interviewees discussed long working hours prevalent in construction and suggested that the reduction of hours to 50 is sensible, these hours are still well above the 38 hours maximum weekly work hours outlined in the National Employment Standard (NES). While the NES sets the maximum full-time hours at 38 hours, it is coupled with an option for reasonable additional hours, creating a vagueness in national maximum hour limits so that they easily become irrelevant to discussions on how long a safe and healthy working week should be.

Long hours of work have been linked to burnout among Australian construction workers (Lingard & Francis, 2005). Although this early work on work hours and burnout was undertaken some years ago, a recent survey undertaken by Wellness in Infrastructure provides further evidence that burnout remains a problem in the Australian construction sector. For example, 2023 survey results revealed that more than one in three infrastructure industry professionals (39%) working in site-based or hybrid office-site positions met the criteria for being burnt-out. Importantly, more than half (51%) of workers aged between 25 and 29 met the criteria for being burnt-out (Roads Australia, 2024).

Reducing hours of work in construction projects has been challenging because construction projects are often delivered to tight timelines. Time overruns are associated with financial penalties. The construction workforce is also made up of two different groups of workers, operating in distinct labour markets. Managerial, professional, administrative and supervisory workers are salaried, i.e., they are paid a fixed annual salary irrespective of the hours they work each week. In contrast, skilled and unskilled trades and labourers are paid based upon an hourly rate up to a standard work week, above which penalty rates are paid for overtime. For the latter group of workers, a reduction in weekly work hours has the potential to reduce their income and, consequently, previous research has shown that changing working time arrangements in construction projects is experienced differently by these two groups of workers (Lingard et al., 2008).

The results of the Pilot Projects reveal that, when the Culture Standard was initially introduced, some waged construction workers at the Pilot Projects expressed concerns about the potential impacts that the Culture Standard's time for life provisions would have on their income. However, for many of the participants, these concerns were alleviated as the projects progressed when it became apparent that

income was not substantially reduced and the benefits of having a two-day break each week were experienced as off-setting any modest reduction in pay.

The time for life provisions in the Culture Standard require organisations to program their projects to target that all workers work 50 hours or less per week and ensure that no workers work over 55 hours per week, effectively establishing a maximum number of hours individual workers can work each week – at least at a project implementing the Culture Standard. Across the Pilot Projects the majority of workers indicated they were working within the requirements of the Culture Standard. 80.3% of waged and 56.6% of salaried participants indicated they worked fewer than 51 hours per week. A further 24.0% of salaried and 11.6% of waged workers indicated they work between 51 and 55 hours per week. However, the distribution of salaried and waged workers differed significantly with proportionally more salaried than waged workers working longer hours at the Pilot Projects. It is also noteworthy that 19.2% of salaried and 8.1% of waged workers indicated they work more than 55 hours each week. When compared to projects at which the Culture Standard was not implemented (but which were being delivered by the same head contractors as two of the Pilot Projects) the distribution of work hours did not differ significantly between the Culture Standard and comparison Non-Culture Standard sites. This may reflect the fact that the implementation of the Culture Standard at the Pilot Projects produced a *re-distribution* of work hours more so than a reduction of weekly hours for many workers.

When comparing the distribution of work hours by waged and salaried workers under the Culture Standard, it is also apparent that more than half of the waged workers who responded to the survey (56.2%) indicated they work up to 45 hours a week (equating to working 9 hours or less per day). These workers are likely to engage in heavy physical work and concerns about the impact of long working days on their fatigue were raised by some of the key decision-maker interviewees. Waged workers engaged in manual/non-managerial work who were interviewed at the Pilot Projects did not express concerns about the physical impact of the work hours arrangements under the Culture Standard. However, it is important that the potential for longer daily work hours to increase fatigue in particularly physically-demanding trades continues to be carefully reviewed as the Culture Standard is adopted more broadly. Fatigue should be carefully monitored and managed.

The Pilot Project findings indicated a majority preference among both waged and salaried workers for working a 5-day week. The following two response options: ‘working a 5-day week and having weekends free;’ and ‘working a maximum of 5 in 7 days’ were combined to reflect a preference for a 5-day week. 93% of salaried workers and 71% of waged workers chose one or other of these response options to indicate their preferred work schedule. This was compared with 25% of waged and only 5% of salaried workers who indicated a preference for a 6-day week schedule.

The interview data provided further insights into the benefits that participants experienced having two consecutive days off each week. These included being able to spend time with family members including children, being able to engage in sport and leisure activities that they could not participate in when working a 6-day week and being able to complete household chores and still have time for leisure activities, which was also not possible with only one work-free day each week. These benefits were experienced irrespective of age, life stage or gender and reflect the fact that having sufficient time for life outside work is beneficial to all workers.

Moreover, having the opportunity to relax, detach from work and engage in activities that are stimulating, challenging and confidence-building during the weekends has been found in previous studies to increase workers’ positive emotional state (and reduce their negative emotional state) throughout the following week at work (Fritz et al., 2010). Research shows, for example, that workers who are able to engage in social, physical, and creative activities during the weekend experience the most positive recovery benefits. Engaging in weekend activities outside of work can replenish psychological and physical

resources expended by workers during the working week, and is reported to improve work-related wellbeing, i.e. reduced burnout and increased work engagement the following week (Ginoux et al., 2021; Ragsdale & Beehr, 2016).

4.2 Women's participation

The Australian construction industry currently faces a shortage of workers. This shortage has been exacerbated by a subsequent Australian Government commitment to building 1.2 million new homes over 5 years, requiring a workforce of 90,000 people more than currently exist (Manfield, 2024). Given these shortages, there is a need to improve the construction industry's ability to attract and retain workers, including women (Infrastructure Australia, 2023). Projected shortages for infrastructure workers have decreased compared with the 2023 forecast as demand softens and supply grows, reflecting the impact of governments actively managing ambitious pipelines to align demand more closely with market capacity (Infrastructure Australia, 2024).

The Culture Standard requires organisations to target the appointment of women across critical workforce segments and strategic decision-making roles and develop a plan for the project to achieve these targets. The analysis of costs and benefits associated with the implementation of the Culture Standard at the five Pilot Projects found that women were better represented in the Pilot Projects (32%) than they were in the workforce of the head contractors engaged in the Pilot Project delivery (24%).

Some of the Pilot Projects implemented specific initiatives to attract more women to the projects, for example, appointing a Female Participation Advisor to support subcontractors in the recruitment of women. However, Pilot Project managerial personnel recognised that their ability to increase the participation of women in the workforce is constrained by the numbers of women with the requisite skills to enter jobs within the industry and it was acknowledged that entry into a construction career has a long lead time. As a result, one of the Pilot Projects initiated a program of making visits to schools to promote construction as a career choice for young women (and men).

The Pilot Project interview data also shows that women generally felt supported and were provided with good amenities including clean, women-only toilet facilities, free sanitary products etc.

However, the Pilot Projects also identified a number of factors that could negatively impact women's safety, health, wellbeing and/or retention. In particular, women at the Pilot Projects indicated that they are exposed to inappropriate interactions and behaviours, for example, sexual innuendo or sexist comments. This is consistent with the findings of a recent study by the National Association of Women in Construction that found that 88% of women in construction report experiencing microaggressions in the workplace (TDC Global/NAWIC, 2024). The TDC Global/NAWIC report defines microaggressions as small acts that make people feel less welcome, less valued or less safe. Women in all roles (including office- and site-based roles) reported experiencing microaggressions which were reported to negatively affect women's professional confidence and wellbeing.

The survey data collected at the Pilot Projects similarly found that women reported significantly higher levels of inappropriate banter than men. A distinction has been drawn between inclusive and exclusionary banter. Inclusive banter helps to develop friendships and a sense of solidarity, but exclusionary banter can result in workers avoiding their colleagues, experiencing mental health impacts or leaving their employment (Wilcock et al., 2019; Plester et al., 2022). Research shows young workers and women are unlikely to report banter if they experience it in the workplace due to fear of repercussions (Wilcock et al., 2019). It was also observed that women in the Pilot Projects who had experienced interactions that were offensive and inappropriate indicated they did not always feel comfortable reporting these because this

could result in them being perceived as ‘trouble-makers’ and have negative impacts on their employment or career. Importantly, experiencing inappropriate banter was also significantly and inversely predictive of mental wellbeing, i.e. the more inappropriate banter is experienced, the lower the level of mental wellbeing reported.

Experiences of this nature reflect a prevailing culture in the construction industry that is resistant to change and does not support a gender-inclusive work environment. Future initiatives implemented in support of the Culture Standard could potentially address this by helping organisations to better recognise and respond to inappropriate workplace humour.

Interview data collected at the Pilot Projects also suggests that women with dependent children may also find rigid adherence to long daily hours as challenging, which highlights the importance of individual workers being provided with flexibility with regard to when and where they work so far as is possible in the context of their job roles.

4.3 Perception versus experience

The Pilot Project interviews revealed that some manual/non-managerial workers and supervisors were initially sceptical about the Culture Standard. Workers were concerned about the potential impacts on their income, while supervisors expressed concern about the ability for the projects to keep to the program when working five rather than six days each week.

The longitudinal research design allowed these workers and supervisors to be interviewed multiple times as the projects progressed. There was a discernible shift in participants’ views about the modified working time arrangements as participants experienced working under the Culture Standard. Many waged participants who were initially concerned about their income indicated that the impacts had not been as great as they had expected and that the benefits of having two consecutive days off work outweighed the costs associated with the modified working time arrangements.

Some supervisors who were initially sceptical observed that the projects had been able to maintain production progress according to the project program and attributed this to good planning and productivity gains associated with workers being well-rested when they come to work at the beginning of the work week.

These interview findings suggest that perceptions of what it is like to work under the working time arrangements specified in the Culture Standard change with experience. It is therefore critical that the insights of people who have personally experienced working under the Culture Standard are considered when determining the likely impacts and experience of costs and benefits.

The survey data collected at comparison projects not implementing the Culture Standard (but being delivered by the same head contractors at two of the Pilot Projects) also provides interesting insights. When asked about their work schedule preferences, waged workers were more likely to indicate a preference for a 5- compared to a 6-day week at the Pilot Projects compared to the Non-Culture Standard comparison projects (74.5% at Project B and 55.7% at the Non-Culture Standard comparison project and 75.0% at Project E and 60.0% at the Non-Culture Standard comparison project). One explanation for these differences is that waged workers who have experienced working under the Culture Standard may be more likely to see the benefits of working under the new working time arrangements (in particular, having two consecutive days off work) than waged workers who have no experience of working at a project at which the Culture Standard has been implemented.

However, it must also be acknowledged that, notwithstanding the majority preference for the 5-day week among waged workers at the Pilot Projects, approximately 30% of waged workers indicated a preference to work a 6- or even 7-day work week. This percentage was similar and consistent across all Pilot Projects and for all age groups within the sample. Interview data suggest that the current cost of living pressures and financial commitments for some participants (e.g. mortgages, investments, costs of raising children etc) that cannot be easily changed are contributing to these preferences.

Unfavourable perceptions about the Culture Standard requirements were also evident in the first round of the key decision-maker interviews. Some key industry stakeholders expected that implementation of the Culture Standard would inevitably cause projects to take longer and cost more. Others believed that adherence to the Culture Standard could not be maintained across the lifecycle of a construction project as project pressures, tight deadlines and the threat of liquidated damages would mean projects would not be able to maintain the time for life provisions throughout the entire life of a construction project. Some key stakeholders also suggested that the time for life provisions were feasible in vertical (building) construction projects, but would not be practicable in horizontal (civil engineering) infrastructure construction projects. One of the key points illustrated by the Pilot Projects is that the Culture Standard provides project management teams with a great deal of flexibility and control over the way that work is scheduled. Projects are able to operate 24 hours a day/ 7 days a week. However, the time for life provisions require that individual workers' hours are capped at 50 (not exceeding 55) and they should work no more than five days in every seven, allowing a 2-day period of recovery each week. The Pilot Projects included three horizontal projects, all major transport infrastructure projects, that demonstrated the practicability of implementing the Culture Standard in projects of this type. These projects experienced a variety of restrictions and conditions surrounding when and how they could work – in relation to reducing noise emissions, closing operational roads/railways etc – and were able to schedule work in ways that met the requirements of the time for life provisions of the Culture Standard while still maintaining production according to the program.

The multi-wave survey design also allowed an analysis of work hours and key variables, e.g. work demand, work-life balance, managerial support for family, respect at work etc, as projects progressed from early- or mid- project through to near completion. Comparison of data collected over multiple waves suggested little variation in these key variables as projects neared completion, indicating that the desired outcomes associated with the provisions of the Culture Standard can be maintained throughout the entire construction stage of a project. Lastly, the Frontier Economics analysis of the costs and benefits of the implementation of the Culture Standard cited high level analysis using previously published benchmarking research that suggested that the unit cost of the Pilot Projects was within a reasonable range of expectations, based on the cost of previously completed comparable projects and found no indications that the Pilot Projects were delayed because of the time for life provisions. This analysis suggests that there is no clear reason to assume projects would incur delays because work hours were largely redistributed rather than reduced at the Pilot Projects (as is also reflected in the comparison between Pilot Projects B and E and the two Non-Culture Standard comparison projects).

4.4 Future workforce

The Australian construction industry workforce is ageing. One industry report suggests that the percentage of workers aged 50 years and over grew from 17.5% in 1997 to 23.6% in 2018, while the percentage of the construction workforce under the age of 30 only increased by 0.6% during this time (Artibus Innovation, 2018). As older cohorts of workers retire a significant skill replacement gap has emerged as new entrants are not replacing those leaving the industry (Artibus Innovation, 2018). One

solution to addressing the skills shortage is to encourage more young people to enter construction (Gerrard, 2023).

However, there are signs that the industry is not performing well in its ability to attract young workers, particularly into trade-based roles. The numbers of young workers commencing apprenticeships in Australia and those currently in training are the lowest for a decade (Australian Industry Group, 2016). The completion rate of construction industry apprenticeships also steadily declined in Australia between the years 2012 and 2017 (ABS, 2018). Completion rates for women in construction trade apprenticeships are 12% lower than for men, indicating women are more likely to drop out of construction trade apprentices than their male counterparts (CSQ, 2018).

A recent study of young people engaged in a New South Wales Government Infrastructure Traineeship program explored the job characteristics that Gen Z workers consider to be important in career-decision-making and the extent to which they perceive these would be available to them in a construction career. The job characteristics that the trainees identified as being important to them included characteristics associated with having a healthy and balanced life and a diverse and fair workplace. In particular, having a job that enables them to have a healthy lifestyle, a reasonable workload that affords control over their work time, and with hours that do not interfere with non-work roles and interests were most important. Having a job characterised by gender diversity and fair treatment was also of high importance to 74% of the trainees in the current study (Turner et al., 2023). These findings are consistent with previous studies which report that a positive, supportive and diverse work environment and work-life balance are primary concerns of Gen Z workers when choosing a career (Ayoobzadeh et al., 2024; Fodor & Jaeckel, 2018; Borg, 2024).

However, when asked whether they thought these characteristics would be available in a construction career, the trainees indicated a low level of expectation that some important characteristics would be available. In particular, the trainees had low expectations in relation to having a job that could be combined with parenthood, that would not interfere with non-work roles and interests, that would allow control over work time, that would not take them away from family for long durations and that would enable a healthy lifestyle (Turner et al., 2023).

Importantly, the size of the gap between perceived importance of these job characteristics and perceptions about their availability predicted the trainees' stated intention to remain in construction on completion of the traineeship program: the greater the gap, the less likely trainees were to commit to pursuing a construction career (Lingard et al., 2025).

The fact that having time for life outside work and having a job that allows a healthy lifestyle, gender diversity and fairness were also important to trainees in this study and highlights the importance of addressing the work practices, cultural norms and behaviours that currently negatively impact health and wellbeing, time for life and diversity.

The Culture Standard therefore addresses key characteristics that are likely to improve the attractiveness of careers in the construction industry for young workers and potentially improve recruitment, retention and diversification of the workforce.

The second round of key decision-maker interviews reinforced the importance of changing the culture of the construction industry in response to the shortage of skilled workers facing the industry. Many of the interview participants expressed the opinion that the construction industry has no other option but to change its culture and practices to be more attractive to young workers who currently regard construction as an unattractive career option.

4.5 Culture of care

The research results highlight the close interrelationships between the three pillars of the Culture Standard. This is evident in the way that the work environment characteristics of exposure to inappropriate banter and experiencing a respectful work environment (aspects of the diversity pillar) and experiencing work-life balance (related to the time for life pillar) were found to be significant predictors of workers' mental wellbeing at the Pilot Projects. Aspects of the psychosocial work environment addressed by the Culture Standard are closely related in the academic literature. For example, imbalanced work, high job demands and a lack of respect at work are linked to mental ill-health (Harvey et al., 2017).

The interview data collected from workers at the Pilot Projects also provides critical insights into how the time for life provisions enabled workers to participate more actively in activities outside work, e.g. spending time with family and friends and engaging in outdoor, sporting and leisure activities, which are reported to be health-promoting (Fancourt et al., 2021; Twohig-Bennett & Jones, 2018). The 2-day weekend was also widely reported by Pilot Project interview participants to improve rest and recovery and support positive family relationships, both of which are also strongly linked to health (Umberson & Thomeer, 2020; Fritz & Sonnentag, 2005).

Flexibility is a key component of the Culture Standard which requires organisations to develop and provide a flexibility plan outlining how they will support and promote flexibility for workers in both office and site-based roles. The interview data showed that flexibility was effectively negotiated by workers in these roles with many managerial or professional workers being able to work from home, start work late or leave work early to accommodate personal needs. In contrast to office-based workers, site-based workers, including those in operational or managerial roles, were not able to work from home due to the nature of their work, but these workers described being able to informally request flexibility to attend to personal matters during work time if necessary. The survey data also revealed high levels of managerial support for family life, work-life balance and work engagement. The Culture Standard therefore provides a collective right for workers to customise their work practices, albeit to varying degrees which can help to break down structural barriers for participation of under-represented groups in project-based construction roles. It is noteworthy that women who were interviewed at the Pilot Projects indicated that they felt more supported than at other projects at which they had worked.

Importantly, interviewees described how the culture of care fostered at the Pilot Projects created positive feelings in relation to work that led to them engaging in extra-role behaviour (i.e, working above and beyond minimum requirements). Previous research similarly shows that creating a positive environment in which workers experience high levels of work engagement improves task performance and reduces counter-productive behaviour at work (Yin, 2018). It is possible that, combined with improved organisation and planning and better rest and recovery, high levels of work engagement at the Pilot Projects contributed to many participants' observation that productivity was maintained and potentially improved under the Culture Standard. This may also explain why employee turnover was reported to be lower at the Pilot Projects than it was in the respective head contractor organisations delivering these projects.

Taken together, the research findings highlight that the impacts associated with implementing the Culture Standard should be understood in the context of all of the different (and interrelated) elements of the Standard. It is unlikely that a single element of the Culture Standard was uniquely responsible for the positive impacts observed. Rather, it is more likely that the strategies implemented in response to the requirements under the three pillars of the Culture Standard combined in synergistic ways to produce a positive outcome for the majority of participants at these projects, in both site- and office- roles.

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Part 6: Appendices

Appendix A – KDM interview guide

Stage One Interview questions

This interview explores how construction leaders and key decision-makers in government, industry and unions see the costs and benefits of 5/7day work week, with caps on hours for industry workers. We'd like you to consider the following questions from your perspective within your organisation, as well as your observations of the industry.

1. Can you tell me a bit more about what you do within your organisation? What is your role?

2. The government has agreed to trial limiting work hours to a fifty-hour work week over five days for government contracts on a number of selected projects in Victoria and New South Wales. What's your view on this?

3. What sorts of benefits would you want to see? What sorts of costs do you anticipate? What costs would you find acceptable? [Probe: think about gender, health, injury, workforce sustainability, productivity, quality and rework]

4. What are the problems – practical or political – to implementing this? Which, if any of these are in your ability to influence? How will you handle this? [Probe: think about internal and external to Government]

Stage Two Interview questions

The interviews were semi-structured, meaning they followed an interview guide with a set list of questions to cover, to allow for reliable, comparable data, but they were also flexible, allowing for the interviewers to probe and follow leads raised by the decision-maker. The interview guide consisted of the following questions:

1. What stood out for you in the evidence presented from the trials 9pilot projects)? Was there some evidence that was more compelling to you? Are the pilot outcomes what you expected?

2. What do you think about what others had to say in the key decision-maker interviews, including any views that were different from your own?

3. What do you think of the solutions suggested by others? Were there any game changers for the Culture Standard to succeed?

4. Do any deal breakers remain?

5. If you participated in the first round of interviews, has your view changed since we last interviewed you? If so, what do you think is behind that?

6. What next steps would you like to see the Culture Standard take?

Appendix B – Pilot Project survey questions

Table 6.1: Survey questions

Variable	Question (item)	Answer	Reference
Work demand	While working at this project, do you have enough time to finish your work tasks?	1 = Never 2 = Hardly ever 3 = Sometimes 4 = Often 5 = Always	Aronson et al. (2013)
	While working at this project, do you have to work at an extremely high pace?		
Workload	While working at this project, do you have to give attention to many things at the same time?	1 = Never 2 = Hardly ever 3 = Sometimes 4 = Often 5 = Always	Rothmann & Joubert (2007)
	While working at this project, do you work under time pressure?		
	While working at this project, do you have too much work to do?		
Managerial work-family support	My supervisor accommodates me when I have family or personal business to take care of – e.g., medical appointments, meeting with child's teacher, etc.	1 = Strongly disagree 2 = Disagree 3 = Neither agree nor disagree 4 = Agree 5 = Strongly agree	Behson (2005)
Fairness	On this project, people are treated the same regardless of their gender.	1 = Strongly disagree 2 = Disagree 3 = Neither agree nor disagree 4 = Agree 5 = Strongly agree	Mor Barak, Cherin, & Berkman (1998)
	This project hires and promoted people regardless of their gender.		
Life balance	I am satisfied with my work–life balance, enjoying both roles.	1 = Strongly disagree 2 = Disagree 3 = Neither agree nor disagree 4 = Agree 5 = Strongly agree	Haar (2013)
	Nowadays, I seem to enjoy every part of my life equally well.		
	I manage to balance the demands of my work and personal/family life well.		
Banter	At this project, banter sometimes goes too far.	1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree	
	At this project, banter sometimes targets women.		
Respect	Angry outbursts are not tolerated by anyone in my work group	1 = Strongly disagree 2 = Disagree 3 = Somewhat disagree 4 = Neither agree nor disagree 5 = Somewhat agree 6 = Agree 7 = Strongly agree	Walsh et al. (2012)
	My co-workers make sure everyone in my work group is treated with respect		
Engagement	I can tolerate the pressure of my work very well.	1 = Strongly disagree	Demerouti et al. (2010)

Variable	Question (item)	Answer	Reference
	Usually, I can manage the amount of my work well.	2 = Disagree 3 = Agree 4 = Strongly agree	
	When I work, I usually feel energised.		
Mental wellbeing	I've been feeling optimistic about the future.	1 = None of the time 2 = Rarely 3 = Some of the time 4 = Often 5 = All of the time	Ng Fat et al. (2017)
	I've been feeling useful.		
	I've been feeling relaxed.		
	I've been dealing with problems well.		
	I've been thinking clearly.		
	I've been feeling close to other people.		
	I've been able to make up my own mind about things.		

Appendix C – Description of statistical procedures

Internal consistency reliability check

When analysing data collected using psychometric scales, the first step of the analysis is to check the internal consistency reliability of those variables. Internal consistency reliability is a measure of the correlations between different items related to a particular variable. It measures whether several items (questions) that are intended to measure the same general construct produce similar scores.

The most common measure of internal consistency reliability is Cronbach's alpha coefficient. A Cronbach alpha coefficient between 0.7 and 0.8 is acceptable, between 0.8 and 0.9 is good and greater than 0.9 is excellent.

The Cronbach alpha coefficients reflect excellent internal consistency reliability for the construct of life balance (Cronbach's alpha =0.90), and acceptable internal consistency reliability for the constructs of mental wellbeing (Cronbach's alpha =0.73). The assessment of internal consistency reliability was not performed for managerial work-family support because it was measured using a single item.

One-way ANOVA procedure

The one-way analysis of variance (ANOVA) is used to determine whether there are any statistically significant differences between the means of three or more unrelated groups. During the analysis, the variance of data between different groups is compared with the variance of data within the groups using the F test statistic. The null hypothesis is that all group means are exactly equal. A larger F ratio indicates a larger variance between the groups compared to the variance within the groups, therefore, equal group means would be less likely in case of obtaining a larger F ratio. To test the statistical significance and decide whether to reject the null hypothesis, a p-value is calculated. The p-value indicates the probability of finding a given deviation from the null hypothesis, or a more extreme one, in a sample. A small p-value means that the data we have is unlikely under the null hypothesis. The convention is that if $p < 0.05$, then there is evidence to reject the null hypothesis and conclude that there is a statistically significant difference between the means of the groups.

Independent-samples t-test

A t-test is used to determine if there is a statistically significant difference between the means of two groups. The null hypothesis is that both group means are exactly equal. The magnitude of difference in the group means is expressed as a (t) score in t-test. The t-score is a ratio of the difference between the means of the two groups and the variation that exists within the groups. In addition, the statistical significance is indicated by the probability of observing such a difference in the groups' mean scores by chance (p) given the null hypothesis. A probability of equal to or less than 0.05 is often deemed to be significant leading to the rejection of the null hypothesis and concluding that the group means are not equal, i.e. there is a statistically significant difference between the means of two groups.

Chi-square test

A chi-square ($\chi 2$) test is used to determine if two categorical variables are independent, or if the distribution of one categorical variable differs in two or more independent groups. The basic idea of chi-square test is to compare the observed frequencies in specific categories to the expected frequencies in these categories by chance (p). The null hypothesis is there is no difference between observed frequencies and expected frequencies. Chi-square ($\chi 2$) is given by adding standardized deviations for each observation together, indicating the degree of deviation between the observed value and the expected value. The larger the $\chi 2$ value, the greater the likelihood of rejecting the null hypothesis. If the p value is less than 0.05, it indicates a significant relationship between the two categorical variables or that the distribution of one categorical variable differs across two or more independent groups.

Regression analysis

Regression analysis refers to the process of fitting a linear model to data to predict the values of an outcome variable (or dependent variable, Y) based on one or more predictor variables (or independent variables, X). The linear represents “straight line”, which can be defined by the slope of the line (b1) and the intercept of the line (b0). A positive b1 indicates a positive relationship between X and Y, while a negative b1 indicates a negative relationship. b0, b1…bn are called regression coefficients (i.e., b). If an independent variable (predictor) significantly predicts a dependent variable, its b-value should significantly differ from zero, which can be tested by a t-statistic, with the null hypothesis being the value of b is 0. If an independent variable significantly predicts a dependent variable through a third variable (indirect effect), then this third variable is a mediator. The test of mediation effect includes the following steps: (1) if the relationship between predictors and outcome is significant (without mediator); (2) if the relationship between predictors and mediator is significant; and (3) if the relationship between the mediator and outcome is significant when regressing the outcome on predictors including the mediator. If the relationship in step 1 is not significant, then there is no mediation effect. In step 3, if the relationships between predictors and outcome also remain significant by including the mediator, there is evidence for partial mediation, otherwise there is a full mediation effect. If one or more relationships in step 2 are insignificant, a Sobel test can be used to determine the presence of mediation effect.

Appendix D – Pilot Projects interview participant sampling frame

Table 6.2: Interview participant sampling frame

Work group	Gender	Life stage	Number
Blue	Man	< 35 and child-free	1
Blue	Man	< 35 and have dependent-aged children	1
Blue	Man	Mid-age (35-44 years) (may have dependent children or not)	1
Blue	Man	Older workers 50+	1
Blue	Woman	< 35 and child-free	1
Blue	Woman	< 35 and have dependent-aged children	1
Blue	Woman	Mid-age (35-44 years) (may have dependent children or not)	1
Blue	Woman*	Older workers 50+	1
White	Man	< 35 and child-free	1
White	Man	< 35 and have dependent-aged children	1
White	Man	Mid-age (35-44 years) (may have dependent children or not)	1
White	Man	Older workers 50+	1
White	Woman	< 35 and child-free	1
White	Woman	< 35 and have dependent-aged children	1
White	Woman	Mid-age (35-44 years) (may have dependent children or not)	1
White	Woman*	Older workers 50+	1
Role		**Employer**	
Supervisor		Head contractor	1
Supervisor		Head contractor	1
Supervisor		Subcontractor	1
Supervisor		Subcontractor	1
		TOTAL	**20**

*If the project does not employ women with all of the sampling characteristics outlined above, then other women can be included.

Appendix E – Pilot Projects interview schedule

Table 6.3: Interview questions and their associated prompts

Question	Prompts
A. Introduction	*Ethics - Standard Participant Information Sheet/Consent Form* *Start recording:*
B. Background Questionnaire Name: Age: Gender: Role: Years with [organisation] / [project]: Family structure: married/defacto/children/other Caring responsibilities (parents/aunt/uncle) When did they start on this project?	
C. Wellbeing 1. Do you feel your health and wellbeing is supported at this project? *For people who just started working on the project the start of the project* How do you expect your health and wellbeing to be on this project compared to other projects? 1a. Is the way your health and wellbeing is supported on this project different to your experience on past projects?	*Why? How? What do the project team do?* Why? *How?* *[job demand, work pace, pressure, work overload …]*
D. Work schedule 2. Can you pls describe to me your current work schedule? Is it the same as pervious projects? Is there any implication for your pay? How do you find it in terms of your productivity? Can you do all your work within the hours you currently work? Does that work for you? Do you like working those hours? Does it affect your health or wellbeing? Are you satisfied with the balance between work and non-work life at this project?	[*Days, start-finish time, number of construction sites they work on, number of hours per week*] *If so, how? Do you get enough rest/recovery between shifts?* *Why? (length of work hours as well as flexibility/control overwork time) – is it different from other projects you have worked on?*

On this project, what options are there to work flexibly – e.g. part-time, shorter hours, different start times? <u>If they have caring responsibility:</u> *How do you fit in your care responsibilities (children, aged parents) with your work schedule?* 3. Is participating in volunteering or community related activities something you like to do? *<u>If yes</u>:* • *on this project, are you able to participate in volunteering or community related activities (coaching sport, playing sport, volunteering)?* *<u>If no:</u>* • *What prevents you from participating?* • *Is this different to past projects you have worked on? How?* 4. Do you have a partner who works in a paid job? *<u>If yes</u>:* • How many hours, on average do your partner work per week? • Is this influenced by the number of hours you work? • If you could continue working the number of hours you work on this site, would your partner be able to increase the number of hours they work?	*Is it easier than other projects? Why?*
E. Inclusive culture 5. What is the work culture at this project like for workers? 6. Do you think it is different for women compared to men? Why/how?	*Is it any different to other projects you've worked at? How?* Offensive behaviour called out? *Respectful interactions?* *Strategies to support women in construction?* *Amenities/and equipment?* *Other things that make it an inclusive culture?*
F. Formal policies 7. Do you know if policies have been put in place to support women at this project? Are the policies the same as other projects you've worked on or different? How? Are these policies/strategies working? Could the project do more to support women?	*Gender pay equality* *How are women recruited into project roles?* *Do they have the same opportunities as men?* *Are they working?* *How/why? Give examples.*

G. Implementation of the standard into the future:	**New questions added for interviews in round 3**
8. Now that you have had a bit of time working under the Culture Standard, what do you think it would be like if your workplace kept doing this beyond the life of the project, say for 5 or 10 years? 9. How long do you think it would take for the whole construction industry to adopt this new way of working? 10. Now that you have had a bit of time working under the Culture Standard, what changes would you make (if any) to make it work better?	
Are there any other things you would like to add or any questions you have for me?	

Appendix F – Statistical analysis results

Table 6.4: Comparison of mean scores for perceptions of work experiences and mental wellbeing in different age groups

Variable	Age group	N	Mean score	Standard deviation	F-ratio	p-value
Work demand	<30 years	120	3.11	0.98	3.484	0.032*
	30-49 years	230	3.13	0.90		
	≥50 years	68	2.79	0.99		
Workload	<30 years	116	3.78	0.87	0.099	0.905
	30-49 years	226	3.74	0.87		
	≥50 years	68	3.79	0.87		
Managerial work family support	<30 years	119	3.78	1.38	2.281	0.103
	30-49 years	230	3.94	1.29		
	≥50 years	64	4.20	0.98		
Work-life balance	<30 years	117	3.16	0.92	2.915	0.055
	30-49 years	227	3.30	0.82		
	≥50 years	63	3.48	0.73		
Organisational fairness	<30 years	119	3.72	1.00	1.828	0.162
	30-49 years	220	3.87	0.92		
	≥50 years	67	3.64	0.94		
Banter	<30 years	119	1.85	0.73	5.032	0.007*
	30-49 years	224	1.96	0.73		
	≥50 years	67	2.20	0.69		
Respect	<30 years	111	5.27	1.34	0.487	0.615
	30-49 years	214	5.42	1.30		
	≥50 years	65	5.40	1.31		
Engagement	<30 years	116	2.87	0.63	4.236	0.015*
	30-49 years	216	3.04	0.60		
	≥50 years	69	3.10	0.55		
Mental wellbeing	<30 years	111	21.32	4.02	1.762	0.173
	30-49 years	211	22.20	3.91		
	≥50 years	62	21.86	4.23		

* Difference in mean scores is significant at the 0.05 level.

Table 6.5: Bonferroni post hoc tests for between group differences

Dependent variable	(I) Age group	(J) Age group	Mean difference (I-J)	p-value
Work demand	1	2	-0.01	1.000
		3	0.32	0.077
	2	1	0.01	1.000
		3	0.33	0.032*
	3	1	-0.32	0.077
		2	-0.33	0.032*
Banter	1	2	-0.11	0.522
		3	-0.35	0.005*
	2	1	0.11	0.522
		3	-0.24	0.056
	3	1	0.35	0.005*
		2	0.24	0.056
Engagement	1	2	-0.17	0.036*
		3	-0.23	0.037*
	2	1	0.17	0.036*
		3	-0.05	1.000
	3	1	0.23	0.037*
		2	0.05	1.000

* Difference in mean scores is significant at the 0.05 level.

Table 6.6: Comparison of mean scores for perceptions of work experiences and mental wellbeing between salaried and waged workers

Variable	Participants' pay type	N	Mean score	Standard deviation	t-value (equal variance assumed)	p-value
Work demand	Salaried	100	2.99	0.87	-1.061	0.289
	Waged	315	3.10	0.96		
Workload	Salaried	99	3.90	0.72	2.133[a]	0.034*
	Waged	311	3.71	0.90		
Managerial work family support	Salaried	100	4.28	1.07	3.575[a]	<0.001*
	Waged	312	3.81	1.33		
Work-life balance	Salaried	97	3.37	0.87	1.188	0.236
	Waged	308	3.25	0.84		
Organisational fairness	Salaried	98	3.98	0.93	2.342	0.020*
	Waged	305	3.73	0.96		
Banter	Salaried	97	1.94	0.68	-0.440	0.660
	Waged	312	1.98	0.75		
Respect	Salaried	95	5.61	1.04	2.339[a]	0.020*
	Waged	295	5.30	1.39		
Engagement	Salaried	97	3.11	0.58	2.024	0.044*
	Waged	304	2.97	0.61		
Mental wellbeing	Salaried	94	22.62	3.60	2.047	0.041*
	Waged	288	21.66	4.08		

[a]. Equal variances not assumed.
*. The mean difference is significant at the 0.05 level.

Table 6.7: Comparison of mean scores for perceptions of work experiences and mental wellbeing by gender

Variable	Gender group	N	Mean score	Standard deviation	t-value (equal variance assumed)	p-value
Work demand	Men	359	3.10	0.94	-1.956	0.051
	Women	43	2.80	0.83		
Workload	Men	355	3.73	0.87	0.863	0.388
	Women	43	3.85	0.83		
Managerial work family support	Men	356	3.92	1.27	0.743	0.458
	Women	44	4.07	1.17		
Work-life balance	Men	351	3.29	0.84	1.000	0.318
	Women	42	3.43	0.72		
Organisational fairness	Men	351	3.86	0.90	-3.106	0.002*
	Women	40	3.39	1.02		
Banter	Men	354	1.92	0.70	4.428	<0.001*
	Women	41	2.44	0.78		
Respect	Men	336	5.45	1.25	-0.873	0.383
	Women	40	5.26	1.36		
Engagement	Men	346	3.02	0.59	0.588	0.557
	Women	40	3.08	0.68		
Mental wellbeing	Men	333	22.07	3.96	-0.957	0.339
	Women	38	21.43	3.31		

*. The mean difference is significant at the 0.05 level.

Table 6.8: Comparison of mean scores for perceptions of work experiences in different mental wellbeing groups

Variable	Mental wellbeing group	N	Mean score	Standard deviation	F-ratio	p-value
Work demand	Low	102	3.30	0.96	9.526	<0.001*
	Medium	252	3.01	0.88		
	High	26	2.46	0.92		
Workload	Low	103	3.81	0.89	0.322	0.725
	Medium	250	3.74	0.84		
	High	26	3.71	0.97		
Managerial work family support	Low	102	3.75	1.28	3.620	0.028*
	Medium	253	4.02	1.22		
	High	26	4.42	1.21		
Work-life balance	Low	101	2.95	0.84	23.843	<0.001*
	Medium	248	3.37	0.75		
	High	26	4.09	0.93		
Organisational fairness	Low	102	3.37	1.10	15.457	<0.001*
	Medium	249	3.93	0.79		
	High	27	4.13	1.10		
Banter	Low	103	2.09	0.86	6.388	0.002*
	Medium	249	1.96	0.63		
	High	26	1.54	0.65		
Respect	Low	99	4.82	1.59	20.587	<0.001*
	Medium	246	5.53	1.09		
	High	26	6.37	0.75		
Engagement	Low	103	2.66	0.66	38.616	<0.001*
	Medium	248	3.11	0.50		
	High	24	3.58	0.36		

*. The mean difference is significant at the 0.05 level.

Table 6.9: Bonferroni post hoc tests for between group differences

Dependent variable	(I) Wellbeing group	(J) Wellbeing group	Mean difference (I-J)	p-value
Work demand	1	2	0.29	0.022*
		3	0.84	<0.001*
	2	1	-0.29	0.022*
		3	0.55	0.010*
	3	1	-0.84	<0.001*
		2	-0.55	0.010*
Managerial work family support	1	2	-0.27	0.187
		3	-0.68	0.038*
	2	1	0.27	0.187
		3	-0.41	0.330
	3	1	0.68	0.038*
		2	0.41	0.330
Work-life balance	1	2	-0.41	<0.001*
		3	-1.14	<0.001*
	2	1	0.41	<0.001*
		3	-0.72	<0.001*
	3	1	1.13	<0.001*
		2	0.72	<0.001*
Organisational fairness	1	2	-0.55	<0.001*
		3	-0.76	<0.001*
	2	1	0.55	<0.001*
		3	-0.20	0.805

	3	1	0.76	<0.001*
		2	0.20	0.805
Banter	1	2	0.13	0.347
		3	0.55	0.001*
	2	1	-0.13	0.347
		3	0.42	0.012*
	3	1	-0.55	0.001*
		2	-0.42	0.012*
Respect	1	2	-0.71	<0.001*
		3	-1.54	<0.001*
	2	1	0.71	<0.001*
		3	-0.83	0.003*
	3	1	1.54	<0.001*
		2	0.83	0.003*
Engagement	1	2	-0.45	<0.001*
		3	-0.92	<0.001*
	2	1	0.45	<0.001*
		3	-0.47	<0.001*
	3	1	0.92	<0.001*
		2	0.47	<0.001*

*. The mean difference is significant at the 0.05 level.

Table 6.10: Comparison of mean scores for perceptions of work experiences and mental wellbeing between vertical and horizontal projects

Variable	Project group	N	Mean score	Standard deviation	t-value (equal variance assumed)	p-value
Work demand	Vertical	227	3.31	0.98	5.846[a]	<0.001*
	Horizontal	196	2.80	0.82		
Workload	Vertical	228	3.90	0.87	3.608	<0.001*
	Horizontal	189	3.60	0.83		
Managerial work family support	Vertical	228	3.80	1.33	-2.204	0.028*
	Horizontal	193	4.08	1.21		
Work-life balance	Vertical	224	3.26	0.88	-0.750	0.454
	Horizontal	190	3.32	0.80		
Organisational fairness	Vertical	223	3.79	0.92	-0.155	0.877
	Horizontal	189	3.80	0.99		
Banter	Vertical	228	2.03	0.74	1.867	0.063
	Horizontal	189	1.90	0.71		
Respect	Vertical	220	5.39	1.33	0.103	0.918
	Horizontal	177	5.37	1.31		
Engagement	Vertical	226	2.94	0.62	-2.513	0.012*
	Horizontal	182	3.09	0.58		
Mental wellbeing	Vertical	213	22.09	3.92	1.004	0.316
	Horizontal	176	21.68	4.05		

[a]. Equal variances not assumed.

*. The mean difference is significant at the 0.05 level.

Table 6.11: The effects of work experiences on mental wellbeing

Variable	b	Standard error	β	p-value
(Constant)	14.74	1.59		<0.001
Work demand	-0.93	0.24	-0.22	<0.001**
Workload	0.36	0.25	0.08	0.148
Managerial work-family support	-0.16	0.17	-0.05	0.358
Work-life balance	1.55	0.26	0.32	<0.001**
Organisational fairness	0.14	0.22	0.03	0.521
Banter	-0.59	0.25	-0.11	0.021*
Respect	0.85	0.17	0.28	<0.001**
Work hours	0.04	0.12	0.02	0.720

R^2 = 0.35, Dependent variable: mental wellbeing
*. Significant effect at 0.05 level
**. Significant effect at 0.01 level

Table 6.12: The effects of work experiences on work engagement

Variable	b	Standard error	β	p
(Constant)	1.78	0.24		<0.001
Work demand	-0.12	0.04	-0.19	0.001**
Workload	0.02	0.04	0.02	0.673
Managerial work-family support	0.04	0.03	0.07	0.172
Work-life balance	0.16	0.04	0.22	<0.001**
Organisational fairness	0.02	0.03	0.03	0.648
Banter	-0.00	0.04	-0.00	0.979
Respect	0.14	0.03	0.30	<0.001**
Work hours	0.02	0.02	0.04	0.359

Dependent variable: work engagement
**. Significant effect at 0.01 level

Table 6.13: The effects of work experiences and work engagement on mental wellbeing

Variable	b	Standard error	β	p
(Constant)	9.93	1.57		<0.001
Work demand	-0.63	0.23	-0.15	0.005**
Workload	0.32	0.23	0.07	0.154
Managerial work-family support	-0.24	0.15	-0.07	0.116
Work-life balance	1.13	0.24	0.23	<0.001**
Organisational fairness	0.10	0.20	0.03	0.613
Banter	-0.57	0.23	-0.10	0.015*
Respect	0.52	0.16	0.17	0.001**
Work hours	-0.00	0.11	0.00	0.994
Engagement	2.59	0.32	0.40	<0.001**

R^2 = 0.46, Dependent variable: mental wellbeing
*. Significant effect at 0.05 level
**. Significant effect at 0.01 level

Table 6.14: Comparison of mean scores for perceptions of work experiences between Project B and the Non-Culture Standard project

Variable	Project group	N	Mean score	Standard deviation	t-value (equal variance assumed)	p-value
Work demand	Project B	170	3.55	0.91	2.279	0.023*
	Non-Culture Standard project	165	3.32	0.87		
Workload	Project B	171	4.06	0.80	2.005[a]	0.046*
	Non-Culture Standard project	159	3.87	0.88		
Managerial work family support	Project B	171	3.70	1.42	-4.102[a]	<0.001*
	Non-Culture Standard project	172	4.26	1.05		
Work-life balance	Project B	167	3.17	0.91	-0.867	0.387
	Non-Culture Standard project	167	3.26	0.90		
Banter	Project B	171	2.02	0.78	2.928	0.004*
	Non-Culture Standard project	162	1.78	0.69		
Respect	Project B	163	5.38	1.36	2.632	0.009*
	Non-Culture Standard project	155	5.00	1.16		

[a]. Equal variances not assumed
*. The mean difference is significant at the 0.05 level.

Table 6.15: Comparison of mean scores for perceptions of work experiences between Project E and the Non-Culture Standard project

Variable	Project group	N	Mean score	Standard deviation	t-value (equal variance assumed)	p-value
Work demand	Project E	62	2.90	0.84	-1.414	0.160
	Non-Culture Standard project	47	3.15	0.97		
Workload	Project E	61	3.56	0.70	-1.271[a]	0.207
	Non-Culture Standard project	44	3.76	0.82		
Managerial work family support	Project E	61	3.92	1.27	0.888	0.377
	Non-Culture Standard project	47	3.70	1.23		
Work-life balance	Project E	61	3.31	0.80	2.299	0.024*
	Non-Culture Standard project	45	2.94	0.84		
Banter	Project E	61	1.90	0.63	0.256	0.798
	Non-Culture Standard project	46	1.87	0.65		
Respect	Project E	54	5.69	1.09	3.501	<0.001*
	Non-Culture Standard project	43	4.74	1.49		

[a]. Equal variances not assumed
*. The mean difference is significant at the 0.05 level.