External Research Report ER93 [2024]

Workplace psychosocial stressors in the construction industry: Perspectives of construction industry stakeholders

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This report was prepared by MATES in Construction, NZ.

BRANZ Funded from the Building Research Levy

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boutique insights
For bespoke research & evaluation

ISSN: 2423-0839

Preface

The views expressed in this research report are the outcomes of the independent research and should not be regarded as being the opinion or responsibility of The Building Research Association of NZ (BRANZ) or MATES in Construction NZ (MATES).

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About the Funders and Contributors

This research was generously funded by the Building Research Levy NZ (BRANZ) and requested by MATES in Construction NZ.

The Building Research Association of NZ (BRANZ) is a multi-faceted, science-led organisation, which uses independent research, systems knowledge and its broad networks to identify practical solutions that improve New Zealand's building system performance to deliver better outcomes for all.

MATES in Construction NZ was established by the construction industry in 2019 in response to the unacceptably high rate of suicide among construction workers. MATES NZ has been adapted from the successful Australian MATES model and is one of the few well-documented and evaluated workplace-based suicide prevention programs globally.

Acknowledgements

We would like to thank all the construction industry participants who gave so generously of their time to be involved in this research. We also wish to acknowledge the huge efforts from the staff at MATES in Construction, who, with Dr Chris Bowden and Dr Lauren Donnan, undertook the mammoth task of organising and setting up the focus groups and interviews, providing support as the researchers conducted them, and following up with participants afterwards. We also acknowledge the support of the field officers from MATES in Construction who attended the focus groups to provide additional participant support, and the BRANZ Research Team representatives who guided the researchers throughout the project. A special thank you too to the expert peer reviewers;

- Dr John Fitzgerald, WorkSafe
- Professor Tony LaMontagne, Deaken University
- Allen Hou and Josiah Jennings, Asian Community Transformation Trust
- Emma Dunkley, Christchurch Field Officer, MATES
- James Sendall, Auckland Field Officer, MATES

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Reference

Jenkin G, Donnan L, Bowden C, Hoskin A. 2024. *Workplace psychosocial stressors in the construction industry: Perspectives of construction industry stakeholders*. Research funded by Building Research Levy NZ (BRANZ) and requested by MATES in Construction NZ: Auckland.

Keywords

Construction industry, psychosocial factors, mental health, stressors, intervention

Abstract

Understanding the psychosocial stressors of an industry or workplace is vital for developing solutions to mitigate their adverse effects on mental health.

This research provides a comprehensive exploration of the perceptions and experiences of stakeholders in the construction industry regarding psychosocial stressors, their mental health impacts, and possible solutions to help mitigate those impacts.

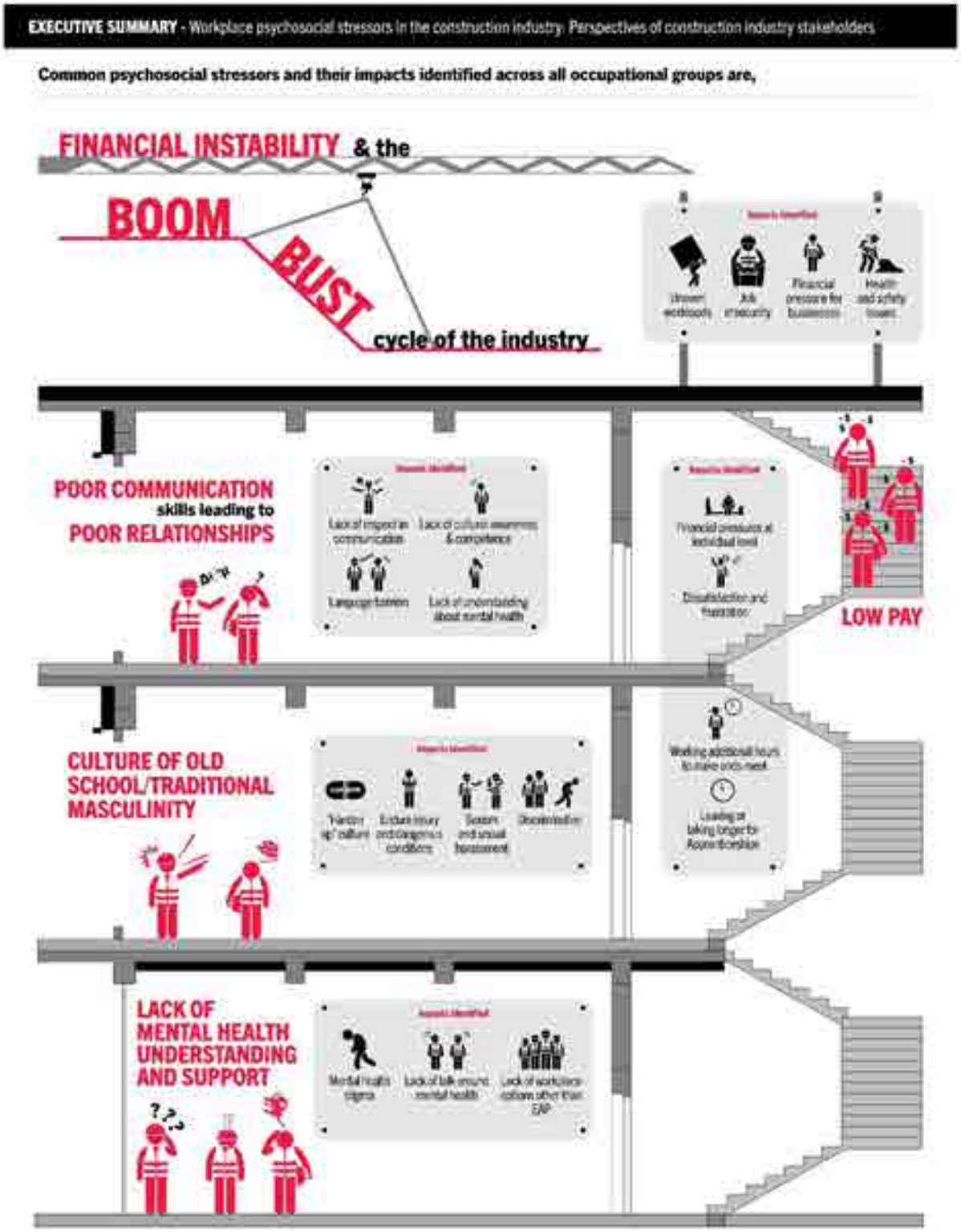
The qualitative research design including 19 focus groups and two interviews with a total of 115 participants allowed for a nuanced, deeper dive investigation of psychosocial stressors as experienced and seen by key occupational groups within the construction industry. The research included 15 apprentices, 30 'boots on the ground' (blue-collar) workers, 16 migrant workers, 15 workers from a mix of construction roles, 18 health and safety managers, 14 white collar workers, and seven peak body and government agency representatives.

Through qualitative analysis, this research identified five workplace-based psychosocial stressors common to and affecting all stakeholder groups directly or indirectly. (1) Financial instability, driven by the industry's boom-and-bust cycle, emerged as the most significant stressor, influencing almost all other workplace issues. (2) Poor communication further exacerbated stress, contributing to a negative work environment, while the (3) entrenched culture of old-school masculinity fostered harmful behaviours and attitudes. (4) Low pay and job insecurity, especially in the context of a cost-of-living crisis, compounded the stress experienced by workers. Additionally, (5) a lack of mental health understanding and support in the workplace hindered efforts to address these issues effectively.

Stakeholders' proposed solutions included government intervention through infrastructure spending, better regulation of procurement processes, and encouraging business diversification. Improving communication skills, fostering supportive workplace cultures, and providing financial literacy training were also suggested solutions. Specific interventions, such as limits on overtime, workplace based mental health programmes, and integrating workplace wellness initiatives, will likely be needed to improve worker wellbeing.

The findings align with previous research, highlighting persistent issues in the construction industry. However, there is optimism as cultural change is evident, with increasing discussions on mental health and wellbeing in the sector.

Infographic: research summary



Solutions to help mitigate workplace stressors identified and discussed by participants*,

- Financial instability & the Boom Bust cycle of the industry
  - Government intervention was proposed to regulate boom-bust industry fluctuations through infrastructure spending
  - Better planning or regulation of government procurement of construction
  - Limits on overtime and implement hourly limits for work done per week
  - Incentivise retention of skilled workers and develop flexibility in the workforce
  - Financial literacy training
- Poor communications skills leading to poor relationships
  - Training of leaders and site managers in interpersonal skills and communication skills
  - Selecting leaders or promoting staff with cultural competence and interpersonal skills
  - Building stronger social support networks
  - Pastoral care-focused health and safety approaches
  - Upskill language and cultural champions
  - English courses and identifying key migrant English speakers and providing mental health materials in migrant languages
- Culture of old school/traditional masculinity
  - Foster a positive workplace culture
  - Build stronger social support networks
  - Find allies
  - Addressing sexual harassment through education
  - Employers to implement clear policies and procedures and fostering a collaborative work environment to combat sexism and discrimination
  - Individuals and leaders to set boundaries and prioritise personal wellbeing and family/whānau time
- Low pay
  - Increase hourly wages
  - Employers to provide additional benefits
  - Guaranteeing minimum hours
  - Government funding income support
  - Government underwriting of apprenticeships to guarantee a minimum number of hours and employment stability
  - Implementing a minimum wage standards in supplier contracts and tendering process
- Lack of mental health understanding and support in the workplace
  - Integrating mental health programs across construction sites
  - Embedding mental health outcomes in procurement processes and contracting agreements to prioritise worker wellbeing from the outset and hold employers accountable for prioritising employee wellbeing
  - Training managers in interpersonal skills
  - Mental health materials in migrant languages
  - Partnerships with organisations like MATES in Construction

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*Please note, the following report solutions identified and discussed by the participants, the solutions presented do not reflect all possible solutions nor all evidence-based interventions. Further, the researchers did not systematically assess the viability or efficacy of the solutions identified by participants.

Abbreviations, acronyms, and definitions

ASIST	Applied Suicide Intervention Skills Training provided by LivingWorks
BCITO	Building and Construction Industry Training Organisation
Blue collar workers	Work most often in a non-office setting and perform physical duties (e.g., machine operator)
Boots on the ground	Colloquial term for blue collar workers
BRANZ	Building Research Association of NZ
CHASNZ	Construction Health and Safety NZ
EAP	Employee Assistance Programme
Horizontal construction	Roadworks and residential
Onsite construction	Traditional construction where structures are built sequentially in their permanent location
Offsite manufacturing	Manufacturing and pre-fabrication prior to installation on-site
Suicide literacy	Knowledge and understanding of risk factors, indications, intervention strategies, and available resources related to suicide, aimed at effectively recognising and addressing potential risks
Vertical construction	Tall builds (e.g., high rise buildings)
White collar workers	Work most often in office settings, and, as the name implies, they would commonly wear a tailored work-shirt (e.g., an architect)

Contents

Introduction

Aim

The purpose of this research was to canvass workplace psychosocial stressors and the associated mental health impacts experienced by construction industry stakeholders in Aotearoa New Zealand (NZ). Additionally, this research investigated construction industry stakeholders' perspectives on potential mitigation strategies or solutions to these impacts.

Background

The construction industry suffers a considerable burden of suicide internationally (WHO, 2020). Globally, suicide rates in the construction sector are on average 25% higher than those in other industries (Tyler et al., 2022). In Australia, construction workers have a suicide rate more than twice as high as that of men working in other fields (Maheen et al., 2022). In NZ, the most recent research (Jenkin and Atkinson, 2021) revealed that age standardised rates overall for men working in the construction industry for 2007-2019 were 19.71 per 100,000 people compared to 14.44 per 100,000 for men working outside of construction. Men in some specific construction trades have a higher risk of suicide compared to those in other occupations. For example, in Australia it was found that labourers and trade workers had a higher rate of suicide (Milner, 2013), and in NZ, male technicians and trades workers, painting trades workers, carpenters, electricians, joiners and plumbers were found to be at higher risk (Jenkin and Atkinson, 2021).

Due to these high suicide rates and increased concern around the mental health and wellbeing of men in the construction industry, MATES was set up to provide mental health and wellbeing support to industry. Since MATES inception in NZ there have been further research efforts aimed at understanding the mental health and wellbeing of workers in the construction industry, and the impact of MATES in reducing stigma and increasing suicide literacy among workers. This has included two surveys (Jenkin et al., 2022; MATES in Construction NZ, 2024), both of which gave cross-sectional snapshots of mental health and wellbeing of workers in the industry as well as key stressors. Both surveys revealed continuing high levels of suicidal ideation and mental distress and indicated some potential psychosocial stressors for further investigation. However, very little NZ based qualitative work has been undertaken to understand, from the workers' perspectives, the types and nature of workplace psychosocial stressors in the NZ construction industry that might be contributing to the poorer mental health of its workers. One exception to this was an interview-based study by Bryson and Duncan (2018) examining factors behind the high suicide rates in construction, although this was limited to the perspectives of industry organisation representatives.

To address the evidence gap, this research was designed with MATES with the aim of unpacking workplace-based factors impacting on the mental health and wellbeing of construction industry workers. This research is focused on the role and nature of workplace based psychosocial stressors as seen from the perspectives of those working in key occupational groups in the construction industry.

It is hoped that by understanding more about these workplace stressors and their impacts on mental health and wellbeing, and canvassing potential mitigation strategies, that priority and impactful interventions and actions to improve mental health and wellbeing in the industry will become evident. These worker-identified interventions, together with interventions identified in the academic and policy literature, can then be canvassed with key industry stakeholders for their potential feasibility and likely impact in mitigating workplace stressors and improving mental health and wellbeing of construction workers.

Methods

Ethical approval

Ethical approval to conduct the research was obtained from Victoria University of Wellington Human Ethics Committee in 2023 (HEC 0000030792).

Research design

The research was qualitative with data collected via a series of focus groups and two individual interviews (for those who could not make the focus group times). The research was designed to examine psychosocial stressors in the workplace for different occupational groups within the construction industry, as previous research has indicated that people in particular construction industry occupations have a greater risk of suicide than other occupational groups (Jenkin and Atkinson 2021; Milner, 2013).

The following priority occupational groups of interest to the study were identified by MATES and the lead researcher prior to online recruitment; apprentices (including those in pre-apprenticeship training), 'boots on the ground' (blue collar labourers), migrant workers, health and safety professionals and site managers, business owners and CEOs of small and large construction businesses, labour hire companies, white collar industry workers (architects, engineers and consultants), construction industry peak body representatives and key government officials of major government departments. There are good theoretical and practical reasons for using these occupational groupings. First, they are similar in terms of their occupational and socioeconomic characteristics, education, income and social status and lifestyle (Boven et al, 2022). Second, similar occupations are likely to experience many similar workplace psychosocial stressors including those shared by all occupation groups in the industry.

Recruitment

Recruitment was undertaken by MATES personnel via an online form advertising the study. The form was widely distributed through MATES' and construction industry peak bodies' established networks and social media channels. In addition, posters displaying QR codes linking to the online form were displayed at trade desks and on work sites. All recruitment material included contact information for MATES supports, in case a worker (and potential research participant) became distressed or required support. Wellbeing information and tools were also included on all recruitment posters. Construction industry workers belonging to one of the key priority occupation groups were asked to indicate their interest in participating in a focus group with others in similar industry occupations, to be held face-to-face with the lead researcher (GJ) supported by MATES' staff, at the MATES' Auckland office, or online.

Koha (gift) of $50-$150 voucher was offered to participants as reimbursement for time and travel to get to the focus group venue, with $50 koha for white collar, CEO, peak body representatives and government officials – note some participants could not accept koha due to their organisations' policies and instead MATES donated their koha to a charity of their choosing. $150 koha was offered for boots on the ground, migrant workers, apprentices, labour hire, site managers, and health and safety. Food and refreshments were provided to focus group participants attending in person, with dietary/cultural requirements requested and catered to. Transport to the venue was provided by MATES' staff for those who needed it. For potential participants for whom English was a second

language, an interpreter was offered. Workers were also asked if they had any transport/venue requirements due to a disability or illness so that MATES could accommodate all workers.

Data collection

Potential participants who identified as working in any one or more of the priority occupational groups of interest in this research were asked by MATES to indicate which of a series of scheduled focus groups they were interested in and available to attend. Those consenting to participate were then followed up by the MATES' Research Lead (LD) who provided participant information sheets and consent forms for signing. Information was collected from consenting participants about their needs for the day, including whether they required a translator for their focus group, had any accessibility requirements for the venue, needed transportation to and from the venue, or had any dietary restrictions.

Consenting participants were assigned to the various scheduled focus groups conducted over a three -week period. Text reminders were sent by phone the day before to each focus group participant, with the opportunity to ask any further questions. Focus group timings were decided in consultation between MATES and a group of construction industry representatives, for minimal interruption to workers' schedules and to avoid time off site and possible lost pay. Focus groups were scheduled on workdays, Monday to Friday, either very early at 6am-7am, during lunch time, or early afternoon or evening to fit in with each construction occupation groups' work schedules. The first batch of focus groups were scheduled over a week of data collection from the MATES' Auckland office, in November 2023, and the remaining focus groups (and interviews) were scheduled over the two weeks that followed and were conducted online. Two individual interviews were conducted online for those who could not make the scheduled focus groups. Online focus groups made sure participants across the motu/country were able to attend.

On the day of the face-to-face focus groups held in Auckland, two researchers were present to welcome the participants while waiting for other participants who were picked up from their site/residence by a third researcher and a MATES' staff member. While participants waited in the office for others to arrive, consent forms were re-checked by the researchers and participants were asked to fill in some basic demographic data. This included gender, age group, ethnicity (allowing participants to tick as many options as were provided as consistent with the NZ census ethnicity question), work location, occupation, and years in the construction industry. This demographic data was collected to ensure the researchers could adequately describe the sample and so that names where not required when using quotes in the report. Food and beverages were provided once participants were settled and following karakia (prayer).

Prior to recording the focus group, the lead researcher covered off the salient points in the Participant Information Sheet to assure participants of confidentiality (that no names would be used in the research findings and reports) and to provide participants with an opportunity to ask any questions. This was followed by a brief overview of how the focus group would run, its length (about an hour) and focus group expectations. Following an opening karakia, the recorders were turned on and the focus group formally began with a quick roundtable of introductions, with each participant stating their name, occupation and work location (city). Two researchers, one male and one female, were present at all focus groups. Attending, as backup support for the participants and two researchers leading the focus group session, was a MATES ASIST (Applied Suicide Intervention Skills Training) trained staff member in case anyone became distressed or required support. LivingWorks ASIST is an internationally recognised evidence-based qualification gained over a two-day in-person workshop that trains volunteers how to recognise when someone may be distressed and/or thinking

about suicide, and how to provide a skilled intervention and develop a safety plan to connect them to further support.

The focus groups followed a semi-structured interview schedule, based on a simple interview guide that included the following questions:

- In your everyday work - what are your key stressors (and what impacts your mental health and wellbeing at work)? Or, what are the key psychosocial stressors negatively impacting the mental health of workers in the construction industry?
- What are the key issues facing the industry that impact on your and you co-workers' mental health?
- What are the causes of these stressors?
- What are the impacts of these stressors, on you, your co-workers, the workplace?
- What can be done about them? (what interventions, initiatives, supports, policies can help improve mental health and wellbeing in construction workers?)

The focus groups lasting 50-90 minutes were guided by the comments of participants. The sessions were concluded with a closing karakia. Participants were welcome to and did often stay around for an informal conversation afterwards.

Analysis

The focus group recordings were translated verbatim, and the transcripts were re-checked once for accuracy, then audio recordings revisited as needed by GJ as the data was iteratively coded into key themes under the following three domains of inquiry:

- Key psychosocial stressors in the workplace identified by participants (including perspectives or explanations of their causes or contributing/exacerbating/modifying/mediating factors).
- Impacts of the psychosocial stressors (where discussed) including any contributing/exacerbating/modifying/mediating factors.
- Potential solutions and perspectives on their acceptability or feasibility.

Interview data was analysed using the six steps outlined in reflexive thematic analysis (Braun & Clarke, 2022) enabling the extraction of detailed insights, summaries, and interpretations of key features and patterns in the data. This process involved the researchers GJ and AH first familiarising themselves with the data (e.g., transcribing verbal data, reading transcripts, creating notes of interest), then generating initial codes, wherein interesting features from within the data were coded to extract potential themes both within and across the participants. The researchers then searched for themes (e.g., coding and grouping codes, using thematic mapping), with key themes being compared with the key themes from the other focus groups in the same or broadly similar occupational group. For example, four focus groups were completed with boots on the ground workers, and the key themes from each of these groups was compared with the others. The themes were then reviewed and refined (e.g., interrogating themes in light of evidence, collapsing or expanding themes), which was an iterative process involving ongoing discussion with CB and LD who tested that there was sufficient evidence for themes and that the themes represented participant's experiences accurately. CB and LD were also involved in facilitating the focus groups and so were able to provide these accuracy and resonance checks. A definition and name were attached to each overarching theme, with GJ and AH prioritising the language and framing of the issues by participants. The final step was generating a report with coherent narratives of the data, themes supported by compelling data excerpts, and a reflection of the research questions (Braun & Clarke, 2021).

Researcher positionality and roles

For transparency, it should be noted that the four researchers involved in this project do not work in the construction industry, although two, CB and AH, have in the past worked as labourers in the industry. GJ is a female social scientist and academic, LD a female researcher and policy advisor and the research lead for MATES NZ, CB is a male lecturer in academia and on the Board of MATES NZ and AH is a female PhD Candidate in suicide studies. GJ, CB and LD were all involved in focus group facilitation and data analysis and AH assisted with parts of the data analysis.

How to navigate the report

The results are presented in eight separate results sections, *seven sections for the occupational groups*: apprentices, boots on the ground, migrant workers, mixed construction (including labour hire), health and safety and site managers, white collar workers including owners and CEOS, and peak bodies and government officials, and *an eighth section summarising the results overall*. Each of the first seven results sections follow the same format, beginning with a demographic overview of the focus group participants; age, gender and ethnicity. For ethnicity, participants could identify with more than one ethnic group so the total number by ethnicity is typically more than the number of participants. This is followed by a summary of the key psychosocial stressors identified before examining in depth the evidence underpinning the key psychosocial stressors, and where discussed, views about their causes, contributing factors, impacts on mental health and potential solutions as identified by and discussed with the participants. Verbatim quotes are referenced only to gender and focus group number (e.g. M, FG1 = male from Focus Group 1), to maintain participant confidentiality.

It is noteworthy that for some focus groups the data were particularly rich with discussions on multiple aspects of psychosocial stressors, their impacts and potential solutions, while for other groups, even with researcher prompting, there was much less discussion on some aspects of workplace stressors.

In reporting the key psychosocial stressors, the order in which they are reported in each chapter reflects their significance in the focus group discussion, with the most significant stressors presented first followed by the next most significant, and so on.

As a note of caution about the reporting of the solutions participants identified in response to some of the psychosocial stressors; the researchers only report what was discussed by the participants in the focus groups. Thus, the solutions presented in the results chapters do not reflect all possible solutions or all evidence-based solutions and interventions. Further, the researchers did not systematically canvass the viability or efficacy of many of the solutions identified by participants although the researchers do comment on some of the solutions where it was warranted by the narrative surrounding them.

Section Eight of the report summarises the key findings across all the groups, and this is followed by the final Discussion chapter.

Apprentices

"my boss was super old school . . . it's essentially just,
I've been through shit and so I'm fine with you going through shit"

This chapter includes the voices of 15 apprentices collected across three focus groups. 10 apprentices described their gender as male and five as female. All were aged 20-34 years bar two aged 35-44. 11 identified as Māori or Pasifika, three NZ/European, one Middle Eastern, and one Japanese. One apprentice was in Wellington, and the rest in Auckland or Northland.

Psychosocial stressors. Low pay, lengthy apprenticeships, the mismatch between training and job requirements, job insecurity, a culture of stoic traditional/old school masculinity, and sexual harassment were key psychosocial stressors.

The stress of low pay was felt more by some apprentices than others - a number of apprentices were aged 30 years plus and had children or family to support.

Despite low pay, apprentices suffered the stress of job insecurity – they did not have guaranteed employment throughout their apprenticeship and the boom bust cycle impacted them as it did other workers.

Limited opportunities through their employer to achieve training requirements and financial incentives for employers to hold onto apprentices kept many apprentices in training for longer than should be necessary.

Apprentices spoke about a "harden up" culture where they were expected to endure difficult conditions without complaint.

Apprentices said that they were not provided with enough instruction at work, were expected to learn "by osmosis", and were often not sure of what they should be doing, worried about asking for help, and hid their mistakes for fear of the consequences.

Female apprentices described some unfavourable encounters from some of their male co-workers, ranging from inappropriate comments to instances of "shocking" and "derogatory" remarks, loud yelling, aggressive posturing, and threatening behaviours.

Solutions canvassed. Some apprentices coped with low pay by working longer hours and some proposed seeking additional benefits from employers, while others proposed increasing pay rates or guaranteeing minimum hours. To address mismatches in training and employer tasks, solutions included seeking supplementary work experiences, improving communication between education institutions and employers, and assigning mentors. Solutions to workplace culture issues involved promoting more communication between education providers and employers/supervisors, better instructions, improved recognition of apprentice's work, stronger leadership education, targeted support for marginalised groups, and addressing sexual harassment through education, clearer policies and reporting procedures, and better support networks.

Results 1: Apprentices

Characteristics of apprentice participants

Three focus groups were conducted (face-to-face, online via Teams, and hybrid format) with apprentices. Some of the participants were not strictly apprentices, with two being in pre-training for an apprenticeship (i.e. had not yet secured an apprenticeship), one a junior site manager, and one in a health and safety role. However, these latter two participants spoke about the experiences of apprentices. Age, gender, and ethnicity characteristics of the participants in the three focus groups are provided in Table 1.

Table 1 Demographic characteristics of apprentice focus group participants

	FG1	FG2	FG3	Total
Total	9	2	4	15
Gender				
Male	8	2	0	10
Female	1	0	4	5
Age group				
20-24	3	1	1	5
25-34	6	1	1	8
35-44			2	2

Note. Ethnicity: Samoan=5, Māori=4, NZ European=3, Tongan=1, Middle eastern =1, Japanese=1, Cook Island Māori =1. One apprentice was located in Wellington, and the rest located in Auckland or Northland.

Psychosocial stressors for apprentices

The key psychosocial stressors that apprentices identified as impacting their working lives were the low pay, lengthy apprenticeships, the mismatch between training and job requirements, job insecurity, a culture of stoic traditional masculinity (largely experienced as toxic and problematic), and unique to female apprentices, sexual harassment.

Low pay

The biggest stressor faced by working apprentices was low wages. Apprentice wages were deemed low relative to all other wage earners in the construction industry, but more problematically, they were seen as inadequate to cover the basic costs of living in 2023.

Participants talked about how they were paid hourly (so no work meant no pay), at a low rate (and for some lower than the minimum wage), although there was some variation between employers:

> *some companies, when you go and start working with them, they have a pay bracket that's just allocated for apprentices (M, FG1).*

The impact of low pay meant that many apprentices struggled to afford necessities such as food and rent. Apprentices also had to deal with additional work-related costs (e.g., purchase of tools and the cost of maintaining a vehicle to travel to work). Although apprentices could apply for a

$1,000 allowance for initial tool purchases, this was a one-off allowance and did not fully cover the cost of tools required nor the cost of replacing tools that went missing or were damaged at work. Apprentices working in different suburbs across large cities, or in rural areas, had to travel considerable distances between home and work and/or between jobs. For many apprentices, a car was an expensive necessity due to the lack of reliable, affordable, and accessible public transport options in the early hours of the morning and for jobs not located near a transport hub. In many cases, apprentices said that job advertisements and employment contracts required that they own a reliable vehicle. Travel to out-of-town sites was a further expense noted by one apprentice who struggled to meet the cost of tools, protective clothing and gear/uniforms alongside additional costs associated with out-of-town jobs, while earning a small wage.

The stress of low pay was felt more by some apprentices than others. Older apprentices we heard from explained that it was a myth that most apprentices were school leavers, and that a considerable number of apprentices were aged in their thirties and had children and other family members to support.

Lengthy apprenticeships

Another issue exacerbating the low rate of pay was the length of time that apprentices remained at that low pay rate while they completed their training and obtained their qualification. The standard timeframe for completion of their trade was three to four years, but many said that it took longer. Factors influencing the length of apprenticeships were seen by most as largely outside of the apprentices' control. Some trades required more time; one participant said that his apprenticeship was split over five years between plumbing, drain laying and gas fitting qualifications, and another explained that working in the marine industry took longer:

> *I was working towards getting an electrical registration. And usually, it takes four years. On average, it was taking us seven years. Because it was the marine industry. (M, FG2)*

Another apprentice concurred:

> *That's the same with my job. Like, they're saying, 'Oh, we want to help, get you qualified.' But it's all just words. And then you'll be spending all your own time doing it . . . I know, people who came to the job … and they've been an apprentice, like, seven years, seven years! (M, FG2)*

The main reason for lengthy apprenticeships was limited opportunities to complete the tasks required to meet standards (explored further below)**.** Another reason given for lengthy apprenticeships was the lack of incentive for employers to support timely apprenticeship completion:

> *I was essentially told by my boss, 'I can keep you on apprentice wages pretty much until you're qualified', which is under minimum wage. So, there's a direct like money incentive there. (M, FG2)*

The impact of the lengthier apprenticeships was extended financial hardship, which apprentices expressed was a source of considerable financial stress and mental distress. Apprentices described their feelings of frustration and incompetence around not progressing quickly enough financially or career-wise. These feelings were further exacerbated for some older apprentices:

> *I would say one of the things that is my anxiety. I mean, going into work now. I'm 30. And it's gonna take me five years to qualify. . . So, lot of times is like, that's stressful for me. . . the age 30 is being considered old already. Given that all of us are here in a very*

labour intensive, demanding job. And, of course, obviously, for me, I'll be stressing like, I need to get this like, done as fast as possible. (M, FG1)

Another apprentice of a similar age felt the same pressure:

I'm in the same boat and I was labouring and then all these younger fellas doing all the stuff. And like I've done other jobs, it's a big blow on the ego you know? You got the pay cut, and then you gotta go back and start from square one. (M, FG1)

Mismatch between training and job requirements

A key stressor described in two of the apprentice focus groups was the challenge of completing the specific competencies required to advance in their qualification while also being limited in everyday work opportunities to develop the experience and skills required to meet the standards. Apprentices described limited support from their bosses, mentors, businesses, and external bodies;

something you stress about is . . . your boss; they have their own expectation of work that they need done. But as an apprentice, you also have standards that you need to complete. So, it's like, you know, there's no support coming from the boss… like very little companies actually provide that support. (M, FG1)

each company have their own agenda of work for the whole year, it doesn't align with, for me, as a builder . . . this is what you need to complete [training standards], you know, by the end of this year. That's what [training organisation] comes and tells you, but your boss doesn't care about that he just needs to get his work done. (M, FG1)

Some apprentices were proactive and found the required work experience outside their regular worksite as a way to meet core competencies, but this approach demanded time, required strong motivation, and a level of maturity.

And now with all the new build houses, it's just the same build, you know, right throughout the year. So, it's like, you'll get to a certain point at your apprenticeship, where you will get stuck, and it becomes your own responsibility to go and find that work with another company for the weekend to get that standard passed. If you're someone who's got a family or something that's hard if you have to go on the weekend. And it's not just one weekend, it's like, continuous, until they sign off on that. (M, FG1)

my company we didn't do slabs … so I had to like talk with another company which is based up at [a faraway location] . . . I went and done three weekends of work with him so the supervisor signed me off for doing slabs. And it's just like that, like every kind of standard that's not in your company, you have to go find it. (M, FG1)

Limited opportunities and a lack of help in securing experiences required to meet standards were key barriers to completing apprenticeship in a timely manner. This issue was a source of the ongoing financial hardship, frustration, disillusionment, and general dissatisfaction experienced by most apprentices in the focus groups across building industry trades, which also impacted on mental health:

your self-esteem just gets blown when it's like, oh my days I got five more years left of this and I'm not even moving forward. That's what gets to you and it's like, is it worth it? (M, FG1)

Apprentices also shared their frustration at being made to do job tasks unrelated to their trade training, which in turn hindered the timely completion of their apprenticeships, as noted by an electrical apprentice:

> *our company, we were doing like different things that weren't entirely electrical related. So, you're essentially being paid under minimum wage, to do something that isn't electrical. And the whole point of being paid under minimum wage is that you sort of get this training, yeah, and it's a pretty big grey area with like, what's actually allowed? I looked into it. And from what I can tell, it's 60 credits or less [or] you can't be on apprentice wages. But have fun trying to argue that with your boss. (M, FG2)*

The concluding sentence underscores the power dynamic between boss and apprentice, illustrating how this disparity can make it difficult for apprentices to have a say about their work. Some apprentices were also worried about questioning or challenging their boss about the tasks they were given because of the wording in their employment contract requiring them to do 'other tasks as and when required'. This was a considerable source of distress and acted to silence one apprentice from asking about work scope:

> *That's the thing that's gonna stress me out because there's more things to do. That's like one of the things that actually plays along with in my mental state. (M, FG1)*

When the focus group facilitators asked if there was independent monitoring of the apprenticeship system and their progress, and whether apprentices had assistance to understand their employment contracts, they were told "it's pretty hands off". These findings suggest that there is a lack of communication (advice and guidance), monitoring and support for the timely completion of apprentices' qualifications.

Job insecurity

Job insecurity was another key stressor that impacted apprentices – the threat of losing work or one's job was a real risk and created significant anxiety. In the time leading up to the focus group research reported here, there was a global economic decline, with a dramatic increase in living costs, tagged in the media as the "cost-of-living crisis". Food and housing costs had risen substantially, and mortgage rates and bank loan lending rates increased by up to or more than three-fold. Many apprentices said that they had entered the industry in the Covid-19 era, facilitated by government subsidies to address industry workforce shortages. Now, in line with the boom-and-bust cycle of construction, with the industry in decline, there was less investment, higher interest rates and more loan restrictions, leading to less work in the pipeline for the next ten years. Added to this, apprentices described the continuing policy and financial uncertainty brought about by the recent September 2023 NZ election and the resulting change of Government Party.

Apprentices told us, despite low wages, that they did not have guaranteed employment throughout their apprenticeship:

> *with a company, they can easily say, 'oh, we can't keep you on anymore. You've got four weeks left, start looking for another job'. (F, FG1)*

Apprentices were facing the threat of job loss as the boom slowed and the pipeline of work dried up, experiencing the stress and anxiety that can impact the construction industry workforce in times of financial instability and uncertainty.

For low paid apprentices, job insecurity meant they could face periods without income, making it difficult to afford necessities such as housing and food during times without work.

Culture of stoic, "old-school" masculinity

The work culture in the construction industry was described by apprentices as male dominated and stoic, and characterised by a "harden up" "old- school" brand of masculinity where surviving meant being a 'man's man'. Two noticeable power dynamics were at play, being the power differences between bosses and apprentices (similar to that of boss and employee generally) and a generational or cohort difference in values and work expectations between younger apprentices and the senior/older men on site. Apprentices reported a "manly man" culture among some of the senior tradespeople who had themselves experienced a tough onsite culture in their apprenticeship days, and who were now in leadership roles and repeating a similar unhealthy culture, which younger male apprentices questioned or found challenging:

> *my boss was super old school . . . it's essentially just, 'I've been through shit and so I'm fine with you going through shit'. (M, FG2)*

Injuries as badges of masculinity

The culture on sites was described by apprentices as one where the older workers had "earned their respect" through hard work and working in difficult or dangerous conditions. Injuries were 'worn' as badges of masculinity, and pressure was felt by apprentices to "harden up" and endure difficult conditions without complaint, as the older generations had.

> *Every person in the company had some significant injury. Right? Like, what is it? Hand, arm vibration syndrome. The fingers start looking a bit . . . different. One of the guys there had those fingers . . . back problems, knee problems, hearing problems. (M, FG2)*

> *The manly man, right? They're like, 'I've been through this, I've been through that'. Right. And we all do it a bit, like trying to harden up. I had rolled my ankle, and it swelled up to sort of like, the size of my fist, on the side of my ankle. And I was talking to my friends and I'm like, 'do you think I can just tape it up and go to work the next day?' And they had to be like, 'no, you can't just tape up your ankle'. And it turned out I had, like, ruptured one of the tendons and then half ruptured the tendon under it. Yeah. But my boss was like, 'why is it taking so long … I roll my ankle all the time, what's going on?' I'm like, 'I don't know. I haven't rolled my ankle before. But the entire foot's purple. Can't be too good'. Like, yeah, just old school expectations. Just breathe in asbestos. Yeah. (M, FG2)*

"Toughening up" and fighting onsite

Apprentices described the workplace culture as involving a general tolerance for undesirable behaviours on the worksite. One participant talked about apprentices being easy "scapegoats" and given difficult jobs by some bosses/managers, setting them up to fail. Some apprentices complained that they were given seemingly meaningless or repetitive work, while others talked about a culture where older tradespeople were verbally putting down or "messing with" younger apprentices as part of their induction and as a way of "toughening" them up. Most apprentices were of the view that they had to accept poor treatment, unsafe conditions, and tasks given to them without complaint for fear of jeopardising their apprenticeship.

Fighting and showing one's physical toughness was also a part of the traditional masculine culture on sites described by apprentices, which they found challenging. One apprentice talked about how one onsite conflict he witnessed played out as a physical fight:

one of the managers at the company was getting pissy with one of the other electricians. And he said, 'Hey, want to take this outside? And we'll settle this and we'll fight?' And the other guy said, 'Yes'. Like, this doesn't happen in normal industries. (M, FG2)

Poor treatment of apprentices

Poor treatment of apprentices, together with their low status and lack of power on worksites, adversely impacted their mental health and wellbeing by increasing the levels of frustration and stress. Several apprentices felt trapped in a difficult situation without recourse, and others reported resorting to increased use of unhealthy coping mechanisms, including drinking and smoking, to deal with the stress. Participants said that it was not uncommon for apprentices to leave the industry, citing the combination of poor treatment, low pay, and inability to progress in their career in a timely manner as reasons for quitting their apprenticeship.

Lack of instruction and mentoring

A further issue commonly raised by apprentices was lack of proper instruction from their seniors on the worksite. Apprentices described how initially they were told that they would receive on-the-job training, but in practice this rarely materialised. Apprentices said that they were often unsure of what they should be doing, and many were too scared to ask, given the culture in the workplace. One apprentice described this as an expectation that they will learn by osmosis:

I was told once you learn through osmosis, that's a good way to learn. Like you should be sweeping up and you'll just absorb the information. And yeah, I told him to go sweep up a basketball court and see how quickly they could play basketball. (M, FG2)

Fear of making mistakes

Apprentices were also worried about making mistakes because of the way others reacted and the personal costs.

I'm scared because, you know, given how expensive materials are, that I might make a mistake in my company, you know, like, if I screw up in something and it cost a lot of money? How would that look upon me? You know, is there a way I can deal with it, just gonna be like, is it going to fall on me? Do I have to pay, help pay the full amount? That's what I'm scared about. (M, FG1)

Another apprentice described how the culture in the industry chastised them for making mistakes:

apprentices have this kind of, like, stigma around them, like we're there to learn, but we get treated as if we should know everything if we get something wrong. And it's just like, it contradicts everything about an apprenticeship . . . quite literally learning. Like, it sucks to say, but like, we got to make mistakes regardless. Don't chastise us. When we make a mistake, we're trying our hardest, like the last thing you want to do is fuck up a big job and cost you money. And then you making us feel bad, on top of that. (F, FG3)

Some noted the likelihood of making mistakes in a context of lack of proper training or oversight was exacerbated by the pressure to complete jobs quickly, as was often expected:

especially as sparkies we're dealing with, you know, electricity that can just kill us without us seeing it. And when you're working, when you're rushing, mistakes are gonna happen. (M, FG2)

As a consequence of the stoic worksite culture, apprentices said that they experienced more stress:

> *and then that puts more added pressure because the next time you go to do something you're scared that you're gonna fuck it up and get in trouble. (F, FG3)*

Apprentices said that they managed this by covering up their mistakes:

> *when you do fuck it up you don't tell anyone … I've seen some like, let's be honest, fourth year apprentices? 'No, I don't know how to wire up a switch or test them'. A lot of them don't know how to test and it's because they're too scared to ask because they've got this impression that they should already know how to do these things or understand how it works. (F, FG3)*

Sexual harassment

During the female only apprentice focus group, the conversation centred on the significant challenges women faced with inappropriate behaviours exhibited by some men in the workplace. While these incidents were not an everyday occurrence, all four women in the female only apprentice focus group recounted instances of sexual harassment in the workplace.

Female apprentices shared various unfavourable encounters, ranging from inappropriate comments to instances of "shocking" and "derogatory" remarks, yelling, aggressive posturing, and threatening behaviours by male workers towards female apprentices. Female apprentices also described instances of bullying towards others onsite, and notably one incident described involving a serious act of collective intimidation by a group of men to a female staff member.

Sexism and sexual harassment

One apprentice told us how alarmed she was with some of the comments made by men on the worksite:

> *it's when people say like, really derogatory shocking things. Yeah. And it's like, I don't think you should say this in front of anyone. Like, there's a woman here. Maybe we shouldn't say that? No. Just don't ever say that to anyone! (F, FG3)*

One apprentice recounted the following comment made by a male worker:

> *. . . like, oh, "did you put your dick in her?" It's not that unusual, that sort of [comment]. (F, FG3)*

Such comments made women and others on the site feel uncomfortable. Similar to their male focus group counterparts, female apprentices also experienced a culture of not speaking up:

> *it's almost like a sheep mentality. But it's just like, is anyone else gonna say anything? No, then I'm not gonna say anything. (F, FG3)*

A female apprentice explained that the workplace culture included not only sexism but every other 'ism':

> *it's everything, like sexism, transphobia, homophobia, racial discrimination; all of the isms. Especially homophobia, actually, that is like a huge issue in trades. Huge. People are very scared of being looked upon as potentially being gay. One of the most frightening things. (F, FG3)*

Another female apprentice pointed out that there was an issue with some men not being able to self-regulate and manage their emotions appropriately, resulting in workers being yelled at:

a lot of men that I work with are not great at managing their emotions. And so, they generally like, if they think you've done something wrong, but it's not your fault, because you're still learning, they straightaway start like yelling and freaking out. And it's quite, you know, for me, just like, hey, there's literally no reason you should be yelling, like, we're good. We can sort this out. And so those are like, that doesn't happen often. But that's usually something that stresses me out. (F, FG3)

Bullying and aggressive behaviour

Various types of bullying (e.g., physical, verbal, social, racial, sexual) onsite were also reported. One woman discussed an incident where a 19-year-old male apprentice who she was working with was being bullied by a physically bigger subcontractor on site for around two months. The woman described having to physically put herself between the apprentice and subcontractor during an altercation to prevent the apprentice from being hit:

This is my stress at work. I had to butt in between a big guy. I'm very small. And the 19-year-old, I had to be in between them so that [the subcontractor] wouldn't hit him because like, [he was saying] 'I'm going to, I'm going to punch you and get you'. I can see [the subcontractor's] hand going in and [I said] 'Calm down here'. And then his hand came in and [I said] 'Are you gonna punch a woman now is that it?' That's how you talk to them. 'You're punching a woman now?' and [the subcontractor's] like, 'argh, no'. And then the guy [who was bullied] cried: actually, that was very human. Like, he was very bullied. And I didn't realise he was bullied on the site for about two months by this guy. Yeah, so we kicked [the subcontractor] out. So, we've blacklisted him. (F, FG3)

Intimidation

One woman described an aggressive incident with a male roofer who leaned over the top of her and yelled about how tough a roofer's life is and how she does not understand that. When the woman told him to calm down, he continued to yell at her:

I was the only woman, four guys shouting at me, right, surrounded me … and then our old man, our gate man, came. He was 74 [years old]; the gate man came and he said, 'what's going on?' He pulled me right out of there because I didn't know what to do anymore. (F, FG3)

The incident had lasting impacts on the woman, triggering anxiety attacks for her afterwards, and is illustrative of the very serious mental health impacts of harassment and abuse on the worksite.

Strategies for managing sexual harassment and bad behaviour

Several strategies were used by female apprentices to manage sexual harassment in the workplace including avoiding thinking about it, speaking up to the culprit, reporting it to more senior staff, and engaging with or finding workplace allies.

One female apprentice discussed how she tried to ignore what was going on, downplaying and minimising what happened to her:

I try to like not think about it, try to think like [that's] a one in a million thing that happened that's gonna go away. But the more I talk about it, and I've only just recently really just started openly talking about like harassment and stuff like that. The more I realise that other female apprentices relate, have worse experiences than what I've had

and didn't report or didn't speak up. And that's kind of like the problem I had with my last company where something happened. (F, FG3)

The same female apprentice described further incidents of sexual harassment:

So, I had a tradesman that professed love to me and he was like a 50 something year old man. So yeah, well, I was put under him as his apprentice. He left the company and came back and said, I came back for you. I didn't see the red flags at the time. Now that I talk about it now, I kind of see the red lights flashing . . . I told like maybe one or two people about it. And I was just like, is this weird? So, I was like, I didn't know how I felt about it. So, dismissal, dismissal. And then another incident happened with another builder from a different company on a different site; [he] was making some weird remarks, gave me a shoulder massage, and then made some weird remarks for another girl I was working with. And then one of the health and safety coordinators from that company came on, like the overseeing company came up to us and was just like, 'hey, we've had some weird experiences with this one particular dude, have you guys had any weird experiences with the guy?' We're like, 'Yeah, actually, now that you bring it up, here's a timeline of all the things that have happened'. I know it's pretty heavy. And then they very luckily red carded him, sent them off site and sent them off any other sites they have, which was really good. (F, FG3)

Speaking up

Some women found the courage to speak up although this did not always end well, particularly when there was a workplace culture that lacked awareness and an appropriate system for managing incidents and protecting staff:

So, I called into the head office, and I was like, 'Hey, I can't be this person's apprentice. This is why'. Even then I didn't tell them the full story either, because I didn't want to be that apprentice. And then they're like, 'cool, we'll take you out from that guy. He'll still be working on your same site' … I can't really remember what happened. But, I went, I was a little bit emotional, I kind of yelled at my boss, which, he didn't like that. (F, FG3)

Later, she spoke up:

So, later on I had a meeting with him [her boss]. I sat him down. I was like, 'hey, like, this is what's happened over the time. This is all the incidences that happened'. I was like, 'your reporting process was shit, the way he looked after your companies, which now your apprentices, are shit'. I was like, 'I told you I was being harassed. You guys didn't follow it up. Like I did all these things'. And then they're like, 'do you want to stay with our company?' And I was like, 'nah, I'm out. Sorry' . . . reporting harassment . . . like if it was to happen again, I'd probably be like, I don't ever really want to bring it up. Because I've already brought up all these other problems. I don't want to be a bigger problem. (F, FG3)

In the above instance, the apprentice described the workplace dealing with the complaint by suggesting the apprentice reconsider their employment and/or resign. It appears that the employer's failure to appropriately and sensitively address the harassment behaviour (for example, by referring to policy and reminding the worker engaging in inappropriate behaviour of expected standards and providing a written warning), left the impression that the problem lied with the apprentice, who wasn't tough or skilled enough to handle challenging behaviour.

Find and talk to someone you can trust

Another strategy female apprentices used was to find a trustworthy workplace ally to talk to, although this was not easy as it was difficult to know who could be trusted:

> *you definitely find your safe person or your safe people on your company. I mean, it's not all the time. But there's definitely those people that you can rely on. I'm pretty lucky because we had a lot of female apprentices as well. So, I could kind of rely on them and ask them their opinions about stuff. But there's definitely those males as well that like, you can see a glimpse of like, hope in them, where you're like, I know you're a decent person, please, please just have my back. But I would tell them weird experiences, and they're like, 'Oh, that sucks. You should tell somebody'. I was like, 'Yeah, I'm telling you'. (F, FG3)*

Here, the apprentice did not know how to report the issue and seek support when she was in distress, and perhaps indicates a culture where fellow workers are wary of getting involved:

> *I think the hardest thing is probably finding a good person to like, vent to and have good conversations with and like. You know, like, even within your own organisation, that can be like impossible to find anyone in your organisation you can trust and be like, 'Hey, I just had this weird experience with like a man on site. And I feel really uncomfortable working with them' . . . there's not many people that you can kind of feel like you can have those conversations with . . . Yeah, I think it can be quite hard to find those people. (F, FG3)*

Solutions offered by apprentices

Solutions to low pay

Strategies used by some apprentices to mitigate their low pay were to work longer hours/overtime or additional days/weekends. This helped to boost low pay but came at the expense of their physical and mental wellbeing and energy levels and was more problematic for those with family responsibilities. Further, taking on extra work was only possible when work was available, and work availability was dependent on the nature and size of the business, the time of year (with more work available pre-Christmas), and impacted externally by the boom-and-bust cycle of the industry.

Another solution identified by apprentices was to increase the pay rate of apprentices or guarantee apprentices minimum hours to ensure a steady and dependable income. Some apprentices suggested that employers could provide other benefits to supplement the low pay. Options canvassed included subsidising the costs of tools, travel, and accommodation expenses (where required for job sites out of town), and employer-subsidised health insurance. One apprentice recalled an example where the employer subsidised a vehicle purchase:

> *One of my uncle's does with his employees. And it's really effective. Literally, he buys them a car. And he gives them half, he pays half. And then it tells him okay, work it off. You pay me this half of the car. And they'll be working for them for five years. And then once they finish, that's the car 100%. (M, FG1)*

Solutions to lengthy apprenticeships and the mismatch between training requirements and those of the employer

Four potential solutions were discussed to address the mismatch between apprenticeship training requirements and the work/tasks provided by employers. First, apprentices suggested taking more initiative to find additional work experience opportunities with other companies to complete required standards, rather than relying solely on their main employer. Second, they explained that improving communication between education/pre-trades organisations and employers might help better align work tasks with apprentices' learning needs over the duration of their apprenticeship. A third solution discussed was assigning apprentices with a mentor or advisor (senior tradespeople and workers) who could help navigate finding supplementary work experiences and balancing work/training responsibilities, with mentors/advisors being incentivised through additional pay. Employer or mentor licensing was also suggested to improve opportunities for apprentices under employer or mentor supervision. Another proposed solution was for employers to allow more flexibility for apprentices to take time off from their main job to gain experience elsewhere if it was not available in their current role.

Solutions to job insecurity

Some apprentices suggested a possible solution to job insecurity was Government underwriting of apprenticeships to guarantee a minimum number of hours and employment stability or provide income support even if an employer could no longer provide the work to complete training. There was also talk of the Government developing targeted apprenticeship programmes through agencies to help Māori and Pasifika secure apprenticeships and implementing a mentorship program where senior tradespeople were incentivised (remunerated) to take on apprentices to help them stay in work. Other apprentices identified a need for improved communication from employers about potential job losses or changes so apprentices would have more notice to find new work. Finally, there was some discussion that unions could help protect apprentice rights and help advocate for benefits like redundancy payments if work finished unexpectedly. The feasibility or efficacy of these options was not canvassed.

Solutions to the culture of "stoic", "old- school" masculinity

Solutions to the work culture issues raised by apprentices included learning to speak up, more recognition for apprentice's work, better leadership and education for leaders, and targeted Māori and Pasifika support, and some suggested that perhaps MATES had a future role in providing mentoring and support to apprentices.

Apprentices appeared to internalise the problems of bad behaviour on the worksite with a number suggesting that learning how to "speak up" was the solution, as evidenced by the following excerpts:

> *for me. . . like, my brother here was saying, you need to speak up. One of the things I can't pick up, because I feel like I will offend someone . . . people do take advantage of that, they will give me more activities to do while I have other things on my plate. It will get to the point where I can't say no . . . and it comes out of my sacrifice for my time and my efforts to do their stuff and we have more stuff coming in. So, it's really stressful also. And that's something that I have to work on myself to actually speak out and say no. (M, FG1)*

Some Māori and Pasifika apprentices wondered if not speaking up was a cultural thing:

but I wonder if that's a very ingrained cultural thing too, Māori and Pasifika people don't tend to feel they can speak up because they've been taught to just put your head down and do the job. (F, FG1)

A number of apprentices said there was a need for better recognition and valuing of apprentices' work, and others suggested that employers and managers should lessen their expectations of apprentices and accept they will make mistakes as they are still learning.

Better mental health, wellbeing and inclusive education for leaders was mentioned by a number of apprentices, sometimes referring to managers and bosses, but at times also referring to mentors and those responsible for supporting apprentices:

I think bosses or like people higher up in the company, they need to be educated more because at the moment there's a lack of understanding around mental health and wellbeing with their workers. I reckon if a lot of bosses and that were aware of what mental health is, what wellbeing is … a lot of bosses would actually be more considerate of everything we're saying, in terms of changing the culture and their company, being more like, you know, inclusive of people … having team building and all of that stuff. At the moment it's survival of the fittest for the companies. And it's like, whoever gets the most contracts, we'll get through. (M, FG1)

Some Māori and Pasifika apprentices argued for Government funded targeted support for Māori and Pasifika apprenticeships through incentivised mentoring by more experienced trades people:

there's the Māori, Pacific, Fijian-Indian, who are, you know, they've done 20 years on the job they need to, then we need a younger generation coming through, they need to have obligations to have to take on a mentorship; they have to take a quota of certain people. (M, FG1)

Some suggested a role for MATES to provide a mentoring programme visiting worksites regularly to check on the apprentices:

like it doesn't have to be like, a whole heart to heart. It's just a check in. Like, this is what's happened. (F, FG1)

Solutions to sexual harassment

Despite poor reporting processes and outcomes, female apprentices (like the male apprentices) were in general agreement that they and other female apprentices needed to learn to "speak up":

So maybe they should try work around giving apprentices the resources that they need to learn how to speak up for themselves because if people are constantly making those remarks and people aren't saying anything about it, they think that it's okay. And it becomes accepted within the workplace. (F, FG1)

However, given the power dynamics where apprentices are at the bottom of their hierarchy, learning how to speak up as a strategy on its own seems limited and was often ineffective.

Other solutions offered and canvassed in the female only focus group included having effective conflict resolution processes on sites, considering selection criteria for trades that emphasises hiring workers with good interpersonal communication skills in addition to technical skills, rewarding and incentivising positive behaviours on site rather than only focusing on noticing and punishing negative behaviours, implementing clearer policies against harassment with easier reporting processes and accountability, providing education around topics like toxic masculinity, empathy, and effective communication skills, creating support networks (e.g., peer support) and helplines specifically for women apprentices in construction, and having female mentors.

'Boots on the ground'/blue collar workers

"contracts have been signed, time and money are factors, and if projects aren't completed on time, someone loses money - potentially thousands"

This chapter captures the voices of 30 'boots on the ground' (blue collar workers) collected across four focus groups. 22 boots on the ground described their gender as male and eight as female. 22 boots on the ground were aged 25-54 years, five aged 15-24, and three aged 55+. 12 identified as Māori or Pasifika, 14 as NZ or other European, and seven as Middle Eastern or Asian. Two worked in the South Island and the rest Auckland or Northland.

Psychosocial stressors. The high, compressed, fast paced workload, poor communication (including abusive, bullying and other poor behaviours), financial pressures, and work-life imbalance were identified as the main psychosocial stressors.

In the face of the urgency of much work in the construction industry, safety measures could be neglected, with workers instructed to proceed without proper safety mechanisms.

Lack of communication between various parties, and poor communication about priorities and expectations were key problems faced by workers in the construction industry and English language barriers added to the stress of poor communication. Communication was often felt to be rude and could be aggressive and accompanied by other bullying behaviours.

Participants described disrespectful and abusive behaviours - often targeted towards migrant workers, women, and those working in labour hire. Poor communication between workers resulted in feelings of anger, resentment, discontentment, distress and low self-esteem, and a sense of the unfairness of the industry.

Boots on the ground experienced stress from two levels of financial pressures, those related to the boom or bust of construction which impacted on workloads and job security, and the impacts of low pay on their ability to meet and pay for necessities and family responsibilities leading many to increase their hours of work.

High and compressed workloads, external pressures and job insecurity all contributed to work-life imbalances, impacting wellbeing and personal lives, causing sleep deprivation and leaving less time for rest, personal life, family time, and self-care.

Solutions canvassed. No real solutions to the problem of high, compressed workloads were canvassed other than more accurate project costing. Solutions to poor communication included training of leaders and site managers in interpersonal skills, making complaints, and better reporting processes. Suggestions for dealing with unfairness, abuse, and bullying included seeking alternative work, building stronger social support networks, and education about employment contracts. Solutions to financial pressures included working more hours and developing good relations with hire companies and managers, while solutions to work-life imbalance were individualised and included setting boundaries, prioritising personal wellbeing, and fostering open communication with managers.

Results 2: 'Boots on the ground'/blue collar workers

Characteristics of boots on the ground participants

Four focus groups were conducted with boots on the ground construction workers, three face-to-face in Auckland and one (nationwide) online (FG7). Occupations of the boots on the ground included builders, plumber/drainlayers, electrical, heavy machine operators, labourers, site foreman/managers and several in engineering or health and safety roles, and retail supplies. Gender and age characteristics are provided in Table 2.

Table 2 Demographic characteristics of boots on the ground focus group participants

Focus group	FG4	FG5	FG6	FG7	Total
Total	6	10	7	7	30
Gender					
Male	5	6	7	4	22
Female	1	4	0	3	8
Age group					
15-19	1				1
20-24	1	1		2	4
25-34	3	3	2	2	10
35-44	1	1	2	1	5
45-54		3	3	1	7
55-64		1		1	2
65+		1			1

Note. Ethnicity: Māori=4, NZ European=11, Other European=4, Tongan=3, Middle Eastern =1, Japanese=1, Cook Island Māori =2, Fijian=3, Filipino=3, Indian=2. The majority worked in the North Island (Auckland/Northland with some in several locations), 2 worked in the South Island.

Psychosocial stressors for boots on the ground

There were five key psychosocial stressors identified from the boots on the ground focus groups. Three of these; the high, compressed, fast paced workload; poor communication; and abusive, bullying and other bad behaviours and unfair practices, were identified as common and as having significant impact on mental health and wellbeing across all four focus groups. The other two stressors – financial pressures and work-life imbalance – were evident across three of the focus groups.

High, compressed, fast-paced workload

One of the biggest stressors reported by boots on the ground was the high, compressed fast-paced workload that often worsened in the build up to Christmas:

> *[The biggest stressor] I could almost speak for everyone here, will be time management and getting the project finished by December. Like for us. Usually, the deadline is, this year will be 22nd of December. And just getting projects over the line, just stressing out . . . trying to get that finished before the holiday comes in. (M, FG4)*

While some workers said that they had worked 80+ and even 90-hour weeks in the pre-Christmas period, a few participants from the building retail sector described the opposite scenario, with work drying up in the 2023 pre-Christmas period, leading to staff redundancies and staff reductions.

Although time management pressures and the condensed, high workload was an issue for most of the boots on the ground participants, it was clear from the overall discussion with other focus groups that some building sectors were faring better than others with a regular and ongoing pipeline of work.

When asked why there was the big rush toward the end of the year, participants shared a number of responses:

> *It's because contracts have been signed, time and money are factors, and if projects aren't completed on time, someone loses money - potentially thousands. (M, FG4)*

Another participant explained the problem was one of improper job pricing:

> *An underlying issue in the construction industry is that jobs are not always priced properly from the start . . . This leads to site teams having to "fill in the gaps" [makes "" gesture with fingers] left by lack of proper planning, programming, and design, [adding] additional pressure and workload on site teams and workers because the company needs to deliver the project within the original contract price, even if the job wasn't properly scoped and resourced from the beginning. (M, FG4)*

Staff shortages in some businesses further intensified the stress, creating a potentially combustible environment.

Sleep deprivation and fatigue

The impact for workers operating in a condensed timeframe, working longer hours and additional days with early starts and late finishes, in the context of long commutes in large cities like Auckland, resulted in sleep deprivation and fatigue:

> *we have guys that will drive in, and they will park their cars at like 3:30-4am in the morning to get a car park so they don't have to pay. They will sleep in their car, majorly tired, and then you'll come to work. And then there'll be a toolbox or morning tea you will see them, and they be snoozing . . . that's just natural every day. (M, FG6)*

Some parts of construction were described as being worse than others in this respect:

> *I think concrete places are the worst . . . we had a night shift running a few weeks back in a concrete place. A lot of concrete and a huge hole, with 40-odd guys placing concrete and then they go home, sweet, we've got to wrap up and they've been here since eight o'clock at night and then here at 4am in morning. . . then 6am, and then another one at 10am. And they're literally just driving to the next job sleeping in the car … you know, you can do your due diligence and have the chats with them and talk about it … we try*

and do it as part of pre-tender negotiations and stuff like that going 'we don't want you to have other jobs surrounding this', but they'll do it to get paid. So, there's ups and downs, right? They'll take the work when they can … it's just the nature of construction. (M, FG6)

Sleep deprivation and fatigue meant that accidents and mistakes were more likely to happen. Stories were shared of workers falling asleep on the job, with one example being a worker falling asleep with a gas torch in hand due to fatigue.

Compromised health and safety

Some participants also described how, in compressed timeframes, workers could be instructed to proceed without proper safety mechanisms in place:

Health and safety just gets thrown out the window. Yeah, as soon as somebody needs [work] urgently done, don't worry about it, just get it done. We know you can do it safely. But not with all your safety mechanisms in place, just get it done . . . Don't let me see what you're gonna do. Just go and get it done. It's just like, why? Like, three weeks ago we're in their safety harnesses, tripods, everything. Now, today, don't worry about it. We don't care about your permits. (M, FG4)

However, other workers said that taking health and safety shortcuts was a key stressor because it required them to take time out from their work to remind other workers (contractors) of the importance of health and safety protocols to keep everyone safe:

The key stressors for me are, when I have to repeat stuff that people I'm talking to should actually know. And I'm talking because we engage a lot of contractors. And our own supervisors, you know, people who are in those positions, often looking after people on site. For whatever reason, they'll take shortcuts, and they know they shouldn't. And we know, they know, because they've been trained, and they've been given information about it. So those are the key stressors for me, because I know where that can lead . . . When people look at what I do and what I'm trying to do and think it's just an add on to their work, it's work, it should be part of everything at work. (M, FG5).

The stress of paperwork and permits

The paperwork associated with permitting and health and safety was felt to exacerbate the heavy and compressed workloads for those responsible. One man from boots on the ground expressed frustration at a job that should have taken 12 weeks but took 26 weeks because they were:

fucking around doing paperwork, instead of just getting on with the job. . . [we do] three hours of paperwork every single morning. And it's just like, why are we doing this? We're doing the same job every day. (M, FG5)

Others agreed that some paperwork and processes seemed unnecessary and caused added stress and delays, with the implicated solution being to minimise paperwork and thus the loss of time caused by excessive paperwork.

Poor weather

The condensed workload and tight timeframes were further exacerbated by other factors outside of industry control, such as poor weather and the impacts of extreme weather events from climate

change (such as the recent Cyclone Gabrielle). For regional areas outside of cities, bad weather took out normal travel routes significantly increasing commute and supply times and delayed the arrival of equipment or materials. Unfavourable weather was also noted as adding to stresses for some parts of the construction industry, particularly roofers and concrete workers, as rain meant that they could not work (and if they had no other work, they received no pay) and thus work was delayed.

The above factors collectively contributed to worsening social and mental health impacts for workers, especially towards the end of the year when timeframes became more compressed.

Poor communication

Participants said numerous times that the construction industry is fraught with increasing complexity; the industry has multiple moving parts and agents that are reliant on effective and timely communication to run smoothly. Project managers are dealing with these multiple moving parts and complexities and finding solutions to problems as they emerge. Good communication about priorities, job roles, and expectations between managers and workers, and between major contractors and sub-contractors, is essential for the smooth operation of work in the construction industry.

However, it was frequently noted that site and project managers and business owners are not necessarily skilled communicators. Focus group participants across the board told us that many managers do not appear to have any training in interpersonal workplace relations, and several workers had stepped up into site or management roles from 'on the tools' jobs, and may have picked up some relationship management skills on the way (or bad habits) rather than having specific training in effective communication.

Lack of respect in communication delivery

A key communication issue identified by many of the boots on the ground participants was a general lack of respect evident in the style, tone, and delivery of information to workers onsite by site managers and others in leadership positions.

The impact of poor communication fell disproportionally on some occupations and demographic groups in the industry, with migrant workers, apprentices and younger workers, labourers, and some women more adversely affected. Participants said that poor communication onsite took many forms, and ranged along a continuum from no communication at all to a general lack of respect and a lack of cultural understanding, to rudeness, yelling, name calling, racist, sexist and other derogatory comments, and bullying. Communication also ranged from passive to passive-aggressive to aggressive.

One labourer described the problem of workers' low English language proficiency together with poor communication from management on sites:

> *Lately, it's been like a lot of people showing up to work that don't know any English at all. And we're told to like, move all this stuff over here. And we could have already been doing it for days. And we've moved everything, and we come back and the person that doesn't know English is moving everything we've just moved back to where it was. And it's like a constant thing that's happening nearly every site I go on to now … And it's just like, no communication, no nothing. And we just stand there all day. No one knows what to do. Because there's no communication, nothing happening, then everyone's in trouble because no one's done anything. [All participants laughing]. (M, FG4)*

Others noted that relationship breakdowns and tension were often a result of a lack of communication:

I try and speak to people as well. And then if you don't communicate with them, or you don't speak to them, if you don't respect them enough, they won't talk to you. So, you can't find out what the problems are. (M, FG7)

Cultural norms and differences also influenced style and type of communication, and a lack of cultural understanding added extra challenges and stresses:

But we've got a person, like a manager that has no people skills whatsoever and doesn't understand Māori and Pasifika, coming from [names country – not NZ]. It's a cultural difference. So, I'm trying to coach them to say things a bit different, less harsh … he's learning his role, but he's also learning the culture aspect as well, yeah. (M, FG7)

One participant, advocating for valued interpersonal skills among leaders, shared incidents of cultural disrespect and bullying of migrant workers by those in leadership positions:

I've also had experience where there's been some Filipino workers … the Kiwi site manager, honestly, he was horrible aye. I didn't even want to go and speak to him. That's how bad he was. I heard him speak to these people. It was disgusting. And I went above him because I knew his immediate boss. And he got dragged into the office straightaway. So, you get a lot of that as well, that cultural stuff. Some of it's disgusting. (M, FG7)

Several participants also described how some migrant workers in leadership positions had aggressive communication styles and were perpetuating some of the bullying behaviours:

I'm not sure if that's a cultural thing from [names country – not NZ]. I'm not being racist, but I've had those same problems with project managers and site managers and foreman on sites where they're actually literally bullying the people on site. And I'm like, man, you can't do that mate. I've actually had to go and talk to these guys quite strong and [say] 'hey don't ever do that or call him those names'. Wow, honestly, some of the answers, some of it was shocking . . . I had to go to the guy, not to his managers or anything like that, I just went and looked him in the eyes, I went, handle it. 'This is not on mate'. And … it was multiple different people. (M, FG7)

For women, the communication issues could be gendered with traditional sex role stereotypes:

sometimes with new people on site, they take a little while to understand my role. For example, more assume I'm there to help with washing up or taking notes or things like that … not know quite sure where to where to put us sometimes. (F, FG7)

One female participant described how, as the only woman on site, she often had to work harder, put her foot down firmly, and occasionally have a male coworker's support so that she could be heard. Another female labourer, who ran heavy machines, reported similar gendered experiences of being a woman in a male-dominated field:

just being womanised on the floor, having a truckie come in and tell me that this is not a woman's job. And I was loading his truck and unloading … being a Cook Islander, at its best I was bought up head strong. So, I wasn't gonna take that shit. And I actually confronted him. And I stood right in front of him, I was actually going to sacrifice my job because of it. Nah, but what was going through my head at the time was my boys. The food that was going on the table, so I stepped back and thought about it. I said 'sorry'. Dude, if I was in my old ways … I would have knocked you the hell out. But I'm gonna do one thing better, call my team leader. And they just started running up the walkway. I think because they knew what I was like. It was good to have somebody

come in and actually see it for themselves and it was my bosses. Since that day I felt supported. never doubted my boss again. Anything he said I did. So yeah. (F, FG5)

Migrant workers and language barriers

Several focus group participants noted the difficulty of communicating with migrant workers who had low English proficiency, citing the language issue as a key communication barrier onsite. This was seen (by non-immigrant workers) as a problem of lack of English proficiency among migrant workers, rather than a lack of cultural and language proficiency among managers of the business to communicate expectations and instructions to migrant workers in their native language.

This was especially concerning regarding health and safety behaviours onsite. Some participants said that some resources, for example health and safety materials, had been developed in migrant workers' own languages and were used on some sites. Although this was deemed helpful, it was felt to be insufficient for migrant workers to fully understand health and safety messaging. The strategy to mitigate the language barrier successfully used by some sites was to draw on a migrant who was a proficient English speaker to assist with language translation, and this appeared to work well where it was possible.

Other participants pointed out the potential mental health impacts of poor or insufficient communication for migrant workers, in particular Filipino workers, a large immigrant group in the NZ construction sector. Participants said that, for migrant workers, being unable to properly express themselves or understand instructions due to language challenges would be a major source of stress. Migrant workers told us that this language barrier was one of the top stressors for them, alongside being away from spouses for five to six years, and the financial pressures of supporting themselves in NZ as well as their families in the Philippines, while working long hours.

Abusive, bullying and other bad behaviours and unfair practices

Labourers were often targeted by site mangers, with several labourers reporting experiences of verbal bullying, such as having their names mocked, aggressive communication styles, and being given menial and unpleasant tasks:

Each site manager is different but a lot of them just expect so much work to be done in a short time. One site I was on I was told you have to move 10 fences and then you have to throw all the bricks in the skip … And we got told we had to do three jobs within an hour when we did the temporary fencing and then did the bricks and then the last thing we got told we weren't doing anything and were slacking around. And he said, 'why the fuck are we even paying for you?' Like he gets us on his on site to do site cleanup often – it's usually like throwing away all the stuff that the builders don't need any more, and all the gib, but this guy actually expects us to pick up all the nails and screws in between all the rocks and everything. That's not our job: If you want cleaners, you can hire cleaners. It's really rude. (M, FG4)

Another labourer recounted working "on their knees all day" under a house with very little space, dirt backfilling down onto them as they tried to dig out a trench.

Having verbally "abusive" communications onsite also appeared to be a regular experience for some in labour hire roles:

I worked at local labour hire. And every job they put me on it was just emptying containers. And every single dude I emptied a container for was very abusive. So, I didn't go back to that. They were all just like screaming and swearing to say, 'fucking do this

now, fucking do that'. I had one dude [who] was just abusing everyone, telling us to hurry up and get it done before five o'clock. I told him, 'you're fucking welcome to do it', and I left. (M, FG4)

Unfair practices

Some boots on the ground described frequent underpayment and unfair contracts, especially participants working for labour hire companies. A seemly common problem for labourers working for labour hire companies was being underpaid, and this added significantly to their financial and mental stress:

And we did all this work. And we worked overtime, and he didn't pay us for overtime hours. And he basically like yeah, he said to our boss, 'you don't do a good job in [names country – not NZ] you don't get paid'. But the whole time you'd be saying we were doing a good job until that last day because we couldn't be fucked with his bullshit of not getting paid. Because it was like we're doing a lot of work for him and … he even said that the work that I was doing; I was doing like a couple of days work in one day. And he still like tried to under-pay us and fuck us over. (M, FG4)

I've worked at like two other labour hire companies. They underpaid me every single week. And then once I found out they were underpaying my friend as well; all the new labourers are getting underpaid. And that was when I was 17. It was my first job. And they said it was a new accountant stealing money from all the new labourers, so that I quit that job. (M, FG4)

Unfair contracts

A couple of younger labourers discussed their experience with unfair labour hire contracts suggesting that they were not fully aware of the terms of their contract at the outset, and had felt pressured to sign it.

The problem with our labour hire is, we've actually had a lot of landscapers want to hire us. But it says in our contract, if anyone hires us, they have to pay the labour hire 20% of our wages for like the first year or something. So, a lot of people refuse to give us jobs because of that … [and] if they're a contractor to us, they can't hire us. We didn't even know about it until like, we got ripped off on a site and this guy was telling us about it, saying that no one can hire you guys, because of your [labour hire] company, did you know that? (M, FG4)

Another participant suggested that labourers needed to understand how to navigate contracts, emphasising the importance of being aware of the terms and negotiating when possible. Some participants suggested that the labour hire company could be do more to protect workers, such as having a system in place for tracking hours and paying workers correctly.

Mental health impacts of poor communication

The impacts of disrespectful and poor communication were likewise felt along a continuum, leading to those affected feeling frustrated and unrecognised for their contributions. In turn this led to workers feeling ongoing stress, low self-esteem, resentment, discontent, and/or a sense of the unfairness of the industry.

Financial pressures

Boots on the ground participants described two levels of financial pressure; firstly, those affecting the industry as a whole, related to the boom or bust of construction which impacted on workloads and job security. Secondly, the impact of low pay checks impacting workers' ability to pay for necessities, which led many to ask for more hours of work.

Boom-bust cycle – heading for bust

Participants articulated how the boom-bust cycle of the construction industry caused job insecurity and financial worries for many workers who didn't know if they would have steady work from one month to the next. Some boots on the ground workers said that their companies had been cutting employees every week before Christmas (in 2023), indicative of a post-boom economic downturn. One worker explained how their company made multiple redundancies throughout the year, including in the lead up to Christmas, highlighting the stress and uncertainty in the workplace. Other workers suggested that companies would be severely affected by the emerging industry decline, and that some businesses would struggle to survive. Despite this doom and gloom, workers described how some sectors kept a regular pipeline of work, with one participant confident that they had a regular pipeline of work for the next 10 years for residential nursing home builds.

Some participants discussed the challenges of managing a team during a period of work shortages and redundancies, including the impact on staff morale and the need for creative solutions to keep employees engaged and motivated despite the challenges. In some sectors, boots on the ground were faced with reducing their hours from 45 to 40 hours a week. This was described as a significant loss for many people. Participants said that in other sectors, apprentices and other boots on the ground struggled to complete their work while working a five-day, 45 hour a week, sometimes having to extend to a six-day week, which was stressful and impacted on work-life balance.

Cost of living crisis and low pay rates

Financial pressures were exacerbated by cost-of-living increases, which workers noted were especially problematic in large cities such as Auckland where housing and transport costs made it difficult to make ends meet, especially for those on low labouring wages. A labourer working for a labour hire company explained how financially stretched he was:

> *I don't have enough gas to go to half of these jobs, I have to borrow money to get to the job. And then when I get paid, I have to give the money straight back. (M, FG4)*

Another labourer told us of his frustrations with the low rates of pay and the unfairness of this given how hard labourers work:

> *That is definitely frustrating when, and I think we can all agree at some level, maybe some more than others, that we do a hell a lot of work. The companies, the bosses, everyone else makes more money. And we're, you know, we're out doing the actual physical work and that, you know, an unfairness in the pay I think definitely does cause stress to people and just feels unfair, right? (M, FG4)*

This participant went on to describe the unfairness of working for a labour hire company:

> *a labourer at labour hires, they charge like something from like $45 to $50 a labourer, and we only get like $23 of that and every single site foreman we work for expects us to work like we get paid $45 an hour, and they say, 'we pay so much for you, why isn't*

this done? You need to hurry up and get it done' and like we get pretty much abused for it. (M, FG4)

Some boots on the ground in leadership roles explained how their workers came to the jobsite stressed out about rising living costs, and how that impacted the workplace and others.

Work-life imbalance

High workload, external pressures, job insecurity, and the need to meet tight deadlines all contributed to work-life imbalance for many boots on the ground participants, impacting personal lives, sleep, and their overall wellbeing. The pre-Christmas period exacerbated and compressed this high workload, and the resulting long hours left little time for rest, personal life/family time, hobbies, or self-care:

> *I think the stress that I'm facing right now is I sense a spot for my kids, my family and work because work is usually second home to me. Like I'm literally there from like 4am to like, 4 in the afternoon. It's the time, that's my stress; trying to create time for my family. And when I do, when I do have the time, it's ripped from me. Because I get a call saying 'hey, man, you've got to come in and work'. I've gotten to a stage where I said 'no, fuck you'. You know, my sons come first. (F, FG5)*

Other boots on the ground workers described the toll overworking took on their personal lives. Many boots on the ground felt constantly tired. They described how it was difficult to get enough quality sleep to properly recover, and how they found it hard to switch off after long hours and days at work:

> *I don't know how you fellas do it. Do you guys think of work when you go home, because I do, I do. One hundred percent, shit, tomorrow I gotta do this, damn. I gotta call the customer, you know? And it never stops. When I get home, I have to have my son's tell me what the homework is all about just to get my mind off it. But as soon as they stop talking or stop laughing or it's quiet or [they] go sleep: Work again. Oh shit, I forgot to do this. Add to the list. So yeah. (F, FG5)*

The above quote illustrates the reality of the intertwined nature of work and home life and the difficulty in separating the two.

Solutions offered by boots on the ground

Solutions to the high compressed fast paced workload

Boot on the ground did not offer any real solutions to the impact of the high, compressed, fast paced workload. However, on the matter of sleep deprivation one participant suggested micro-naps:

> *Well, our business actually encourages micro naps, and as an expert in the field, I can tell you they're very good. I do a lot of driving. And I'll quite often just pull over the side of the road, wind my window down, put my seat, back set my alarm for 20 minutes, and I'm out. (M, FG5)*

However, it seems doubtful, given potential safety risk, that micro-naps will be feasible for many boots on the ground occupations.

Solutions to poor communication

Some solutions to poor communication were canvassed including better training and improved processes for reporting aggressive communication.

Solutions to abusive, bullying and other bad behaviours and unfair practices

Strategies adopted by labourers included; "hoping it will get better", looking for other work or to set up on their own, getting educated about employment contracts, and reporting abusive behaviours. However, these strategies had met with limited success. When asked if being an apprentice was a better option than working as labourer for a labour hire company, one labourer explained:

> *I thought about doing an apprenticeship but like, I don't know, like all the people that have been offering one they don't seem like too positive. I don't want to get into an apprenticeship with some dickhead. So, it's like I don't really have a good attitude if you don't have a good attitude. So yeah, I have to be careful where I work. (M, FG4)*

Building stronger social support networks and closer connections at work, creating a more growth-minded and positive workplace culture, and increasing awareness and respect onsite were also seen as ways to reduce bullying and aggressive communication:

> *I think you can also sort of broaden your connections. And when you find good people just, you know, try to form connections, because I've seen people on the other end of that, who have started [a] labour hire company that's actually good. I know some small businesses that do good. And it might even be that with these big companies, they've got different branches or different managers. So, I think part of dealing with that is just reaching out, like voicing the same way you voice now. Maybe, perhaps, if it's your manager, or someone you know in the office, you might want to start pushing them in a good manner, right? Because if you want someone to help you grow or get somewhere you don't just walk in the door and tell them, 'You guys do this shit to me'. And you might even be like completely unaware of what's happening at your side. I think make people aware, build connections; I've seen heaps of people, as the brother said, move into different companies, because you do a good job for the client as well. So, everyone's got that personal brand in them as well, where you bring yourself to the job. You know, if you come with a good attitude, and you're here to do the work, sometimes … some people respect you, you'll find your way. (M, FG4)*

Other participants said that workers needed to push back against mistreatment, and described what happened in some instances when they had made a complaint to their employer.

> *So, we actually made complaints about him, because he was mocking just our names and stuff. And he's just been really rude towards the last two, three days we're working with him … So I made a complaint about it. And then some other labourers were sitting there because we refused to go back, and apparently he was better towards them. (M, FG3)*

While making a complaint to the labour hire company about a site manager might work in some circumstances, it was often too late as respect and trust had been lost and relationships were damaged.

In another instance when the labourers made a complaint about not being paid for hours worked, the labourers told us how the labour hire boss still sided with the site manager/foreman:

> *with the labour hire it was logged in that we started seven thirty and we finish at five, but we were getting there at seven and not finishing till six and he [the site manager] wasn't logging that in and he refused to pay those hours. Instead, it turned to a big argument and the [labour hire] boss showed up and even the boss said he doesn't believe him, but there's nothing you can do. It was like, fuck, you sent us here. Where's our money? (M, FG3)*

Here, the system designed to track hours was reliant on the site managers' accurate input, which was incorrect. This left the labourers feeling angry and frustrated that their complaint was not properly addressed, and they did not get the pay they were owed.

Another boots on the ground participant who had site manager responsibility noted that sometimes it was the other way around:

> *Don't get me wrong. Just to be honest with you guys. I've had the other way around, where I've got people showing up late for work, and asking you to sign things. And I'm like, well, you only got here at 9:30, why should I sign you in at seven in the morning. And they'll say 'oh, but we work on a daily basis'. And this and that. I was like, 'well, this is a piece of paper, I'm charged by the hour, you're charged by the hour … If there's anything else, you and your boss can deal with it, but you know, I'm only putting on the paper what I've seen'. So, it does … have a give and take from both sides as well. (M, FG4)*

Solutions to financial pressures

One team lead had negotiated some mitigation strategies with their company and found ways to relieve financial stresses on their staff by providing food to staff in need, having a barbecue once a month, and giving monetary vouchers to staff members under financial pressure. Other potential solutions to the impending industry downturn, redundancies, and job insecurity were offered and included getting a second job, building good relations with the hire company and client for a seamless switch when short of work, transitioning to project management or consulting, and asking to work longer hours, including overtime, to earn more money.

Solutions to work-life imbalance

Solutions to the work-life imbalance canvassed by boots on the ground included the need for individuals to set boundaries and prioritise personal wellbeing and family time. Some companies supported workers to do this better than others, with some managers attempting to accommodate employees' preferences when it came to job assignments, considering factors like commute time and family responsibilities. Other workers highlighted the value of regular, honest, and open communication about the need to maintain work-life balance, engage in self-care, and flexibility in accommodating personal commitments. Participants suggested that leaders needed to prioritise employee wellbeing to avoid burnout and maintain productivity. Some boots on the ground talked about a stoic culture of overwork where people in the industry often undervalued themselves and their worth, leading to a cycle of overwork and burnout.


Have you
signed in
today?

Migrant workers

'you think that if you ask too much from the employers, maybe one day you be fired, or you will be kicked out'

This chapter captures 16 migrant workers' voices. In this group, 15 workers described their gender as male and one as female. 12 migrant workers were aged 35-54 years and four aged 25-34 years. The majority (13) identified as Filipino, alongside one of each of Cook Island/Māori, Latin American, and African. All migrant workers were in the North Island in Auckland, Gisborne, or Wellington.

Psychosocial stressors. Migrant workers identified shift work due to workload pressure, the high cost of living, visa issues, discrimination and sexism, separation from family, and language barriers and intercultural misunderstandings as psychosocial stressors.

Workload pressure and demanding deadlines, especially with shift work, created significant stress for migrant workers affecting their body clock and overall wellbeing.

The high cost of living in NZ was a major financial stress for migrant workers as they balanced financially supporting families here and back home.

Maintaining working visas involved significant financial and administrative burdens for migrant workers and the fear of losing employment due to visa-related issues meant that migrant workers navigated their employment with a heightened sense of caution and apprehension.

Discrimination was a stressor for many migrant workers who experienced racial discrimination at work, as was sexist behaviour experienced by the female migrant worker.

Despite the feelings of sadness and stress expressed as a result of being away from their homeland, migrant workers demonstrated resilience and commitment to supporting their families back home.

Communication challenges due to lack of English language proficiency and intercultural misunderstandings added to migrant worker stress, hindering their ability to comprehend instructions and communicate with others on site.

Solutions canvassed. Migrant workers proposed various solutions including collective worker efforts to manage workload pressure, financial planning to cope with the high cost of living and obtaining residency status to address visa issues. Other suggestions were for employers to implement clear policies and procedures and fostering a collaborative work environment to combat sexism and discrimination. To address language challenges, migrant workers suggested implementing basic English-language courses and identifying key English language speakers within the migrant worker community on sites to help with translation and overcome communication barriers.

Results 3: Migrant workers

Characteristics of migrant worker participants

Two focus groups were held with migrant workers in the construction industry. Both focus groups were conducted face-to-face in Auckland, where most of the participants lived and worked. Participants had the option of an interpreter, but none chose this option. Gender and age characteristics are provided in Table 3. Although a couple of the migrant workers were in supervisory positions, the majority were boots on the ground workers. Several of the workers were on the same build site at the time of their focus group, but most were from different build sites across Auckland, employed by medium to large companies.

Table 3 Demographic characteristics of migrant worker participants

Focus group	FG8	FG9	Total
Total	10	6	16
Gender			
Male	10	5	15
Female	0	1	1
Age group			
20-24			
25-34	2	2	4
35-44	4	2	6
45-54	4	2	6
55-64			
65+			

Note. Ethnicity: Cook Island/Māori=1, African=1, Filipino=13, Latin American=1. The majority worked in the North Island (most in Auckland with some in Wellington or Gisborne).

Psychosocial stressors for migrant workers

This section explores the multifaceted challenges encountered by migrant workers in the construction industry, shedding light on stressors they shared with many other industry workers and those specifically impacting them as migrant workers. Please note, this focus group represents a small sample of the NZ construction industry migrant worker community – with most participants being Filipino migrant workers – and thus does not represent the diversity of migrant workers' experiences. While this chapter offers invaluable insights into migrant worker experiences, further research is required to explore the issues raised with a larger and more diverse sample of participants.

The main stressors expressed by migrant workers in this study were shiftwork due to workload pressure, and the high cost of living. Further stressors experienced by migrant workers included, visa issues, racial discrimination, sexism and sexual harassment, separation from family, and language and communication barriers.

Shiftwork due to workload pressure

Migrant workers highlighted the interconnectedness of high workload pressures with other stressors prevalent in the construction industry, such as fatigue and lack of sleep. For migrant workers the pressure of workload and demanding deadlines centred around shiftwork and the constant requirement to be available for work. This impacted their body clock, as one migrant worker who managed other migrant workers told us:

> *You find maybe this week, night shift, the other week, afternoon shift, the other week, morning shift. So, the body clock is just messed up … a block of 12 hours. Yeah, they just go 12 hours. And then you go and rest and have different [shift]. And you realise that most of the time they don't have enough rest because their body clock is being cooked. (M, FG8)*

As well as long hours and shiftwork, migrant workers explained how workload pressure intersected with their unique circumstances, language barriers, and separation from family. For those living in Auckland, the commute to work further compounded the challenges they faced.

To address the pervasive issue of workload pressure, migrant workers said that they worked together to help their teammates during peak periods:

> *My team will go in and help them to get it done so that we can get our work done. And then they help us in turn. (M, FG9)*

Migrant workers explained how this teamwork alleviated individual burdens and ensured project completion without compromising quality and wellbeing. Additionally, migrant workers emphasised the need for improved communication and coordination between project managers and workers to mitigate the impact of external factors, such as delays in deliveries or organisational shortcomings, on project timelines. They needed to keep each other informed with changes and show consideration for the stress that others were under.

Delivery delays

Delays in the delivery of essential building materials, a common occurrence in the construction industry, compressed already high workloads. This often resulted in heightened stress and pressure as teams worked harder to maintain project deadlines despite setbacks.

> *And then this is just the impact from my company … from not organising, delivery come a day early. So that's on site at the required 7:30am on site. And then all I get is 'oh nah you're … not gonna get that Monday [morning]', we're gonna get it Monday after three o'clock, then that's two days lost building. And then me and my team have to pick up the pace and stay on top of things and complete the build. So yeah, that's where my stress lies. (M, FG9)*

Weather and traffic

Migrant worker discussions revealed significant challenges related to both weather conditions on workdays and traffic to and from work, reflecting concerns we heard from some workers in other focus groups. Migrant workers we spoke to often found themselves compelled to work in adverse weather conditions as they were involved in lifting, placing, and assembling components or welding on site:

> *I mean, we have to finish it, even if the rain is pouring. (M FG8)*

Migrant workers said that adverse weather could compromise both safety and earnings, as poor weather led to work cancellations, delays, and future compressed workloads and deadlines. As with some other participants in this study, migrant workers found themselves disregarding safety considerations to get the job done due to tighter deadlines.

Moreover, Auckland based migrant workers, like their counterparts in other big cities, faced significant obstacles related to travel to and from work, with early start times and lengthy commutes contributing to heightened stress levels and adding to their fatigue. Needing to wake up in the early hours to manage the commute compounded the strain of long commutes, impacting workers' overall wellbeing and quality of life by extending the working day and reducing time for self-care and sleep. Lack of parking near worksites for some added to the commuting stress.

Inadequate staff-room facilities

A further workplace stressor vigorously debated in one of the migrant worker focus groups was around inadequate provision of facilities, in particular microwaves in the lunchroom. Like many workers in NZ, migrant workers wanted to heat up food brought in from home for their lunches. In several workplaces there was only one microwave, which meant, since everyone took their breaks at the same time, spending much of their lunch break waiting in line or waiting for space to sit and eat their lunch. This caused frustration and impacted adversely on the enjoyment of break times.

Potential solutions to the problem of limited resources and spaces included having staggered break times and flexible scheduling to alleviate congestion during break periods. Additionally, discussions highlighted the importance of negotiating longer break durations with subcontractors to better accommodate the demanding nature of the work. Participants were prepared to collaborate with other workers to address stressors and improve workplace conditions. Although this was not identified as a primary stressor in the workplaces of migrants in the construction industry, it nonetheless offers valuable insights into small changes that can be implemented at the organisational level to enhance workplace conditions.

High cost of living

Like many other workers in the industry, migrant workers told us that the high cost of living in NZ was a major financial stressor. Migrant workers spoke of the many complex financial challenges they faced and balanced including financially supporting families in NZ and back home:

> *Yeah, here it's expensive to live, yeah. So, you need to provide for yourself and to your family back in the Philippines. (M, FG8)*

Focus group participants reflected on this struggle, highlighting the need to carefully budget expenses such as rent, car-related costs, and insurance. For many this budgeting began even before immigrating to NZ:

> *Because before you come you need to compute how much you need to expend … for your rent, for your car, for your petrol, and for your insurance yeah, you need to pay a lot of insurance for your car and for yourself. (M, FG8)*

Additionally, the migrant workers explained how they sacrificed certain aspects of their lifestyle in NZ to cope with their dual financial obligations locally and abroad, such as living in large groups in mixed family and intergenerational households (often describing cramped conditions) to minimise expenses. Several migrant workers who were working in one workplace said that they travelled together in a van to save money.

Visa issues

Visa related stressors emerged as a central theme among migrant workers. Participants talked about the pressure stemming from their visa status, where their ability to remain in the country was directly tied to their employer. As a result, workers could not leave their workplace to seek better employment conditions elsewhere or terminate employment with employers who mistreated them. This predicament was succinctly captured by one participant, who described the feeling of being "attached" to their job and the added stress this entailed:

> *because of my visa, there's another thing like when you're attached, you're de-sensitised to your job. It's like it's another kind of stress because it's not easy to move companies, is not cheap as well, you need to apply, and luckily, I'm resident, so now I can I feel more free about that. (F, FG9)*

The fear of losing employment due to visa-related issues compelled migrant workers to navigate their employment with a heightened sense of caution and apprehension. Migrant workers said they felt that any misstep with their employer could jeopardise their ability to renew their work visa. Migrant workers shared the pressure they felt to maintain their employment status, particularly when their family's wellbeing was also at stake:

> *You will have to tolerate all this stress because if you mess up with your employer, then you are not employed by him. You cannot renew your work visa. So … you had that internal pressure that you have to do it, but you were forced. [It's] stressful and especially if you brought your family with you. You don't want them to say, 'why are we going back home dad?' (M, FG8)*

Moreover, maintaining visa standards entailed significant financial and administrative burdens for migrant workers, who shared some of the bureaucratic complexities involved in visa maintenance that demanded considerable investments of time, money, and effort, adding to their overall stress and feelings of uncertainty.

Considering these discussions, getting help (advice and advocacy) to navigate the bureaucratic system and obtaining residency status emerged as a desirable solution to alleviate visa-related stress and provide migrant workers with a greater sense of security and stability:

> *We are thinking that we can, those guys that they can also get the residency here, so they stay here. That's a lot of opportunity. (M, FG8)*

Discrimination

Discrimination was a significant theme in migrant workers' discussions, as they recounted instances of observable differences in their treatment at work revealing underlying issues of unfairness, lack of respect, and safety concerns. Sometimes this differential treatment was between different migrant groups, and at other times it was NZ/kiwi workers being afforded preferential treatment over migrant workers, irrespective of their competence:

> *Because I can see in my company, how different they treat people from their own country: being in two companies, one ruled by people from NZ, and one from people [in another country]. And it's sad, it's sad to see because, like, let's see, they treat mates way more easy than the people from [other countries]. And they're being really really good workers. They're not fair. (F, FG9)*

This differential treatment fostered feelings of marginalisation and diminished job satisfaction for the affected migrant workers, and affected their overall wellbeing and job performance. Migrant

workers also discussed, as one consequence of discrimination and their precarious visa status, the pressure from being the 'other' in the workplace, to excel and prove themselves:

> *But its's expected that if you work as an [foreign] person, you should shine or you are an outcast, and thus why we work long hours; you don't complain even if you're stressed. (M, FG8)*

Discrimination also intersected with sexism, as noted by the one female migrant worker whose seniority and identity were undermined:

> *When I was their supervisor, they used to call me 'white bitch'. And I was like, I am at least yellow? I am from [named country], so I am not white at all. (F, FG9)*

Sexism and sexual harassment

Female lens

Gender-related challenges have been a theme in apprentices and boots on ground focus groups and impacted worker's wellbeing and professional growth. Gender-related challenges were also identified by the one female participant in the migrant worker focus groups. This participant shared accounts of bullying, difficulty others had accepting her as a female supervisor, and feeling outnumbered by male colleagues in the construction industry:

> *Being a woman is actually 50% more complicated than being a guy in construction. (F, FG9)*

Despite her efforts to excel in her roles, she often faced name-calling and a lack of respect, recounting instances of sexual harassment and mistreatment. The female migrant worker explained how these experiences compelled her to work harder to prove her worth in the predominantly male work environment, while at the same time contributing to feelings of isolation and psychological distress. This in turn exacerbated her sense of vulnerability and insecurity in the workplace.

The female migrant worker also discussed how her concerns were dismissed or minimised by both colleagues and management, much like the situation described by some females in the apprentice focus groups. When explaining taking concerns directly to management, the female migrant worker recounted being dismissed:

> *literally, they have laughed at my face. One time, they told me like … 'you need to cope with it'. (F, FG9)*

The participant's recounting of being laughed at and told to "cope with it" by management could suggest embedded patterns of discrimination and inadequate support structures. This is supported when the migrant woman felt the need to explain to her male migrant worker peers in the focus group session:

> *You guys [referring to her male colleagues both in the room and onsite] need to understand that all of us are exactly the same. And if I smile at you, that doesn't mean that I'm flirting with you. It's really challenging. (F, FG9)*

The female migrant participant also shared her experiences of female colleagues leaving the industry due to mistreatment and lack of support, highlighting the impact of gender-based discrimination on women's career trajectories and overall wellbeing.

Like the girls that operate [machinery], they leave sometimes, or the girls that were like labourers. They don't feel secure. And I don't think you can go every day to your job, like it's not healthy, not feeling secure. (F, FG9)

Workplace harassment and a lack of a supportive environment for women in construction added to female workers' stress and distress and the female migrant worker explained this may lead to a sense of insecurity that could ultimately drive some women to leave despite their interest, skills, and proficiency in the work. This may not only result in a loss of valuable talent but may have multifaceted repercussions for the workplace, including diminished morale, productivity, and diversity.

Male lens on sexism in the construction industry

While this above discussion around gender issues represented the experience from the perspective of the one female migrant worker in the focus groups, it was noteworthy that male migrant workers also contributed insights into the significance of gender in the construction industry. One male participant revealed some adherence to sex-role stereotypes, and candidly expressed a common coping mechanism among male workers, stating:

We're not like girls talking about their problems; we just know ours, so we drink, we don't talk about problems. (M, FG 9)

The perspective conveyed in the quote highlights how male workers, instead of talking or seeking support for their challenges, can keep quiet and turn to drinking as a coping mechanism. Moreover, it suggests an underlying issue wherein expressing vulnerability or discussing problems is perceived as feminising – which is seen as bad, likely because it threatens traditional notions of stoic masculinity that men are expected to adhere to within the construction industry. This reluctance, common among men, to share emotional struggles in a constructive manner may not only perpetuate harmful stoic masculinity stereotypes but can also impede efforts to foster a more inclusive and supportive workplace culture, ultimately impacting both individual wellbeing and organisational dynamics.

Male migrant workers also offered reflections on the treatment of women in the construction industry and recognised the problem of the pervasive nature of sexual harassment and discrimination:

Women do experience [harassment], and we see it everywhere. And most people quietly allow it to happen; some people need a good slap in the ear, metaphorically speaking. (M, FG9)

This quote acknowledges and validates the sexual harassment experiences discussed by the migrant woman, highlighting how widespread it is. It also highlights the complicity of bystanders doing nothing. The metaphorical call for action to a "good slap in the ear" underscores a recognition of the need to disrupt the prevailing culture of silence and complicity surrounding sexual harassment in the sector. Another male migrant worker talked about the potential positive impact of gender diversity in the industry:

In general, women in construction is a good thing for men. Because it allows us the opportunity to be respectful to a woman. (M, FG9)

While on the surface, the comment suggests a positive acknowledgment of the benefits of gender diversity and the importance of mutual respect in the workplace. The quote also hints at underlying issues within the male-dominated construction industry wherein the need for an opportunity to show respect for women implies a systemic lack of such respect generally. This may be indicative of a culture where respect is not automatically afforded to female workers, underscoring the challenges

and cultural barriers that need to be addressed to create a gender equal and inclusive workplace culture.

In response to discrimination, sexism, and sexual harassment related challenges experienced by workers in the industry, migrant worker participants offered several solutions. Emphasis was placed on the importance of management taking proactive steps to address sexual harassment promptly and effectively, including implementing clear policies and procedures for reporting and addressing such incidents. Participants also stressed the need for providing support services such as psychological help/therapy for workers dealing with the mental impact of work-related issues (including bullying and discrimination), as well as creating avenues for workers to seek assistance, advocacy, advice, and guidance in navigating sexism and harassment in the workplace. Additionally, there were suggestions for fostering a more inclusive and supportive work environment, where all workers, regardless of gender, were treated with respect and afforded equal opportunities for professional growth and advancement.

Separation from family and community

Another prevalent theme was the significant challenges associated with separation from family and community. Migrant workers face unique stressors due to the distance from many of their loved ones and the inability to address issues back home while fulfilling work commitments in NZ. Participants found it challenging to convey the realities of their life in NZ, including the high cost of living and long work hours, to their families, who were described as having an idealised image of life abroad:

> *[Families tell us] Because you are in the developed world you don't care about us anymore. (M, FG8)*

Additionally, for some, the time difference between NZ and their home country added strain to communication with loved ones, disrupting their rest time:

> *After you finish, you need to chat to your loved ones in the Philippines, because we always do that. So maybe you can sleep around 10 o'clock and then in the morning, you wake up around 4.30 - 5 o'clock. Yeah, because you need to prepare another food for your lunch on the work. (M, FG8)*

Migrant workers emphasised the effects of separation from family and home country, with some participants looking upset and sad as they talked about their families back home. Workers described often missing important family milestones and felt heightened levels of worry and stress. The cultural responsibility to support not only immediate family but also extended family members in their home countries exacerbated their financial strain and emotional burden. Despite these challenges, migrant workers told us how they remained committed to supporting their families and maintaining communication, demonstrating their resilience:

> *We feel lonely, but we're all humans, we need to provide for our family, especially for our kids. That way we hope that we can give them the better future for them. Yeah, yeah. That's why we sacrifice a lot. (M, FG8)*

Migrant workers emphasised the sacrifices they made to provide a better future for their loved ones, expressing feelings of loneliness and longing for their presence. Participants stressed the importance of finding healthy ways to cope with the stress and maintain their wellbeing. This included relying on peers and existing spiritual supports including prayer and connections with their church and religious community.

Language barriers and intercultural misunderstandings

Migrant workers identified and explained the significant challenges they faced due to language barriers and intercultural misunderstandings. Participants described how understanding cultural nuances and expressing themselves effectively was daunting in a multicultural workplace. Specifically, workers highlighted the difficulties posed by lack of English language proficiency, alongside accents and jargon, which hindered their ability to comprehend instructions and convey thoughts accurately. This limitation extended to intercultural communication, making it challenging for migrant workers to express their feelings or ask for help in work situations:

> *Because you think that if you ask too much from the employers, maybe one day you be fired, or you will be kicked out. (M, FG8)*

As a result of these communication barriers, participants said that they experienced heightened levels of stress. Workers shared how the inability to effectively communicate their thoughts and emotions led to frustration and isolation. Additionally, workers discussed feeling anxious about asking questions or seeking clarification from their employers, fearing that it might upset them or jeopardise their employment.

> *The big problem for us [is] sometimes you've been scared to ask. (M, FG8)*

This anxiety was exacerbated by uncertainties regarding their rights and responsibilities, making migrant workers vulnerable to exploitation and further hindering their ability to address workplace issues effectively.

It was also noteworthy in discussions surrounding mental health and wellbeing in the migrant focus groups that migrant workers were aware of the pervasive 'harden up' ethos of the construction industry:

> *[there is an] industry saying you should swallow a concrete pill and it's a sign of a weakness if you go and confess … 'hey, I'm not okay'. (M, FG8)*

Solutions identified by migrant workers

Solutions to shift work due to workload pressure

Strategies adopted by migrant workers to manage the high workload and shiftwork centred around collective worker effort – helping each other to get through the work and make up for lost time and delays. Clearer, more timely, and honest communication was also suggested as a potential solution to mitigate other organisational problems and delivery delays.

Solutions to the high cost of living

Migrants explained how they carefully undertook financial planning to ensure their financial sustainability in the face of low wages and high living expenses, even before arriving in NZ. This suggests that budget advice may not be needed for this group as it is already undertaken. Working long days and hours and shift work were key stressors for migrant workers, but these were also strategies used by migrant workers to increase their income and meet the other major stressor, being the high cost of living. Shared accommodation to reduce expenses, taking lunch to work, and sharing transport to jobsites were further strategies used by migrant workers to meet their financial obligations. Interestingly, increasing wages was not canvassed as a potential solution to meet high living costs.

Solutions to visa issues

On the matter of visa issues, migrant workers described how the fear of losing employment and the subsequent impact on their residency status weighed heavily on them, contributing to a sense of insecurity and vulnerability in their work environments. The only real solution to this offered by migrant workers was to obtain residency status.

Solutions to discrimination, sexism and sexual harassment

The female migrant participant described the systemic dismissal and minimisation by managers of concerns surrounding sexual harassment within the workplace. This suggests that speaking up against unhealthy and harmful practices in the workplace may not be an effective strategy to address the issues. Bystander apathy also meant that although harassment towards women was seen, heard, and commonplace, there was a culture of ignoring such behaviours despite workers recognising this was problematic and needed to change. Emphasis was placed on the importance of management taking proactive steps to have clear policies and procedures for promptly and effectively reporting and dealing with sexual harassment in the workplace. Some participants also suggested the need for worker support counselling services to help those affected by harassment and sexism.

As well, discrimination towards and between different migrant worker groups was highlighted as an issue that required addressing by managers as it was difficult for migrant workers to speak up and advocate for themselves due to the power dynamics at play, including often being in lower positions in the work hierarchy in labourer roles, being the non-dominant culture or 'other', and their vulnerable status as employees tied to a company because of their visa.

Participants emphasised the importance of effective management practices, advocating for the escalation of issues to supervisors via confidential reporting options, and urging management to take reported incidents seriously, listen attentively, and address concerns without minimising them. Additionally, there were calls for action to combat discrimination and harassment, with participants highlighting the need for fair treatment regardless of gender or ethnicity. Solutions included removing individuals who engaged in harassing behaviours and fostering a collaborative work environment where all crew members supported each other to complete tasks efficiently. Some migrant workers who had recent experience in another country where they were physically and verbally abused by supervisors felt collaborative workplaces with a less formal and more family-oriented approach was a potential solution. They described working in the NZ environment where workers felt more listened to and empowered to raise concerns without fear of reprisal. As one participant stated:

> *Our supervisor … and also our team leader, they treated us as brothers. (M, FG9)*

The intersection of racial discrimination and gender that adversely impacted on the female migrant worker likely requires the same high level proactive steps and workplace cultural change.

Solutions to separation from family

No real solutions were offered to address the stresses of being separated from family and community back home, other than regular video calls to their family, migrant workers supporting each other (e.g., spending time together on weekends doing leisure activities like fishing and cooking), and drawing on existing spiritual supports (e.g., drawing on faith and church-based community for social support).

Solutions to language barriers and intercultural misunderstandings

Some solutions were identified in response to the problem of language barriers and intercultural misunderstandings. These included potential workplace initiatives such as basic English courses and identifying key English language speakers within communities to enhance intercultural understanding and improve workplace communication and support. Participants shared how the prevailing attitude in the construction industry captured by the metaphor of 'swallowing a concrete pill' may have fostered a culture where migrant workers, like others in the industry, were discouraged from seeking help or acknowledging mental health issues, adding to the problem of poor workplace communication around mental health.

Mixed construction

"If your boss is putting a heap of pressure on your performance, and not rewarding you . . . then you get all sorts of weird dynamics happening"

The two 'mixed construction' focus groups capture the voices of 15 workers from a diverse range of occupations including apprentices, 'boots on the ground' (blue collar workers), and health and safety personnel. 11 workers described their gender as male and four as female. Eight workers were aged 25-44 years and six were aged 45 years plus. All workers were in Auckland or Northland. Nine workers identified as NZ/other European, seven as Māori/Pasifika, and four as Asian. This chapter offers nuance with multiple construction stakeholder perspectives.

Psychosocial stressors. Stressors identified through the mixed construction worker focus groups included the uneven work pipeline, lack of and poor communication, and for apprentices, low pay and an imbalance between host and apprentice expectations.

Participants described how construction industry workers faced significant stress due to fluctuating workloads influenced by market conditions, seasonal rushes, government contracts, and political changes. Small businesses were particularly vulnerable to uncertainties in the tendering process and employment stability. Efforts to increase efficiency could lead to uneven work schedules and redundancies.

Poor communication, both within teams and between supervisors, led to safety issues, work hindrances, frustration due to unclear messaging and cultural differences, and unplanned deliveries. This ultimately resulted in stress and underutilisation of mental health services, highlighting the importance of open and empathic communication to address these challenges effectively.

Participants highlighted additional financial stress faced by apprentices due to low wages and high living costs, leading to workers taking on additional work, such as Uber driving, leading to exhaustion.

Balancing apprentice and employer/host expectations was a challenge, particularly when work schedules were disrupted, and there were additional pressures from business owners expecting performance without adequate reward, which negatively impacted safety and the mental wellbeing of apprentices.

Solutions canvassed. Mixed construction participants did not offer any solutions to the construction industry's uneven work pipeline and instead proposed solutions focused on interpersonal skills and cultural changes, emphasising mental health support, career flexibility, and fostering a supportive work environment. Suggestions for improving communication included enhancing empathy, understanding, and social connections through initiatives like regular social activities and toolbox talks, while also advocating for greater pastoral care roles onsite. Solutions for apprentices' concerns included setting clear expectations and training apprentices properly though inductions on what the job involves, providing

genuine praise, and ensuring open communication channels. No specific solutions were offered to address the low pay of apprentices.

Results 4: Mixed construction workers

Characteristics of mixed construction participants

Two focus groups were held with workers from a diverse range of occupations - 'mixed construction' workers in the industry. One focus group was conducted in a hybrid online and in-person format, the other face-to-face in Auckland. This was the most diverse group in terms of occupation, with occupations represented including apprentice, apprentice manager, labourer, labour hire, driver/machine operators, builder, scaffolder, health and safety personnel, project managers and a site foreman. Participants' gender and age characteristics are provided in Table 4.

Table 4 Demographic characteristics of mixed construction worker participants

Focus group	FG10	FG11	Total
Total	3	12	15
Gender			
Male	2	9	11
Female	1	3	4
Age group			
20-24			
25-34		2	2
35-44	2	5	7
45-54		1	1
55-64	1	4	5
65+			

Note. Ethnicity: NZ European=7, Samoan=2, Tongan=2, Chinese=2, Other European=2, Māori=1, Cook Islands Māori=1; Niuean=1, Indian=1, Pakistan=1. All workers were working in Auckland or Northland.

Psychosocial stressors for mixed construction workers

Psychosocial stressors identified through the mixed construction worker focus groups were; uneven work pipeline, lack of and poor communication, and for apprentices, low pay and an imbalance between host and apprentice expectations (as discussed earlier in Results 1: Apprentices).

Uneven work pipeline

Having too much or not enough work was the major stressor impacting on the financial and mental health of construction industry workers in the mixed construction focus groups. Again, the boom-and-bust cycle of the industry featured in participants' narratives around workload:

> *I find our workload is so dictated by what's happening in the market. Like two to three years ago, we had the biggest boom we ever had. And we hired three extra staff members: we're a small company, so three extra staff members is a lot. And right now, we're looking at redundancies, which is really stressful. (F, FG11)*

Differences between small and large businesses in terms of quantity of work and having a regular work pipeline were also noted by other participants, who pointed out that small businesses were constantly thinking: Do we have enough work? Do we have enough staff? How many staff do I need? and Who do we need to layoff? Participants working for small businesses also described the tendering process, which involved considerable cost and time investment and was difficult for small businesses who might not win the work.

The work pipeline was affected seasonally by the pre-Christmas rush to get work over the line, and by government contracts that typically end in July (end of financial year). Other critical external events impacting on workload were around election time and with any subsequent change of government, especially for businesses heavily reliant on government construction projects. Participants also described how uncertainty around the implications of the recent change of government had people worried about job security.

Despite the many uncontrollable macroeconomic and political factors impacting on the work pipeline, some factors were controlled to some extent by industry, although perhaps in a reaction to uncertainty. One participant for example described how contractors were pressuring sites to finish projects more quickly to drive efficiency and cut costs. This put pressure on the whole supply chain, including designers, builders, and workers. The resulting downside to rushing jobs through to finish earlier than planned was that it created 'holes' in work schedules when projects were completed earlier than expected, leaving contractors without work for staff.

Lack of and poor communication

Participants said that there was a lack of communication between different supervisors and teams working in shared spaces, leading to safety issues, as one participant explained:

> *And supervisors it's just, sometimes, they just don't talk to each other. So, when you're sharing spaces with other teams, you don't get to be part of the toolbox [talk] on what they're doing, but yet, you're sharing that same space. So, you don't know what the dangers are that they're doing, they don't know the dangers of what we're doing in our space as well. So, it's quite stressful that you know, that people haven't planned for those shared spaces … What I'm talking about is you've got about 50 or 60 different teams working in the same space. (M, FG11)*

Work progress was hindered on some sites as various supervisors operated in silos:

> *people are focused on their own thing. So, where I have a problem is with people who are so beat up on getting their little bit done, and get it done well, they want to do a good job, but they'll stand on somebody else's toes to do it. And they won't say, 'well, we're all gonna play in the sand pit, I'll sacrifice. I don't need my pipes delivered now, because I've got enough to keep going for the rest of the day. We'll let these guys get on and have their trucks and get a load out' or whatever. So that's just that basic. Learning to live together is frustrating … they're just too focused on their own individual little job in front of them instead of being able to look at the bigger picture … they won't step back and do that helicopter view. (M, FG11)*

Other communication challenges identified included unclear messaging from management, which caused considerable frustration, as did cultural and language differences on projects with diverse crews. Sometimes there were problems as some workers did not speak English proficiently, and other times participants described how intercultural communications could lead to rifts between managers and staff when differing communication styles and tones were adopted.

Some mixed construction participants noted how a lack of communication also led to unplanned deliveries arriving ahead of schedule, often at busy and inconvenient times, adding to stress and feelings of being overwhelmed on busy worksites:

> *they're supposed to book it all in a day before … But then shit happens and deliveries don't come in. And often other deliveries come in, and then that delivery that was supposed to be there isn't, and it just comes on top of that. And just like, it's gets a bit overwhelming and you start getting a bit agitated. (M, FG11)*

Participants also described a lack of clear and timely communication between employees, apprentices, and their managers about problems or changes, which was highlighted as a stress point for all involved. Open communication was seen as important to resolve issues before they escalated.

Mixed construction workers explained how good and empathic communication was required when staff had to manage mental health issues and stress experienced by their colleagues. Although many participants workplaces offered Employee Assistance Programs (EAP) counsellors for their staff, these services were not always the preferred option and were thought not to be well utilised:

> *On EAP, I agree. We can have an app or phone call, but do I find that our team ring them? No. I find that they shut down. They're too scared to talk to people sometimes. Or they ring up and they get a call centre activation. 'Hi, how are you? How old? Are you male or female?' So that's a barrier … I think there's people that can talk, and they're open, and they're okay to pick up a phone … I've worked in construction, a number of guys would come and talk to me, but they would never go and talk to … So I'd be like, the auntie approach, whereas a lot of guys, you know, they wouldn't ring a phone number, or they wouldn't go and actually talk to their manager. Yeah, and I do think that there's, especially in the construction, I think that that barrier is there. (F, FG11)*

There were concerns about burnout of more compassionate and helpful staff:

> *And then there's the empathetic manager who actually wants to take on and who wants to help, who will take on everything and he'll break. Yeah. (F, FG11)*

MATES in Construction was also recognised by a number of participants as having helped with the communication at work around mental health:

> *Since MATES has come along, you know, they're far more active and getting to sites, and it has broken down a hell of a lot of stigma for us. I've got no idea if people actually ring MATES or not, because that information never comes to us. But the fact that we're actually asking people 'are they okay?' That just didn't used to happen. We're very bloke centric, and were tough sort of males too in contracting, you know, they don't want to be seen as being weak. You know, I'm a tough guy. And you know, when shit has actually happened in their lives and the missus has buggered off with a new boyfriend and whatever else and they're really in a bad space and you know something's wrong but they are not going to tell ya. Now they actually will. So that change of having people doing the basic MATES [training], almost all our guys have done the basic MATES training and a lot of us have done that Connector [level two MATES training] there's only a few ASISTs [level 3 MATES training] out there at the moment but just the fact that I think we have [MATES staff member] generally but you know, she'll come along to a pre start every month or so it's just being there, and 15 people queued up to have a chat to her, but it's just the whole atmosphere is I think improved vastly from what it was only three or four years ago, I think five or six years ago before I even knew what MATES was, we had mates but we didn't have MATES in Construction. (M, FG11)*

Apprentice issues – low pay and imbalance between host and apprentice expectations

Unlike apprentices in the apprentice focus groups [see Results 1: Apprentices], who said they struggled with balancing the requirements of the job with those required in their training, the apprentice manager participant said this was monitored and not an issue from his point of view having an oversight role and managing up to 60 apprentices. The stress for apprentices from his perspective arose from the cost of living and a lack of pastoral care.

The apprentice manager said that the apprentices he managed were guaranteed a 40-hour week and at the time of the focus groups, paid no course fees for the first two years, but were on a very low 'pay to train wage' that was less than the minimum wage (which he said could be as low as $16.40 per hour). With the high cost of living this created a 'stress model' of significant financial strain on apprentices, some of whom were supplementing their income by Uber (similar to Taxi) driving from 6pm to 3am in the morning, having a couple of hours sleep, then turning up to work exhausted. However, the apprentice manager explained that trade apprentices, (instead of having a student loan as is usually the case for university students), are essentially paying for their training as they go, with no debt once they are qualified.

A further issue identified by the apprentice manager was the difference in and imbalance between host and apprentice expectations:

> *my job is to match those two to make sure that they're on the same pathway, because the stress for them, which becomes my stress, is when any one of those things become out of balance. So, it's ongoing all the time. So, for example, the slow down the work at the moment for the major contractors. We have a number of major sites around the cities that have been sped up, completed, which has left a hole in the work schedules for some plumbers. Then I have three apprentices with me, all of a sudden, they have no work. So they come back to me and my job is to find them a new job. If they're not performing, they can come back to me, if they aren't reliable, they can come back to me … so that's my stress, comes when my charges if you like, don't deliver for the businesses that I service. (M, FG10)*

The above is indicative of the position of an apprentice manager who answers to businesses as well as apprentices. He described how apprentices found out when they meet with their cohort of apprentices what one another said they were getting paid, and then expected a pay rise which caused stress for the business owner.

Another pressure noted for apprentices was the lack of reward for or acknowledgement of good work. Working hard without reward created an imbalance of expectation:

> *If your boss is putting a heap of pressure on your performance, and not rewarding you … then you get all sorts of weird dynamics happening, which creates a negative attitude if you like, towards your work, and that can create health and safety issues. You start rushing through your work, and that creates … you're not sleeping you know, which makes you unhealthy at work, you're not safe, because you're not thinking, you're distracted. So, all these dynamics are at play. (M, FG10)*

Another problem according to the apprentice manager was having to watch that apprentices were not intimidated by business owners. He told us how apprentices can face intimidating language and behaviour on job sites, so need to develop a thick skin. But respect and praise were also highlighted as important.

Solutions offered by mixed construction workers

Solutions to the uneven work pipeline

Participants from the mixed construction groups did not offer any targeted solutions to stabilise the inherent ups and downs of the construction work volume and deadlines driven by broader economic and market forces. The discussion around solutions focused more on interpersonal skills and culture changes to better support workers through challenging periods. This included focusing on mental health and wellbeing initiatives to help workers cope with stress from unpredictable workloads and potential redundancies. Some participants suggested there needed to be greater support for career flexibility and transitions so tradespeople could adapt to changing industry demands.

Solutions to lack of and poor communication

Some of the interpersonal skills or cultural changes suggested as potential solutions to workplace stressors included: improving empathy, understanding and communication between workers from different backgrounds; focusing on acts of kindness, humour and fun initiatives to lighten serious work pressures; and fostering a more cohesive "work family" environment with mutual support between teams.

Although workers praised MATES in Construction, participants also felt there needed to be more opportunities for pastoral care/support roles on sites similar to the self-appointed "auntie" described earlier, who people went to informally for a chat. Other participants proposed that it was not realistic to be the close mate everyone can talk to and confide in, and suggested the need for planning regular social activities for colleagues outside of work to foster team building and create social connections:

> *I think there's things you can do to help that cohesion. Like have barbecues on Fridays and you know, activities you can do that not necessarily work related but there could be like, you know, get together with workmates, you know, after work or something. (M, FG11)*

Fostering social connections had wide support from participants and included regular toolbox talks to prevent isolation and withdrawal.

Other participants discussing caring for the wellbeing of workmates referred to the desirability of a family-like culture at work:

> *actually that's like your brother, that's like your sister that you're working alongside. So … when they do come in and they're a bit different you know, they're acting different? Because they're not like that every day. And then it's 'Oh, are you okay?' Little things like that means a lot. (M, FG11)*

To break down communication silos across the industry, one participant suggested the vision with MATES in Construction was to build a "family" and connect the different parts of the industry that work in construction. Improved communication up the management chain was deemed imperative to improve communication between supervisors, and collaboration between different teams on a shared site.

Solutions to apprentice issues – low pay and imbalance between host and apprentice expectations

Suggestions to better support apprentices included setting clear expectations, training apprentices properly and having thorough inductions on what the job involves, providing genuine praise and recognition for good work to boost self-esteem and motivation, and ensuring open communication channels are in place so issues can be raised and resolved before escalating. No solutions were offered to address the low pay of apprentices and their struggle with the high cost of living.

Health and safety

"We need steady workflow. We don't need this peaks and valleys. It kills us"

Two focus groups were conducted with 16 construction industry participants working in a variety of Health and Safety roles, including Quality Health and Safety & Environmental Managers, Project Managers/Site Foremen [sic], Supervisors, and General Managers/Managers. 12 participants described their gender as male and four as female. Ten participants were aged 25-44 years and six were aged 45-64 years. Eight participants identified as NZ European, two as Māori, and eight as 'other'. Most participants were in Auckland or Northland.

Psychosocial stressors. Five psychosocial stressors were identified by health and safety personnel: workload and workplace culture, communication for good relationships, financial stressors, lack of mental health understanding, and industry wide challenges.

Discussions highlighted the unsustainable high workload faced by frontline workers due to unrealistic scheduling and tight deadlines, leading to intense stress and fatigue, impacting both work performance and personal life.

Discussion also highlighted the impact of poor communication on workplace relations and dynamics, and on employee wellbeing. Participants emphasised the importance and need for managers to have strong interpersonal skills.

Financial stress was a significant problem for many frontline construction workers, leading to a culture of overwork and detrimental effects on personal and social wellbeing. Financial stress resulted in instances of prolonged work without breaks, safety hazards, breakdowns in relationships, and poor mental health.

Lack of mental health knowledge and awareness was also identified with the result that mental health was often neglected, leading to risks to individual health and exacerbating health and safety hazards across construction sites.

Finally, health and safety personal recognised the transient nature of the workforce, the profit focus of the industry, and the impacts of government change as challenges for the whole sector.

Solutions canvassed. A comprehensive set of solutions to address workplace stressors included increasing wages and regulating working hours to reduce overwork and its impacts, promoting open communication to enhance relationships and wellbeing, integrating mental health programs across construction sites, and embedding mental health outcomes in procurement processes to prioritize worker wellbeing from the outset. Additional suggestions included fostering a supportive workplace culture, incentivising retention of skilled workers, and integrating workplace wellness initiatives into contracting agreements to hold employers accountable for prioritising employee wellbeing.

Results 5: Health and safety managers

Characteristics of health and safety managers

Two focus groups were conducted with construction industry participants working in a variety of Health and Safety management roles. These roles included Quality Health and Safety & Environmental Managers, Project Managers/Site Foremen [sic], Supervisors, and General Managers/Managers. One focus group was conducted face-to-face in Auckland and the other was conducted online. Gender and age characteristics are given in Table 5.

Table 5 **Demographic characteristics of health & safety, managers & site manager participants**

Focus group	FG12	FG13	Total
Total	8	8	16
Gender			
Male	8	4	12
Female	0	4	4
Age group			
20-24	0	0	0
25-34	3	2	5
35-44	2	3	5
45-54	1	1	2
55-64	2	2	4
65+	0	0	0

Note. Ethnicity: Māori=2, NZ European=8, Other=8. The majority worked in the North Island (most in Auckland or Northland with some in several locations).

Psychosocial stressors for health and safety managers

The focus groups held with health and safety personnel identified five primary themes related to psychosocial stressors: high workload and the culture of overwork, communication issues and poor relationships, financial stressors, lack of mental health understanding, and industry wide challenges.

High workload and the culture of overwork

Workload and a culture of overwork (i.e., working more than a 40-hour working week) were two interconnected themes that led to poor work-life balance for construction workers according to the health and safety participants.

High workload

Most of the workload discussions centred around the challenges encountered by 'boots on the ground' (blue collar workers), rather than the personal workloads of the health and safety managers themselves (i.e., health and safety participants spoke on behalf of boots on the ground). Participants described the workload of boots on the ground workers as unsustainable and a major stressor because workloads were influenced by unrealistic scheduling, tight deadlines, and a lack of time off for employees.

According to health and safety managers, workers experienced persistent and unrealistic workload pressure. Participants contrasted Health and Safety Guidelines dictating a typical working week, and the real-world weekly hour requirements for boots on the ground to meet both their financial needs and to get the job completed. This divergence became evident through conversations where participants discussed the constant "push for [more] hours" from workers, and the concept of a boots on the ground worker's financial "hours budget" (hours needed to pay the bills):

> *I think that the point that someone made before about the hourly wage, you have people who who've literally, their budget, if they can have a budget, is around 60-hour weeks … I'm sure these boys are probably pulling 55 hours, 60 hours a week, at least, let alone driving time. But that's what they bank on. So, if you suddenly have a day where it's a rain-day you just paid them for eight [hours work, no overtime], that stuffs them. (M, FG12)*

The effects of working hard to meet targets in short periods of time meant workers felt intense work pressure. Participants described exhausted workers who experienced fatigue, with some individuals reportedly found to be sleeping at their desks. Participants observed the pressure in the short tempers among staff: "they also snap a lot quicker; the fuses are a lot shorter". The health and safety participants also observed a noticeable imbalance between work and personal life among employees evidenced in workers not having anything "left in the tank" for themselves or their families when they went home:

> *I think with the with the boys on the ground, yeah that sort of burnout is probably more seen when you get home, you know what I mean? So, you sort of give all your energy to work. And unfortunately, your partner, your kids and everything like that will miss out afterwards whether that be you're not being interested, not wanting to sit down, not wanting to help the missus out because you're knackered. Yeah, I think the family life definitely suffers more when you're physically exhausted. Because typically at the end of the day, that's when you're tired aye. The guys bring themselves to work and give us all they can. It's, I think you're right, it's when they go get home as well, it probably affects it and then it cascades next day that have a fight with the missus and all of that then next day is even worse out. So, like compounding after we heard a bit from some guys who said like basically you get in the car at the end of the day, you're knackered, and then you've got a shit drive home. And then you get home, and you get whacked again, for being late or being shitty or being tired. And it's just this kind of endless grind. And they're coming to work and presenting the best face that they can because they*

don't want to miss out on the overtime, they don't want to let their team down. (M, FG12)

Suggestions for addressing this issue aimed at making workloads more manageable and sustainable included considering an increase in hourly wages to alleviate some of the need to work extra hours and the financial strain on employees. A novel solution to the issue of overtime was also described by another participant:

we told our guys, [to] try and get a bit of balance, that we will give them the overtime. Because what we found was they would stretch out the work to make the Saturday work day. [So] we said 'we'll give you the Saturday's pay if you get everything done by Friday', right? So, you get the money, and you get the weekend off. And that go down really well. Really, really well. (M, FG12)

Culture of overwork

The health and safety focus group conversations delved deeply into the challenges stemming from "old guard" workplace culture, revealing a prevailing ethos that prioritises work productivity over worker self-care, and which discourages help-seeking and acknowledgment of mental health issues having an impact on workers:

So, it'd be the same with the mental health. I don't want to tell my boss because he's a dinosaur. He's gonna tell me to harden up. (M, FG12)

Despite these challenges, there was optimism around a slow but gradual culture change:

a lot of these old-school boys are getting sort of phased out, retiring, getting old. And I think the site that I'm on at the moment is moving on a site with more young people, leaders, with young families as well. So, you see that it's actually a pretty good place to work. (M, FG12)

This quote suggests a gradual shift towards a more supportive environment under the leadership of a new generation of more empathetic individuals who prioritise employee wellbeing and work-life balance.

The health and safety participants also revealed an underlying ethos disregarding the value of taking time off. Participants described how the current construction culture fostered resentment towards those who took time off to actively address work life challenges, particularly when individuals in positions of power did not model a healthy work-life balance. Traditional notions of the need to separate work life from personal life perpetuated this prioritisation of work over personal wellbeing:

[On mental health concerns] It's all sorts with guys, some with severe issues, and most of it is personal stuff. And we recognise that, you know, the old saying of leave your private life at the gate is a very old-fashioned notion, it doesn't work that way. (M, FG13)

Participants also spoke to the stigma surrounding mental health, highlighting the need for a cultural shift towards greater acceptance and support:

He would have been better off to have had a broken leg than to have a mental health issue. (F, FG13)

Communication issues and poor relationships

Health and safety participants highlighted the importance of relationships, communication, and interpersonal skills in the workplace. Participants discussed how relationships influenced work

dynamics, emphasising the overlap between personal and professional relationships. Health and safety managers stressed the emotional effort required to build and maintain these connections between workers and underscored the value of them, as health and safety managers, as well as others on site, having strong interpersonal skills to foster positive relationships.

> *it actually helps them [when you] remember the names, even foreign names, especially now the Filipino guys. I know their names and know how many kids they have, how old their children are. And it creates a special connection. And people actually, that's helping to build this trust. And this bond where people actually treat you as more like a friend, they can reach out and come up with their hazard … because they know you're there for them. (F, FG13)*

There was recognition that factors such as work-life balance and financial pressures significantly affected both personal and professional relationships, highlighting the need to foster a supportive work culture. Interestingly, according to the health and safety managers, workers did not have time to build and maintain positive relationships with one another and the nature of the work (working in separate areas/roles) was another key barrier.

Financial stressors - for workers

Discussions with health and safety managers also emphasised the significant cost of living stress experienced by construction workers on low wages that is one of the factors driving the culture of overwork among workers, often at the expense of personal and social wellbeing. The impact of the high costs of living were felt in fatigue and burnout among employees, exacerbating existing workplace pressures. One participant described a scenario where a worker, driven by financial incentives, worked an uninterrupted stretch of 42 days without respite, despite potential safety hazards on site. The situation intensified when a fire occurred on the site, prompting the intervention of the Health and Safety Manager and highlighting the grave risks associated with overwork.

This pressure to work additional hours also strained social relationships on-sites with workers becoming "cranky" under the stress. The intensity of these stressors was underscored by participant descriptions of "meltdowns" and "breakdowns" among staff, particularly heightened during the holiday season. Several health and safety managers described instances where workers had spoken about suiciding and enduring the suicide of a colleague, indicating the severe impact of financial stress on mental health and wellbeing:

> *Yeah, you know, we've had guys that are having meltdowns. Had one guy committed suicide. So, we've been through it all and all that bad stuff here. (M, FG13)*

Lack of mental health understanding in the workplace

The health and safety focus group conversations delved into the lack of understanding and prioritisation of mental health concerns. Participants described how within the traditional workplace culture, mental health often takes a backseat, leading to adverse effects. Relationships with fellow workers faltered under the strain of unchecked stress and workers then neglected their own wellbeing, leading to fatigue. Such conditions may not only jeopardise individual health but also compromise overall safety on construction sites, amplifying the health and safety risks in construction.

Industry wide challenges

Challenges facing the industry included the transient nature of workers (e.g., workers having to move to where projects and development are), issues faced by migrant workers (e.g., visas, finding accommodation, navigating a foreign culture, and acculturative stress), the profit focus of the industry, and the impacts of government change on the sector.

Transient nature of the construction industry

Participants said that the construction industry's transient nature significantly impacted workers and their needs. With projects having defined timelines, workers often move from one project to another, leading to job instability and uncertainty. Participants vividly described the industry's cyclicality as characterised by alternating periods of high demand and subsequent downturns. The fluctuating demand for labour was said to result in inconsistent employment opportunities, affecting workers' financial stability and in turn, wellbeing. Broader economic fluctuations were described as further exacerbating these challenges, with industry downturns leading to layoffs and job insecurity. To survive, health and safety managers said that workers in the construction industry had to continuously adapt to the evolving economic conditions.

This unpredictable rhythm, or the boom-bust cycle of the industry, not only disrupted workflow but also had implications for the workforce, resulting in a continuous loss of expertise as skilled workers sought more stable opportunities elsewhere. According to participants, the void left by departing skilled workers was often filled with lower-skilled and inexperienced labourers, exacerbating the cycle and adding more stress to those workers who remained with their companies.

The focus group discussions shed light on the underlying structural deficiencies, notably the absence of a robust workforce infrastructure pipeline, which perpetuated the reliance on transient workers. This, in turn, was felt to fuel issues such as job insecurity and fragmented workplaces, where different sites operated under varying processes.

> *Then you've got … the labour hire which is probably the majority of our problem. Well, they're not a problem themselves, but the industry, meaning the mental health and they're in and out all over the place. They don't know what they're doing next, [if the] job is coming in from labour hire, you can turn off like that [clicks], light switches, which is zero job security. Because it's not even a month's warning, it literally turned them off and say don't send them today ... If you don't like them, it's just turn them off. (M, FG12)*

Solutions to the transient nature of the industry emphasised the need to establish a more consistent workflow to mitigate the detrimental impacts of a volatile pattern on workers' mental health and wellbeing:

> *We need steady workflow. We don't need this peaks and valleys. It kills us. (M, FG12)*

Participants expressed their frustration at the disruptive effects of the transient workforce on individual workers and on the industry as a whole:

> *The other problem is that the construction pipeline in NZ; there isn't any. So, we're highly reliant on labour hire because the [large construction employers] don't want to hold on to this massive workforce, they will just bring [workers] in as they need them. So, without that ability to ... have that that pipeline of work where [they can] resource something [because] they know they've got work for the next 15 years [and] they can invest in their frontline leaders, they can invest in their systems and processes. But because it's project, nothing, project, nothing, project, nothing. So [named*

organisation], once it goes, all that expertise, it's gone. The same with [named organisation], once it's finished, it's all gone. And they'll go to Australia and get paid twice as much. (M, FG12)

Participants also outlined various hurdles associated with subcontractors, emphasising challenges ranging from compliance with health and safety legislation to the implementation of workplace wellness initiatives. Health and safety managers particularly highlighted the struggle in managing fatigue amongst subcontracted staff, where policies aimed at limiting hours and enforcing rest periods encountered practical limitations due to the nature of subcontractor arrangements. Moreover, participants explained that the subcontractor model presented additional challenges to the main contractor in terms of ensuring health and safety compliance, as subcontracted workers were not under their direct control (and may have less incentive to adhere to safety protocols or may find ways to evade oversight).

Migrant workers

The discussion among health and safety participants delved into the challenges experienced by migrant workers:

For the Chinese workers, for them to even like show up in NZ, they need to pay like 20 grand, 30 grand NZ dollars to the agent just to get a visa. So, the visa is an issue for them. So, they don't speak English. And if they have any problem with current life, with a current boss, they couldn't just leave the job … They don't know who they should talk to and language barriers that stop them from approaching the right person ... they are like really stressed. (M, FG12)

Participants also described other issues faced by migrant workers; communication hurdles, cultural disparities and acculturative stress that comes with adjusting to a new life, understanding 'norms' in a foreign culture, strained relationships with other workers and exploitation by employers and recruiters, with one participant likening the situation for migrant workers to one of modern-day slavery.

Another participant highlighted the resilience of migrant workers, noting that they often endured significant hardships in silence out of respect and ingrained cultural norms of deference to power. These challenges manifested in various adverse effects, with health and safety participants describing heightened workplace friction, fatigue stemming from financial strain and long work hours, conflicts arising from intercultural and linguistic barriers, and a dearth of opportunities for workforce advancement.

One participant's account illustrates the financial hardships endured by migrant workers, stressing the urgent need for industry-wide support and reform:

So, we've got a lot of overseas workers, over 55% of the workforce from overseas, so there's loneliness, there's separation – a lot of their families back home, or could be even people traveling from other parts of the country that they don't get to be with the family. Relationship stresses, financial, definitely. We were talking to a worker the other day, he's been brought in from the Philippines. He's on $27 an hour. And to come over, his employer made him pay for all his tools, all of his training, his medical, so it's about five to six to $7,000 worth of stuff that he had to pay for on $27 an hour … now it gets skimmed off his wages, then he's got to pay for his rent in Auckland, and then he's gotta have food, and then he's gonna send as much as he can back to home. So that's pretty

shit. So, you know, those type of people, they come in, they really, really struggle. (M, FG12)

The financial pressures experienced by migrant workers, compounded by the need to work long hours to send money home and cope with the high cost of living in NZ, had notable implications for the broader workforce. Participants described how the focus on working extensive hours to meet financial obligations lead to fatigue and decreased productivity among migrant workers, impacting overall workplace efficiency. Additionally, participants conversations highlighted how financial stressors could also contribute to heightened workplace tension and reduced morale among the workforce as a whole.

Profit focus

The health and safety managers discussed how in the construction industry, financial gains were prioritised over workforce wellness. Participants emphasised how companies often prioritised profit margins during tendering processes, leading to a focus on cutting labour costs to enhance profitability. Participants said that this emphasis on the financial bottom-line could result in several adverse effects, including higher risks, diminished expertise, and a lack of essential leadership skills or people with good interpersonal communication skills due to budget constraints:

Our frontline leaders don't receive any training on good leadership and planning and coaching and how to how to work with their people, there's none. Because there's no time and no money, no budget for it. (M, FG13)

Impacts of change of government party

There was robust discussion about the impacts of the change of government party (in November 2023 the National Party were voted in following Labour Party leadership since 2017) on some parts of the industry and its workforce. One participant noted:

You look at the change of government now and whatever side you're on. Light rail would have been huge for Auckland. It will be gone. There'll be other projects coming up, but they just don't start. So, there are other projects coming up, but they're not going to be ready when you need them to be ready because they've been turned off for the last six years. So, you have to start it [from] scratch, you got to redesign reconsent, you've got to re tender and tendering takes four or five, six months, then the designs have to be put through, it takes time. (M, FG12)

Several participants described the challenges faced by some construction industry sectors which experienced prolonged periods of uncertainty and long wait-times between projects or in project initiation due to the need for redesigning, reconsenting, and retendering. According to the health and safety managers, the recent changes in political party in NZ had led to disruptions in employment opportunities and potential skill stagnation for some sectors of the workforce.

Solutions offered by health and safety managers

The focus groups conducted with construction industry health and safety personnel yielded a range of solutions to address workplace stressors and enhance workforce wellbeing.

Solutions to high workload and the culture of overwork

Key recommendations included increasing hourly wages to alleviate financial strain, implementing hourly limits to regulate working hours and ensure compliance with health and safety standards, and providing acknowledgment and compensation for overtime work to prevent overstretching and fatigue.

Proposed solutions to the culture of overwork discussed included implementing, offering, and supporting workers to take dedicated wellbeing days and integrating recognition for health and safety achievements into workplace practices. Additionally, fostering community networks through team building and social events, and providing support for workers such as gifting food vouchers were suggested strategies.

Solutions to communication for good relationships

Proposed solutions to enhance relationships and communication included toolbox talks and recreation zones, aimed to promote open communication and connection, and provide opportunities for workers to rest and recharge to enhance mental wellbeing. Additionally, participants stressed the importance of addressing workers' information needs and implementing workplace community wellbeing initiatives to bolster positive relationships and overall employee welfare. Throughout the discussions, there was a strong focus on how personal and professional relationships influence each another.

Solutions to financial stressors

The health and safety focus group discussions also revealed systemic challenges arising from prioritising financial gains over workforce wellbeing. These challenges included cost-cutting measures during tendering and a lack of investment in workforce development, especially in leadership, communication, and interpersonal skills. Participants cited governmental changes and privatisation, and issues like transience, short-term contracts, and retention of a skilled workforce as key issues, suggesting the need for industry-wide reform.

Solutions to the lack of mental health understanding

Participants advocated for transformative solutions to address the lack of mental health understanding in the workplace, highlighting the urgent need for comprehensive mental health care programs and for unified approaches that transcend individual construction sites and projects. Participants said that the industry could begin to address mental health concerns more effectively by bridging the gap between management and workers (i.e., senior staff and owners taking the lead and promoting good mental health practices), establishing consistent policies and practices across sites and consistent support mechanisms for the whole sector (e.g., dedicated Employee Assistance Programs (EAP), counselling, 24/7 support lines), and fostering open dialogue between managers and workers and between contractors:

> *If we can get the main contractors actually getting on board with one programme of mental health, rather than it's hard because then guys go [company name] one day and they have to do this then two days later they're on another site, and they have to do something completely different. (M, FG12)*

Participants believed that MATES in Construction also had a role, as did EAP:

> *What's been really good is the EAP. Anonymous counselling. That's been really, really good. But also, I think, with MATES coming onto the site, and creating more Connectors*

[MATES level two training], or you know, more people that put their hands up and say, 'if any one of you need somebody to talk to, come and see me', and that's a very practical resource, I suppose. And if we would have more of those, because it's like going to your health and safety rep … to raise near miss. I just saw, go and quietly whisper to the health and safety rep. (M, FG12)

As well, health and safety personnel advocated for integrating mental health outcomes and workplace wellness strategies into procurement processes to prioritise worker wellbeing from the outset, holding companies and employers accountable through contractual obligations. By allocating resources for mental health initiatives and embedding wellness strategies in contracts, companies would be required to foster a safer, more supportive and mentally healthy work environment.

Other notable suggestions involved implementing daily mental health check-ins, providing EAP for anonymous counselling, fostering a supportive workplace culture, and integrating mental health care programs across construction sites to ensure consistency and to maximise benefits for the transient workforce. Additionally, the recommendations from health and safety manager focus groups prioritised measures such as higher-level liaisons with employers of migrant workers to prevent their exploitation, upskilling language and cultural champions to facilitate communication across and within workers from different and diverse cultural backgrounds, and providing translation services for mental health resources to overcome language barriers.

Solutions to industry wide challenges

To address the problems of the transient nature of the workforce, health and safety participants understood that systemic change was required including a move away from dependence on unskilled or low skilled labourers during periods of workforce scarcity. Health and safety managers believed more needed to be done within the sector to grow their own workers (e.g., apprentices) and incentives were needed to retain skilled workers.

To balance out the profit motive of the industry, the discussions underscored the need to integrate positive mental health outcomes and workplace wellness starting from the procurement stage. Participants suggested proactive measures were needed to prioritise worker wellbeing from the outset of procurement processes including integrating workplace wellness initiatives in contracting agreements. The discussion on solutions focused on high-level interventions aimed at embedding mental health outcomes and workplace wellness into contracts, thereby holding employers accountable for prioritising their employees' (and potentially sub-contractors') wellbeing. Participants stressed the importance of clearly defined contractual obligations to ensure employers follow through on commitments to workforce wellbeing. By including mental health initiatives and workplace wellness strategies in the contract from the outset, companies would be compelled to allocate resources and budget, relieving middle management of the burden of implementing these initiatives with limited resources and time.

To address challenges faced by migrant workers the solutions proposed by health and safety managers included fostering closer collaboration and oversight between large scale construction companies and the subcontracting agencies responsible for the employment of migrant workers to help to prevent exploitation. Participants also recommended instituting initiatives to identify and elevate language and cultural leaders to help workers feel more connected and welcome and improve their knowledge of worker rights and access to support services. Health and safety managers proposed leveraging existing linguistic, religious, and cultural resources for support that is culturally responsive to the unique stressors faced by migrant workers. Additionally, the translation of mental health resources into multiple languages was suggested.

Although no real solutions were offered to address the issues that come from a change of government, one participant reminisced to a time of greater government regulation for large infrastructure projects, hinting at a regulatory solution:

> *The country used to be set up like that a long time ago, the Ministry of Works and NZ Rail and all that sort of thing. And I think when that was actually in play, it actually worked well. But because we sold that all off when we brought in private enterprise and said we'll just give it to these little companies. That's where all went wrong. And I think if it sort of went back to, you know, these big infrastructures, where they can get all the people in and train them and keep them and go from there, then that flow effect becomes massive. But when you're doing a six-month contract, or a one-year contract, or a 12-week contract, or whatever it may be, you're getting these people in and these people out: oh yeah, we can just resource quickly, just get them and get them out. (M, FG12)*

As the quote suggests, the previous centralised structure for government investment in infrastructure projects was seen as more effective in training and retaining workers. By implication, privatisation was perceived as leading to fragmentation and short-term contracts, resulting in instability for workers and hindering the industry's ability to train and maintain a skilled workforce (and ultimately impeding the efficiency and sustainability of construction projects).

White collar workers

"So, I just texted him [a new guy onsite] to say, 'hey, mate, you're going great guns, and I'm hearing really good feedback about that'. And then he came in this morning and said, 'well, that's amazing, thanks heaps'."

This chapter presents the findings from three focus groups and one interview held in person and online with 10 white collar workers, including several business owners/CEOs. Seven white collar workers identified as male and three as female. All were in the North Island. Seven identified as NZ European and three as 'other'. Three workers were aged 20-34 years, three were aged 35-54 years, and four were aged 55 years plus.

Psychosocial stressors. Psychosocial stressors identified by white-collar workers were uneven work stream, poor communication, poor leadership and lack of "soft skills", and "paperwork, permits, consents and the council".

The boom-and-bust cycle of the construction industry led to periods of intense workloads that demand long hours and risked worker burnout, followed by quieter times that brought job insecurity and financial strain, especially for smaller businesses.

Workers described poor communication in the construction industry characterised by senior staff keeping crucial information to themselves, leading to uncertainty, frustration, increased stress, poor relationships between managers and teams, and compounded by high staff turnover and language barriers faced by migrant workers.

Poor leadership and lack of good interpersonal skills led to significant stress and disillusionment among workers, who felt unsupported and undervalued, exacerbated by micromanagement and a lack of trust.

White-collar workers in the construction industry faced significant stress from the burden of extensive paperwork, permits, and consents due to complex regulations and a slow, bureaucratic council, which often failed to provide sufficient information, causing delays and increased pressure from management.

Solutions canvassed. White collar participants suggested solutions such as training managers in interpersonal skills, fostering a family-like company culture, and providing mental health materials in migrant languages. Participants also recommended mental health activities like paid "blue sky" days, guest speakers at toolbox talks, and an industry roundtable to address workplace stressors, expressing optimism about improvements due to initiatives like MATES in Construction.

Results 6: White-collar workers

Characteristics of white-collar workers

Three focus groups and one interview were conducted (face-to-face, online via Teams, and some hybrid format) with white collar workers and business owners/CEOs. We initially asked for CEOs but as it turned out the people in these groups were from a range of white-collar occupations – so they have been grouped together as 'white-collar participants'. Age, gender and ethnicity characteristics of the participants in the three focus groups and one interview are provided in Table 7.

Table 6 Demographic characteristics of white-collar focus group and interview participants

	FG14	FG15	I16 (interview)	FG17	Total
Total	2	3	1	4	10
Gender					
Male	2	2	0	3	7
Female	0	1	1	1	3
Age group					
20-24	1				1
25-34				2	2
35-44			1		1
45-54		2			2
55-64		1		2	3
65+	1				1

Note. Ethnicity: NZ European=7, Other=3. White collar participants were located across Auckland, Waikato and Bay of Plenty.

Psychosocial stressors for white-collar participants/owners/CEOs

There were four key psychosocial stressors identified as impacting on the mental health and wellbeing of white-collar workers: uneven work stream, poor communication, poor leadership and lack of interpersonal skills, and "paperwork, permits, consents and the council".

Uneven work stream

The biggest stressor impacting on white collar workers was the uneven pipeline of work, either too much work or too little work. Again, this was acknowledged to be the result of the boom and bust cycle of the construction industry:

> *Definitely a boom bust cycle in construction, and it's that effect on everybody, depending on where that is, so obviously in boom it's workloads. And you don't know where your next one's coming from, everybody's, you know, trying to do the best in coordination, particularly subcontractors and the likes, is definitely a stressor. And then on the flip side, our residential team just had a quiet patch, ah, like lots of the residential building companies. And then there's that impact, well how secure is my job? So, you know, those are pretty significant. And, obviously, the challenges are … most of us can manage*

them for a period of time, it's about how long is that boom cycle, that workload, or when you are not achieving. (M, FG17, mid-size company)

Working long hours

When there was too much work, the pressure was on the existing workers to work longer hours or a longer week. Rather than tapping into temporary workers via labour hire companies to meet the higher work demands, white collar workers described how often, the extra work was given to existing employees:

What we're finding is a lot of subcontractors, their teams have been run quite lean. So, you tend to gravitate towards the workers that produce the most, and then give them the majority of the work. So, it's not uncommon for them to be doing, you know, extraordinary hours to prop up the business. (M, FG14, large company)

The risk of working long hours was more stress, and potentially burnout:

They've just got to be mindful that they're not burning their workforce out. Like I'm, I can see a six-day working week, where say on Saturday, it's maybe an eight to one o'clock, and then the rest of the day off with a Sunday. But when you're starting to hear workers that are working the full seven days, working very long hours … it's so important to have that downtime, that rest time. It's just not sustainable. (M, FG14, large company)

In common with many participants from other focus groups, the pre-Christmas period added additional pressures to close off projects in December:

So, within commercial construction, it's quite a critical time of the year. As we know Christmas and the holidays is fast approaching so there's always the build program. So that's always overarching, no matter what stage of the build, especially for us, with the example we actually have three or four projects, which are due to complete all in December. So, as you can see there is a massive effort or focus in closing those projects out. (M, FG14, large company)

On being asked if, from a health and safety point of view, there were upper limits to the number of hours workers could be engaged for, participants said that there were no regulations:

No. So it's the responsibility of that company. Obviously, as being the main PCBU, we are able to extract that data to see if a particular person has spent the majority, how much time they've spent on our site, because obviously they have to electronically sign in. So that would trigger as we go through the reports, but we obviously focus more on our own staff rather than the subcontractors. So, while we've got that ability to review that data, it's rare that we do it, only if we were actually asked by a subcontractor. (M, FG14, large company)

Not enough work

Government election time was noted by a number of white-collar workers as having an impact on the construction industry work pipeline:

Obviously, now that we've had the election, in the new year, I think things will ramp up again, construction always seems to be quite buoyant. And it has been for quite some time. I think we needed this dip. Because this dip was quite well overdue. As we know, it always runs in a cycle. And I don't think we experienced much of the last cycle [due to COVID-19], I think we kind of skipped over that and just continued along with this

construction boom. But I think now the industry is starting to tighten up its belt a little bit. (M, FG14, large company)

Participants again described how construction industry businesses are all different, with some having a regular and forecasted pipeline of work:

We're fortunate we do have a pipeline … we can actually forecast out three years from now, not many subcontractors or small organisations have that luxury, I think a lot of them have operated from project to project … it's not like it was this time last year, where there was just a flood of work. And it didn't matter if a certain project would fail because the subcontractors would just up and leave, because there was just work coming everywhere. Whereas now it's definitely becoming a lot stricter in the industry. And also the amount of work out there is starting to kind of peter out. (M, FG14, large company)

but you've got to have an employer that's in a financial situation from the boom to be able to survive the bust, and I'm lucky enough, we are in that situation. And that's probably quite good for our team. But they still had a, you know, there's still some concern where things get quiet. (M, FG17, mid-size company)

For some, especially smaller and newer businesses, when there was not enough work tough financial decisions and personal sacrifices were made:

Between May and August, we didn't have enough work. We were working on reduced hours and the cash flow started slowly draining out. So, we decrease our salaries, my husband and I, as much as possible to be able to pay those workers … because the election was coming, we just weren't getting any work. (F, I16, small business owner)

For one small business owner, the hard periods were fraught with added feelings of pressure and responsibility:

you're accountable for well, for me, it's seven people and the seven men, they are families. And that it's pressuring, knowing that we need to do well in all areas, because if the business fell and we can't pay them this is impacting not just the worker, but their families as well. (F, I16, small business owner)

The consequences of the bust part of the boom-and-bust cycle for the white-collar workers without a secure pipeline of work was the constant worry of not having enough money to pay the bills, pay the workers, or even pay themselves adequately, as well as the potential to lose good workers as they looked to seek work elsewhere.

Poor communication in the workplace

Several accounts were shared regarding poor communication, in particular from senior staff and especially managers or supervisors, who were described as keeping information "in their heads" and not sharing the work problems or priorities with staff:

So, the biggest stressor probably in the office team would be lack of communication, everything's in his head. And he knows exactly what's going on, but he may not have communicated to others. We certainly don't have any clear vision statements or missions or anything. (M, FG17)

This lack of communication led to uncertainty and frustration and was exacerbated during periods of change in the workplace, adding to worker's stresses and uncertainty around their jobs and roles.

Poor communication skills were passed down to other workers, increasing pressure and stress on their team and culminating in poor quality relationships between managers and their staff.

One participant, in attempting to explain poor communication in the construction industry, put it down to the hierarchical nature of work roles and the associated power imbalances between the various parties:

> *what I've found in the construction industry is not new, it's the master slave type relationship, you know? I see it all the time. And I've worked with builders, daily, and it's horrible … That power imbalance is challenging particularly if you're talking about relationships as a project manager … representing the owner … always that power imbalance if things get challenging. (M, FG17)*

Staff churn impacts communication

White collar participants also described how in some workplaces, staff churn was a problem exacerbating lack of communication with new staff around their roles and responsibilities:

> *I mean, it's a real luxury to have someone new coming in, to actually sit with them for a month, because that's not going to happen, because by the time someone puts in their resignation, and go, well, you know, maybe it's two weeks, maybe it's four weeks, maybe six weeks, what's in the contract. By the time you actually recruit somebody, that persons gone. Yeah. So that's another stress. (M, FG15)*

> *I have the same issue. I've been drafting for 20 odd years … it was like there's no one there that knew where things were at. Don't get me wrong, like the staff are helpful when they can be, but they just couldn't really help me and it was an issue right there, they had someone leave … I got yelled at after I was drawing someone else's drawing, trying to figure out how they drew it, to get it off to the customer on Friday. (M, FG15)*

> *One of our guys, he came on board with us, they had a very minimal transition period before the other person left. Sort of thrown in the deep, in trying to do the absolute best he can, asked questions, got told, basically just get on with it. And then he got hauled over the coals for something that he had done and asked advice on but didn't get the advice. And then he got hauled over the coals for the reset. And he thought he stood up for himself where he was like, well, hang on, but it's still just, it was his fault. And eventually, he's gone now. And he's in a much happier place, which is good for him. But you know, it should never have happened. (F, FG15)*

The above conversation highlights the significant impact of staff turnover on communication and productivity in the construction industry. Participants expressed their frustration over the lack of proper handover periods for new staff, leading to difficulties in understanding roles and responsibilities. There was a sense of urgency due to the short timeframe between a staff member resigning and their departure, leaving little time for knowledge transfer. This lack of adequate handover resulted in new staff feeling overwhelmed and unsupported, leading to mistakes and conflicts. Furthermore, the lack of effective transition processes contributed to staff dissatisfaction underscoring the need for better management of staff churn to maintain a positive work environment and productivity.

The importance of positive feedback

Examples of good communication included giving positive feedback to workers for work well done:

And that's something that, with the macho attitude in construction, I think is a challenge in itself, again, lack of I guess, the skill set, and giving positive feedback. I used to always struggle with this in the early days of health and safety, but it's a bit better now. But, you know, if I try and get project managers to say to their subcontractors, 'hey, you've done a really good job'. And they'd say, 'we pay them for a good job, why do I have to thank them as well? Will they do it better next time?' Those three words, is it hard to do? You know. (M, FG17)

Another participant, in response, revealed a recent instance where he gave positive feedback to a builder:

I totally hear you on that one (positive feedback). I've been in my role, I just got to four years now, and I don't think the person that I report through has said anything positive to me in four years … it's just their way. And then on the other side, I sent a text last night when I was sitting down having a beer at a restaurant, sending a text to new person … a young builder, and he's come on board. And the feedback about him has just been amazing. It's like, he's got credibility, because he's been on the tools. So, I just texted him to say, 'hey, mate, you're going great guns, and I'm hearing really good feedback about that'. And then he came in this morning and said, 'well, that's amazing, thanks heaps'. Then I went back to him and said, 'yeah but [jokingly] I still think you're a dick'. He laughed, but what did it take me? 23 seconds maybe. (M, FG17)

Language barriers

One participant, focusing on the needs of their migrant workers, was concerned about the absence of mental health resources in migrant languages:

the majority of our staff come from China. And they have only taken a very poor English probably, maybe not, cannot speak English. And that makes this very difficult to … get on well with the other guys working on the construction site. And that may cause the stress to them. And another thing is cost, we don't have the, the materials that's using the Chinese language, that they tell us how to deal with this stress, how to feel better when you get them stressed. So, I think the main problem I see is to deal without these kind of things is done with failure under the culture difference … One day, I found a guy that tried to kill himself … this thing is already happening in the corner of the [workplace]. He used a [weapon]. You have discovered him, he just lying down on the corner. And we call the Police, call 111 … the main cause of this, after they come and talk to him … he got some family issues. And another cause is using drugs. It's very yeah, it's very helpful to him to have mental [support], you know, let it do some chats, come in soon. (M, FG14)

The impact on the management and staff in the situation where the worker tried to take their own life in the workplace led to the manager reaching out to MATES in Construction and illustrates the severe end of unaddressed mental health issues in the workplace and the need in such circumstances for emergency mental health support.

Poor leadership and interpersonal skills

Participants provided several scenarios illustrative of the poor leadership they had experienced at work, which they highlighted as a key psychosocial stressor. One white-collar worker explained how

recent management changes and poor leadership from her new manager was causing her stress at work:

> *we've got a new general manager … which is just stress on me … I don't know, I don't feel like the support is there anymore. And I've sort of felt like I've battled with him constantly regarding sick leave, and just, it hasn't been for me, for my loyalty in the company, there hasn't been any love, then I don't, you know, I don't expect you to give me six weeks off on total pay with, you know, whatever. But just a little bit of assistance or to be nice when it came to sick leave requirements. And so, I've found that really, really stressful. And I actually got to the point, I've always sort of been the person that will get to work early, you know, work all day, not take breaks, all of that sort of stuff. And I've just got to the point now where I'm like, actually, you can get stuffed. I'll show up to work on time, I'll be at work when I have to be at work. And I now take every break that I'm entitled to. And I've never done that in my entire working life. And I just feel like, well, you know, you don't seem to give a shit about me. So why should I give a shit about you? And why should I give you that extra five hours that I've always given you for free? (F, FG15)*

Another white-collar worker complained about micromanagement and the general lack of trust in carrying out their work:

> *the management micromanage us a little bit too much, rather than letting you make, you know, like, I'm here to do health and safety … I think there's times that I should be allowed to make decisions without influence from the management on the smaller things that you know, they shouldn't have to get involved in. (M, FG15)*

Good leadership was highly valued by white-collar participants:

> *I've been in leadership all my life really and experiencing poor leadership is really challenging. Yeah, so having amazing leaders that are amongst your people, I think is because it is a people game isn't it, everything's a people game and if you've got outstanding leaders, and not necessarily leaders have got Harvard leadership degrees behind them, but just good people with common sense and who are caring. (M, FG17)*

The need for interpersonal skills

Overwhelmingly, white collar participants emphasised the importance of leaders having "soft skills":

> *One of the things on my list, is I actually think around the soft skills, particularly at supervisory level, or on site … so we've got examples of guys that are trained properly and we've got examples of people who literally been dragged up from the tools, survived the next role, survived the next role, and then survived till the next role then they're not skilled enough to do it, and then then everybody complains that they're not up to it. So not having the skills to do your job is a major stressor … it is leadership, it is the soft skills, how to talk to people, if that supervisor is struggling, they'll pass that struggle on to other people, because they don't know how to plan properly. They don't know how to email their subcontractors and keep them around and don't know how to run an effective toolbox meeting, which is where we communicate what's happening. All of those skills are critical and have an effect on subcontractors and direct employees on site as well. (M, FG17)*

Some participants suggested that staff could be selected for interpersonal skills:

One question you don't often ask or look for in that individual is just how well they're going to interface with all of the workers and kind of how much time are they going to spend getting to know those people and how important it is as well, because at the end of the day, look, our workers are our biggest resource. So, if you have a solid workforce, and this extends out to subcontractors as well, then the organisation is going to benefit. When I first entered into the industry work 16, 17 years ago, especially from a health and safety aspect, I thought it was just strictly going to be showing and teaching everyone the correct way of actually doing things, doing it safely. Whereas now it's just branched, it's opened up more into this wellbeing, because I think that's the main thing that we should be focusing on. It's easy to teach someone how to use the tool, but then they've got all these life kinds of stresses and pressures and everything, and we've got to address those. And if they've been bringing those into the workplace, that's making it unsafe, they're not addressing it, not able to, to kind of cope with what's going on just in day-to-day life. (M, FG14, large company)

Another suggested that emotional intelligence training should be prioritised:

it's quite important and when something goes wrong, or when there's a stressor or something is triggering … emotional intelligence training would really help. And it would help everybody stay in communication. How do you communicate? And I know it sounds silly, but they aren't actually. Yeah, they, if you understand how you communicate, I mean, if you've had that training, it means that you're going to understand how someone else communicates, you're going to identify, oh, hang on, we don't communicate the same. How does that work? And it would help a lot. (F, I16, small business)

What good management looks like

Managers that have your back

White-collar participants talked about the positive impacts on their work life when they had a manager who trusted them and "had their back":

the previous manager was quite a tough operator … but when anything went downhill privately, you know, she had one of her strengths was she made you feel like she cared, and that she had your back, I guess, and you felt that support. Whereas, you know, the new gentleman he, you know, is by the book. So, it's a very different style. (M, FG15)

Leading by example

One participant shared how he had recently "lost the plot" at work and took his frustrations out on his teammates after dealing with work-related stress and personal grievances over a long period of time. His teammates recognised that he needed a break and encouraged him to take a couple of days off work, as he "just broke" (emotionally) and his attitude at work had become poor. This demonstrated the importance of having supportive coworkers who look out for one another's mental wellbeing and who are willing to encourage taking time off when needed. The example also illustrates how taking time off to take care of oneself can set an example for others.

Treating workers like family

A further common theme evident in discussions among white collar workers when speaking about workplace culture, was the need for workplaces to treat their staff members like family:

So, we always were one big family … And that was with the [social event] every month, everyone came together. And you know, we talked work, but we also just chatted in

general as well. Like, we all sort of felt like, everyone cared about each other. Whereas now that we don't have that, except once every two months. (F, FG15)

One white-collar worker's method to manage mental health issues with his staff was to have informal face-to-face, one on one catch ups, proactively.

Face to face. One to one. Yeah, that myself and the team leader should manage, [check in with] their guys, how's their working? How's their attitude? How's their feeling? So, they come to me and I can figure it out. This is one by one. That's the thing … I have not found another better way to deal with it. Yeah, because I'm the only guy that can speak English. So yeah, I think I'm the only guy in the place that can handle it. So, it's that's where my stress comes from. Yeah. (M, FG14)

He further explained:

[For our migrant workers] it's very hard to, you know, to get the knowledge how to deal with some things here [in NZ]. For example, if they are sometimes even got a fine from police itself or speeding one, they do not know how to pay for it they gonna ask me, and if they don't ask me it's very stressful if they are men cause they don't know how to deal with it. Sometimes they, they find going to be like two or three hundred dollars and compare with their salary … So they gonna feel very stressful. (M, FG14)

Sometimes, treating workers like family meant white-collar participants going out of their way to help workers deal with the stresses. One participant described the support she offered her apprentices to achieve their qualification:

So an apprenticeship is not just the training … and our boys every second Sunday, they come to the yard not paid, so voluntary. Three-hour block, and we sit together, and we go through it … it's a commitment that they are making and if they give me their time, I'll give them mine, like it goes both ways. A lot of them, they're so smart, but they're just, they don't like school, they had bad experiences at school. So, they don't want to hear about it. But they're interested in that topic. And I explained to them that, hey, this is one or two years of your life, but that thing [your qualification], you keeping it for the rest of your life, you know, it's a you adding value to yourself. And that's something, that's a concept that you actually need to tell them. I think for those people, they need to look at the company they work for, and always meant to look after them. Because that's, that's the trainer, the trainer responsibility. But they need that support. They can't do it themselves. And it wouldn't, it wouldn't be fair if the employer wasn't there to support them or be available, then don't sign them up. Don't offer apprenticeship if you can't commit as an employer. (F, I16)

Another white-collar worker described how he helped the migrant workers settle in:

we provided the transportation, we've supplied our company car to men, and they supplied the SIM cards for their phone. They only needed to pay for their property, to pay for their insurance and pay for their food. [We help them with] problems when they are facing, like to buy a car, to repair a car, or something. Like I just talked to the company, I got to try to help him, have to do it, you know, because I have to try and make them happy to make them have a good attitude towards work towards their own life, because they come from China, far from their home. None of their family members here, I am only family member of them. Yeah. (M, FG14)

Paperwork, permits, consents, and the council

The final psychosocial stressors that disrupted the work life of many white-collar workers was the stress caused by the burden of paperwork, permits, and consents required by increasingly complex regulations and a slow and bureaucratic council. Sometimes this was a problem of the council not providing enough information:

> *So recently, we just had a project where I submitted, that was a commercial one, submitted the documentation, getting a request for information, and they're asking for things that should have been in the building consent, but weren't. And I rang her up and I was like, 'where did this come from?' So that being said, I would have had it sorted, but it wasn't. It just does my head in. (M, FG15)*

White-collar workers also shared their frustrations dealing with the council:

> *what I see, people [from the council] have gone from feeling competent to make decisions, to be more worried about covering your arse. And it's not just with our company, that's, you know, I deal with the council, I see it with them all the time. I used to be able to you know, make a phone call, get an answer, done. And now it's like make a phone call. Five people have to discuss what I want, because they're scared that something's going to happen to them. And just seems to be across the board. But it's all about arse covering now. It's not about actually helping and making improving systems or anything like that. It's just about covering your own arse. Which, yes, we all need to cover our arse, but it makes life really, really hard to not feel confident in your job to be able to make a decision. (F, FG10)*

There were concerns shared by participants around delays caused by council and not getting the right consents and permits in the face of pressure from the management that added to the paperwork stress:

> *So if there's a delay, or you know, this needs to be done, all that needs to be done, then I've got the directors at me going 'well, you need to have this by, blah, blah, blah', and I'm like, 'well, I've done everything I can do, it's in councils hands, council have 20 working days to do it, but you want it in five, I can't, there's nothing I can do about it'. So, you know, get off my back, I've done my job. I've put every phone call, contacted every contact in relation to this that I possibly can, to get it pushed. But also on the other flip side, they also don't understand that the more I push, the more council gonna get pissed off at me. So, I go to the bottom of the pile, right? There's a very fine line. (F, FG15)*

Solutions offered by white-collar workers

Solutions to the uneven work stream and the burden of paperwork and permits

For two of the psychosocial stressors, the uneven work steam and the burden of working with a bureaucratic council to obtain required consents and permits, no real solutions were offered by the white-collar participants. Surviving the bust part of the boom-and-bust cycle depended in part on the size and maturity of the construction business, the diversity of its portfolio, and luck.

Solutions to poor communication, poor leadership, and lack of interpersonal skills

On the matters of poor communication, poor leadership, and lack of interpersonal skills, white collar participants made several suggestions. Discussions between participants revealed some of the qualities of good leaders and managers and healthy workplace cultures and practices that facilitated good communication and relationships between workers and between workers and managers. Training managers and supervisors in interpersonal skills like communication, coaching, and mentoring, emotional IQ, or selecting managers or leaders with these qualities, was suggested as a solution to poor communication by managers and may improve how issues are addressed in the workplace. Another solution to poor communication in the industry included operating the business or team more like a family. What was common to these approaches was having a management and company culture where leaders had good relationships with their staff, knew something of their personal life and stresses, and cared enough to regularly check in with them, and provide a listening ear and support when it was needed.

It was suggested that some of the challenges faced by migrant workers in construction due to language barriers and cultural differences, could in part be addressed by the provision of mental health materials in migrant languages. They could also be addressed by proactive intervention by culturally sensitive managers or team leaders who spoke the same language, meeting privately, face to face, and one on one to identify and help solve migrant workers' everyday stresses.

Focus groups also highlighted a number of other mental health and wellbeing promotion activities including paid "blue sky" days where some companies offered extra days or afternoons/hours off work to focus on life outside of work, individualised support by a sympathetic and listening manager, and inviting speakers to toolbox talks:

> *build partner toolboxes. So, every second month, we get all of our subcontractors together. This is at my old company, and then I'd get guest speakers along. So often it could be around the mental wellbeing [and] we'd have counsellors, we also have other organisations, you know, what's helped, what's important, health and safety to them. (M, FG14, large company)*

A broader suggestion was made, however, around having an industry roundtable to canvass viable solutions to workplace stressors:

> *if information was more easily accessible, I'm toying with the idea of getting a roundtable together with other organisations similar to ourselves. We need to get stakeholders together, we need to have these open conversations about the industry and just, you know, share information. I think that's the key. (M, FG14, large company)*

There was also some discussion and optimism expressed in a number of the focus groups/interviews around there being a culture change in mental health and wellbeing in the construction industry. White-collar participants noted the culture on sites was a lot better now and heading in the right direction in terms of managers and others being able to identify people in distress and offering help and support, and some normalising of this behaviour. Much of this improvement our participants said, was due to the positive impact of MATES in Construction visiting onsite.

Peak group and government representatives

"what we're describing generally is we've got a little bit of a sick industry financially about the way it works and the way that it operates … this is a big part of the systemic issue in the construction industry."

Representatives from seven peak construction industry workplace safety bodies and key governmental organisations were captured via a series of two-person and individual interviews conducted on-line via Teams, with two participants in Auckland and five in Wellington. All seven representatives described their gender as male, were aged 45 years plus, and identified as NZ/Other European. Note: This group typically spoke about the stressors of others in the industry and not themselves.

Psychosocial stressors. Financial stress and 'job demands' – defined by this group as job characteristics that made working in the construction industry particularly challenging – were significant stresses, followed by pressures outside of work, labour hire issues, poor communication, and interpersonal relationship challenges. Different industry sectors experienced different stressors.

Financial stress from the construction industry's boom-bust cycle impacted businesses and individual workers, leading to heightened anxiety, depression, and poor mental health due to job insecurity, low wages, and fierce competition.

Job demands in the construction industry, including heavy physical labour, long hours, tight deadlines, and hazardous conditions, led to significant mental health impacts such as fatigue, depression, anxiety, strained relationships, and higher injury rates.

The stress of "stuff outside of work" encompassed various socioeconomic challenges that workers brought to the jobsite, leading to mental health impacts, and made worse by some workers' lacking foundational literacy and numeracy skills.

Labour hire issues including job insecurity and inadequate support from some companies exacerbated poor mental health among such workers, leading to feelings of instability and lack of belonging due to constant changes in supervision and workplace conditions.

Poor communication and interpersonal challenges in the construction industry compounded stress and dissatisfaction among workers.

Industry sector differences in psychosocial stressors highlighted workplace challenges and preferences among workers, underscoring the need for tailored solutions.

Solutions canvassed. Some participants suggested financial literacy training could alleviate financial stress for some individuals and businesses while others argued that systemic issues such as low pay and insecure employment contracts were the root causes and could not be solved through training. Government intervention was proposed to regulate boom-bust industry fluctuations through infrastructure spending. Implementing minimum wage standards in supplier contracts and tendering processes were suggested. To address job demands, efforts to improve mental health support were highlighted, including partnerships with organisations like MATES in Construction. However, concerns were raised about the effectiveness of

the many different intervention options available, emphasising the need for evidence-based approaches and clearer guidance for employers. Other stressors, such as communication breakdowns and literacy challenges, could be mitigated according to participants through interpersonal skills training, and pastoral care-focused health and safety approaches.

Results 7: Peak group and government representatives

Characteristics of peak group and government participants

Due to challenges arranging mutually agreeable times for focus groups with peak group and government representatives, a series of two-person and individual interviews were conducted on-line via Microsoft Teams.

The participants included representatives from seven peak construction industry workplace safety bodies as well as key government groups.

Table 7 Demographic characteristics of peak group and government participants

	Four interviews
Total	7
Gender	
Male	7
Female	0
Age group	
20-24	
25-34	
35-44	
45-54	2
55-64	5

Note. Ethnicity: All were NZ European, and one was also 'other European'. Two were in Auckland, and five in Wellington.

Psychosocial stressors for peak group and government participants

The peak group and government interviewees typically spoke about the stressors of others in the industry and not themselves. The two common stressors believed to have the most impact on construction workers were financial stress and job demands. Other stressors and issues variously raised by individual participants included "stuff outside of work", issues to do with labour hire, poor communication and interpersonal relationship challenges, and the different psychosocial stressors for different sectors (offsite versus onsite and vertical versus horizontal construction).

Financial stress

By far the most profound workplace stressor was financial stress due to the uncertainty of the boom-and-bust cycle of the construction industry. Financial stress was seen as having major impacts at both the business and the individual worker levels.

A sick industry

At the business level, participants said that the boom-bust nature of the construction industry meant that there was a constant lack of visibility and certainty around the pipeline of future work, which impacted financial stability. In addition, participants explained that for many businesses, and more so for small businesses, tight margins were a real problem. Fierce competition in tendering for work that operated on a lowest price mentality for awarding contracts to suppliers meant that companies submitted low bids and then put workers under pressure to meet deadlines and complete builds under cost and before or on time to break even or make profits:

> *what we're describing generally is we've got a little bit of a sick industry financially about the way it works and the way that it operates … people get caught up in that and this is a big part of the systemic issue in the construction industry in NZ. (Peak body representative)*

The problem with pricing so low is that:

> *when you're a bit of a shaky business, and you're looking to do it on the cheap, and I was pricing, it was best value, and so you're bringing the contractors on board, because somebody is on board, because they've given you a good price, and then something goes wrong. And so, there's delays, and then the pressures go on to keep the job to time, and then stresses go up, supervisors start yelling, people get stressed, like it all kind of compounds off the bat. (Peak body representative)*

Participants said that at the individual worker level, the financial stress was experienced as low wages. To ensure or maximise profit, participants explained that some companies hired the cheapest labour or paid low wages. Apprentices were recognised as a special group within the industry that suffered from low wages:

> *there is a lot of minimum wage as well … and that is about the population of people that construction picks up in NZ … there is a lot of unskilled people … so mom picks you up off the couch she said 'you've gotta go do something' … and the next week he'll be on a construction site, that's quite a typical profile. And even if you think about apprentices, you know they're not really well paid and the way that labour rules work in NZ there's more of a push to contracting as well, so small businesses are now saying that, you know, they are on contract rights. (Peak body representative)*

Apprentices, labour hire, and labourers were also the groups that were susceptible to financial shocks, downturns and challenges, and job insecurity according to peak body and government representatives:

> *So, you're teamed up with your own car, your own vehicle, your own tools … it's actually really tough financially … So, when you get a shock economically it's really felt in construction, so I think you've got to look at financial stresses as a broad sort of category. (Peak body representative)*

Peak groups and government representatives recognised that financial pressures were not felt equally by all companies and workers in the industry, with some (i.e., those who were larger, with excellent management, and who had more capacity) being more insulated than others:

> *I was meeting with a [large construction firm] earlier in the week; they are very optimistic, and there's a general sense when you go and talk to their workers they can see a future, they're not worried about job security, because they know they are working for a company that's thinking 20 jobs ahead. They've got pipelines and they've got a really good management team who are probably good economists, and some got real good skills there about keeping their pipeline full, and you know a nice portfolio of different things. So, if our residential slows down, they'll go into another sector, but they are not the norm. The norm would be organisations that are a lot smaller [and who] don't have the ability to fund 10 or 15 tenders for the future, and probably couldn't do them if they did get them, and [who are] pretty much hand to mouth from one job to the other. (Peak body representative)*

Good management and economic forecasting as well as a diverse portfolio of work were highlighted as key factors underpinning successful construction companies that managed to forge on and maintain a steady workforce.

Impacts of financial stress

Financial stress in the construction industry significantly affected workers' health and mental wellbeing. We heard from peak body and government representatives how they were aware of how struggling with financial pressures can lead to heightened anxiety, depression, and overall poor mental health among construction workers. Additionally, they described how uncertainty of employment, irregular income, and financial instability can contribute to chronic stress, and can manifest in physical health problems (such as hypertension and heart disease). Moreover, participants identified that financial stress may impair decision-making abilities, decrease productivity, and strain relationships both at work and at home. This burden was perceived to exacerbate existing mental health issues like depression and anxiety and lead to a cycle of financial and mental distress.

Job demands

"Job demands" was the phrase used by this group of participants to frame a suite of work characteristics that made working in the construction industry particularly challenging. These included the heavy physical and hazardous nature of much of the work, the need to work long hours, working quickly under tight timeframes and budgets, and the pressures to keep up the pace despite illness or injury and unfavourable weather conditions.

Participants described how various job demands added to workload pressures and stress. Owners of businesses were perceived to deal with the day-to-day stresses of managing a business and workforce, including issues like absenteeism and increasing costs. Workers in white collar or managerial roles were seen to deal with increasing compliance requirements and greater project complexity:

> *projects are way more complex than what they used to be … productivity has never been so low … there's so much complexity within what we have to deliver with our buildings. People have to work longer hours and more days, weekends, that type of thing, because complexity is imposed by your employer, complexity is imposed by legislation, and*

complexity imposed by your clients, that you work with programs and constraints. Complexity has increased, but times have stayed the same … council compliance, regulatory compliance, employment compliance, you know, you must fill out this form, you must do this, you need to do this. There's so much compliance and I reckon without measuring it you could probably put a day a week down to compliance. So, then you have to make up a day a week. So, any way, you make it up, a day a week is working longer. (Manager, large vertical construction company)

Project manager roles were highlighted by some participants as a particular concern:

Project managers, you know, it's like huge, huge complexity, right. And there were some stresses on those jobs around the job design as well, that the punch between the client organisation and the constructor, and often they've got nowhere to go. And they've got these complex problems to work at. And it's just constant. So, I think it's worth probably just putting a marker in for them as well. Because I think a lot of it has to do with the way we do construction, how we manage construction, and the position we put those people in. (Peak body representative)

Participants also explained how blue-collar workers endured the high physical demands and fast pace of the work, while meeting expectations of 'being tough' in the industry.

Several other participants alluded to some key differences in working conditions according to whether a worker was onsite or offsite, working in manufacturing of building components or materials in warehouses or factories. Participants said that work on traditional construction sites (onsite) was characterised by low productivity and poorer working conditions, lack of work facilities, and a scarcity of protection from adverse weather. In contrast, the more controllable off-site construction sector featuring shelter, temperature control, access to rest rooms and lunchrooms, and parking for workers which meant a less stressful work environment. Participants also highlighted that workplace environmental stressors and exposures were different for vertical (tall builds) versus horizontal construction (roadworks and residential).

Lower productivity, poor workforce retention, fatigue and injury

As well as lower productivity and problems with retention rates as workers leave for more secure jobs with better pay and conditions, participant said that the construction industry faced significant challenges related to the negative impacts of high job demands on workers' health and mental wellbeing. Again, participants described the stress of doing physically demanding work and long hours resulting in fatigue and increased risk of physical injuries, leading to chronic pain and musculoskeletal disorders, which in turn can contribute to mental health issues such as depression. Additionally, participants discussed how the long work hours left little time for family and home life, putting strain on workers' relationships and social wellbeing:

Well, what does that do when you're away from work, for the home life, because yeah you leave home at 5:30 in the morning and you get home at 7:30 at night and you've got all of those things … long work hours leave little time for family and home life, putting strain on relationships. (Peak body representative)

One participant explained how these stresses can escalate and manifest in conflicts or issues on job sites if not managed properly, and suggested that the competitive nature of the industry, combined with demographic factors, was linked to high rates of suicide. Moreover, participants noted that labour hire workers, facing unstable employment conditions and a lack of support, were particularly vulnerable to stress-related health and wellbeing issues. Overall, the combination of demanding

schedules, tight timeframes, and budget pressures created a challenging environment that impacted both physical and mental wellbeing for workers in the construction industry.

The physical demands and toll of construction work could lead to tiredness, especially when combined with long hours. Fatigue from long, physically demanding workdays was said to potentially exacerbate mental health issues like depression or anxiety. Labour hire workers were perceived as facing additional fatigue due to being placed with different companies each week without stable employment conditions.

> *fatigue is a big issue, it's a big hazard … people are fatigued and come to work and they don't concentrate. Like there's a couple of people in the office here, that by the middle of the afternoon, I see their head is down in front of the computer, and they're just not getting anything done … if you've got a machine you're operating then potentially [that] is really dangerous if you're not paying attention. (Government representative)*

Fatigue was also a concern for project managers:

> *Project managers, in that layer … In NZ, they have quite a dominant position … I often see people sort of age range early 30s to sort of mid 40s … and they've got cognitively quite difficult jobs. So, this time of the year, as well as with a couple this week, and you can just see that their eyes, they are tired. (Peak body representative)*

Fatigue was also implicated in higher rates of accidents and injuries on construction sites due to safety issues caused by inattention. Additionally, participants shared how increased complexity and workload pressures, particularly from compliance requirements, further exacerbated mental health issues like burnout and stress and lead to fatigue.

"Stuff outside of work"

One participant explained that a key stress in the industry was the "stuff outside of work" that characterises the life of lower socioeconomic groups, and which workers bring to the job site with them:

> *They all suffer from things other people suffer from … So, think about all the risk factors that go with lower socioeconomic type issues. We pick up more than our fair share of factors outside of work, are probably more prevalent potentially, in construction. (Peak body representative)*

Literacy and numeracy skills were highlighted as important skills for workers in the construction industry but often lacking. Peak body representatives said that people were coming into the industry without basic knowledge around subjects like geometry, and there was a sense that the modern-day education curriculum was not as good as past generations' curriculum. Transitioning from school to work was also identified as an issue, as there was a perceived gap between what the construction industry needed workers to know, and what secondary schools were teaching students. The lack of foundation skills (e.g., maths, writing, reading, spelling, English) was said to be a major source of stress on job sites and made it harder for workers to adapt to changes. Participants said that it was very difficult to teach these skills to workers in the workplace.

Labour hire issues

Some participants pointed to additional workplace stress brought about by the industry reliance on labour hire and the structure of the labour hiring sector. In particular, labour hire practices were seen as contributing to job insecurity and financial stress for some construction workers. As well,

some labour hire companies were viewed as prioritising profits over worker wellbeing, placing workers on sites without proper gear, training, or support:

> *It's a real fragmented industry and so there's lots of [labour hire companies] and probably the big ones have reputations to protect. Whereas some of them are really fly by night, you know, they set up office in a small town and then the next week they've got ten people on their books … Some of them do really good work, however, others, from my view anyway, they're in it to make the money. They do not necessarily care about the welfare of the worker, placing workers onto sites, some of those workers are having to buy their own gear and fund their own training … [It leads to thinking] does the business owner here actually care about my wellness and wellbeing? (Peak body representative)*

For labour hire workers, participants also said that being placed with different companies weekly under different supervision added to instability and contributed to a lack of belonging for the workers.

Poor communication and interpersonal relationship challenges

The participants raised the importance of good communication to understanding people and dealing with interpersonal relationship issues in the workplace. Other problems highlighted by participants as adding to stress and dissatisfaction with work included the lack of recognition for extra effort and a lack of support and access to resources for non-English speaking workers, particularly those away from their family and wider community. Good pastoral care, which involved good communication, was acknowledged by several participants, with pastoral care being highlighted to improve employee retention.

Having consistent teams where people trusted and knew each other, worked towards a common goal, and talked to each other respectfully and frequently, was believed to help reduce some stresses compared to constantly changing work crews. Some participants made the case for building stronger communication down the supply chain as an important mechanism for reducing stresses in the industry.

Different psychosocial stressors in different construction sectors

The characterisation of sectors of the industry as offsite and onsite and vertical versus horizontal by several participants illuminated some of the differences in workplace environments for people working in the construction industry. One advocate for offsite construction explained that the traditional worksite was not only inefficient, but hazardous for workers from a health and safety point of view because they were typically messy and disorganised compared to the offsite manufacturing sector.

One peak body representative explained how environmental impacts like exposure to weather conditions and messy and disorganised construction sites could be mitigated by implementing "lean construction principles" and compulsory training in apprenticeship programs to improve industry standards. The participant said that this could occur by promoting clean and tidy site environments through discipline, clear streamlined processes, and leadership from the top-down. Workplace culture was also seen as important, with well-designed workstations and tools facilitating proper organisation, preparation, and efficiency on construction sites. A peak body participant also suggested that construction sites could learn from off-site construction approaches to address issues like productivity, waste management, and environmental impacts on sites.

Another participant also acknowledged the benefits of offsite construction, including from a health and safety perspective, and benefits to having more control over the environment. The participant noted, however, that as there was so little offsite construction happening in NZ, some major tasks, like pouring concrete and roofing, had to be done in situ. Another participant identified further problems with offsite construction, being that they are not immune to economic challenges:

> *should there be more offsite manufacturing in NZ, like from a productivity and efficiency point of view, yes absolutely. But you know, can we just have those off-site manufacturers stop going under and going into insolvency, and taking everyone's money with them which they, at the moment [do] with alarming regularity. So, they've got to fix up their industry as well. (Peak body representative)*

As well as different types of environmental psychosocial stressors between onsite and offsite construction, participants also talked about individual worker preferences for working onsite or offsite:

> *Someone who'd be happy working in that prefab environment, being really focused on that particular thing, in doing and doing it to a high level of quality. Some people will really thrive in that environment. Others, that wouldn't be the right environment, they want that point of difference, that being out on the site and different weather and different conditions, different sub trades working around them. They thrive on the challenge that that brings. But both can create psychosocial challenges, depending on who you are as a person, and I suppose this is some of the spaces that different people get impacted in different ways. And so, finding a solution isn't a one size fits all. (Peak body representative)*

Solutions offered by peak group and government representatives

Solutions to financial pressures

On the matter of budgeting and financial literacy which is often seen as a quick easy 'fix' to resolve financial stressors, several participants suggested financial literacy training could help address financial stresses for some individuals running companies and for some workers. Others noted that budgeting and financial literacy will not address the issue of low pay and broader industry issues or motivate small businesses/contractors to attend training:

> *[businesses] are on that spectrum of maturity. I think one of the things I always question is, sometimes, the easy solution, I will train people, is seldomly the best solution. So, people aren't managing their business as well. So, we'll give them training. Well, what is the driver for them to attend training? There is no driver. So, the companies that are already understanding it don't need it, and the businesses that need it, don't have the time or the funds to do it. (Peak body representative)*

As well, apprentices were mentioned as sometimes not understanding how to manage their finances when they were paid monthly rather than weekly and falling into debt as a result. Participants acknowledged that while training may help some individuals, the core financial issues stemmed from systemic problems in the industry like low/insecure pay, contracting practices, and boom/bust cycles, which training alone could not solve (i.e., you cannot budget money you do not have coming in).

Peak body and government representatives suggested a potential role for government in mitigating the financial ups and downs of the boom-and-bust cycle of the construction industry. Participants

described how, in some overseas jurisdictions like Singapore, the government regulated the industry by controlling government infrastructure expenditure. In NZ, the government is responsible for around 20 percent of construction spending, making it very influential on the industry. Several participants explained how government departments sometimes add workload pressures when throwing work into the market during busy periods. Participants identified that potentially, the government could also mitigate some of the financial impact of the boom-and-bust cycle by counter-cyclical infrastructure spending, like Singapore does, to help smooth boom-bust cycles. In response to this notion, a participant said;

> *about 18% of construction in NZ [is] government procurement in construction. If they were absolutely perfect, able to get the timing right, and didn't always do lowest cost compliant procurement, which they do, so they drive some of the poor behaviour at the moment as well. Yeah, that would potentially within the system even at 20% might work. (Peak body representative)*

Some participants suggested that a long-term, planned, national infrastructure investment programme was required to provide more transparency about future work. Some participants noted, however, that this would be challenging due to the three-year election cycle of governments in NZ. Some participants also suggested that minimum wage/pay standards for workers could be a requirement of supplier contracts and tendering rather than competing primarily on price.

Solutions to job demands

One representative shared their organisations' efforts to improve mental health and reduce stress on construction industry workers. These included working with MATES in Construction who visited onsite, and tapping into resources offered by existing mental health and wellbeing support services;

> *one of the things we're doing is working with [wellbeing organisation] to make their [wellbeing] platform available to a proportion of the industry [the small companies] that often don't get access to tools and resources like that. A three-person plumbing gang doesn't always have a wealth of information in the wellbeing and wellness space. So that's one of the things we're trying to do to support that. And as an organisation, we're also sponsoring a number of counselling type sessions for our members. Because again, most small players don't necessarily have access to EAP services, or while they might have access to it, they're not necessarily willing to commit to the cost that's involved to access to it. So, we're looking at how we sponsor a number of those across the course of the year. And also, [we are working with a charity organisation] that have trained in that Mental Health First Aid space for some time, around about similar time MATES was forming. (Peak body representative)*

We also heard from some participants that mental health programmes for workplaces was becoming a crowded space, and the challenge for employers was deciding which interventions to choose:

> *I do wonder about the evidence base. [Some] construction safety research out of Colorado, just written … to guide the construction industry, really good peer reviewed, quality paper, that basically has gone through all the interventions. And basically, they say that the best route for construction professionals is to destigmatise mental health and serve as a bridge that connects the workers needing support with qualified medical professionals. They don't go as far as blasting it, but basically that there's actually no evidence that one on one training helps anybody and that people's mental health issues, which are all very complex, should be left to a qualified professional … Because unfortunately, you know, there is a whole lot of snake oil salesmen out there. I just*

noticed this morning, there's a new AI one that's been developed to solve mental health … So I think, in some ways, it's about saying, look, there is a role for businesses in this, [but] some of the things you can do might not be the right things and you can actually do harm in this area. (Peak body representative)

The point being perhaps more support, clearer information, and possibly a blueprint or guide was needed for businesses to help them choose safe, evidence-based interventions that address the hazards their workers face.

Solutions to other stressors

Good communication (e.g., clear, consistent, respectful) was important for understanding where people were coming from and dealing with interpersonal issues in the workplace. Solutions to improving communication included investing in interpersonal skills training for leaders, and building stronger bonds and encouraging a more collaborative culture down the supply chain. Improving job satisfaction and sense of belonging through recognition, support networks, and addressing issues like bullying were also suggested to address problems faced by some workers.

For increasing workers' literacy, solutions included investing in literacy and numeracy skills in the workplace, although no suggestion was made as to who should lead and fund this. Some participants suggested that there was a need to teach foundational knowledge and different trades and skills through alternative apprenticeship models beyond traditional programs.

For issues faced by apprentices, having a licensing system for people to be able to take on apprentices was suggested. Participants recommended a system where mentors had specific training and potentially a code of conduct outlining how to communicate with people, with reporting lines if someone was unhappy with the way that they had been treated. Another participant suggested that some employers could also set a good example and require trade mentors to complete a programme before taking on an apprentice.

In terms of potential solutions to safety hazards and poor working conditions, some participants were in favour of moving to more offsite construction working environments, or a more balanced offsite and onsite partnership although as some others we spoke to pointed out, offsite construction sector also has issues.

Other suggestions to managing stresses experienced by workers canvassed in the participant discussions included; increasing awareness among workers of their rights and available support through better communication and training; adopting a more pastoral care-focused approach to health and safety with emphasis on supporting mental and physical wellbeing over safety compliance alone; partnering with Trade organisations to provide accessible support hubs in communities (especially for smaller businesses); addressing physical injury rates through prevention strategies to reduce impacts on mental health and providing wrap-around support for workers with disabilities/injuries to stay in the industry if possible; and for modular mental health training packages tailored to specific needs.

Finally, participants spoke to the gender imbalance in the industry and discussed having more women in construction:

I guess we have big Pacific Island and Māori people … because they are strong. Yeah, and because it's physically, you know … and that's reality. So, for a woman, it's gonna be different … a scaffolder will take or move two tons of scaffolding off a truck. (Manager, large vertical construction company)

Well, a diverse industry is a strong industry, so I think there's plenty of scope to see a greater proportion of females in the sector and there are quite a varying level across different trades … you know, we've got to carry to 25 kilo bags of cement, you know, it's probably not going to be a trade that females … Yeah. (Peak body representative)

Participants perceived that women's strength was a barrier to their greater participation in the construction industry, however, given the increasing use of modern-day power tools and mechanisation, further investigation and research could be done to explore this further. Perhaps more women in the industry could result in new ways of working that minimise the reliance on physical strength and endurance, and the resulting wear and tear on the body.

Participants shared their hope for the future involvement of more women in the industry:

one of the things we do [is] we offer scholarships for a level three certificate program … we're seeing a growing number of females apply for those scholarships. And dare I say it, they smash it out of the park, compared with their male colleagues, you know, we have probably twice as many high-quality applicants from females in the construction sector than we do males. And I look at them, I think that's actually really, really positive that we're seeing some really smart, clever females that are going to be coming into our industry and offering different things. And to me, that's really important. (Peak body representative)

Results 8: Overall findings

"I think five or six years ago before I even knew what MATES was, we had mates, but we didn't have MATES in Construction." (M, FG11)

This section summarises the overall findings across all occupational groups.

Focus groups and participant numbers

In total, 19 focus groups and two individual interviews were conducted. The first 13 focus groups were conducted face-to-face in Auckland and the remainder were conducted online by the Wellington based researchers GJ and CB.

Efforts were made during recruitment to ensure all those belonging to the same/similar occupational groups were together in the same focus group (so they could share similar experiences and converse freely without issues from power dynamics). However, at times participants turned up on the day who were not in the same occupation as most of the focus group participants, despite stating that they were during the recruitment phase. This was accommodated as it would have been difficult to turn participants away after they had gone through the consent process and made the effort to attend.

Table 8 Total number of focus groups and interviews and number of participants

	Number of focus groups	Number of Participants
Apprentices	3	15
Boots on the ground	4	30
Migrant workers	2	16
Mixed construction workers	2	15
Health and safety managers	2	18
White collar workers	4*	14
Peak body/government representatives	4*	7
Total	21	115

*includes 1 interview.

Psychosocial stressors by occupational group

Table 9 Psychosocial stressors by occupational groups

Occupational grouping	Psychosocial stressors identified by participants
Apprentices	Low pay. Lengthy apprenticeships. Mismatch between training and job requirements. Job insecurity. A culture of stoic/old-school masculinity. Sexual harassment for female apprentices.
'Boots on the ground' (blue-collar) workers	High, compressed, fast paced workload. Poor communication. Financial pressures. Work-life imbalance.
Migrant workers	Shift work due to workload pressure. High cost of living. Visa issues. Discrimination, and sexism and sexual harassment for the female migrant worker. Separation from family. Language and communication barriers.
Mixed construction workers	Uneven work pipeline. Lack of communication. For apprentices, low pay, imbalance between host and apprentice expectations.
Health and safety managers	High workload and a culture of overwork. Communication issues and poor relationships. Financial stressors. Lack of mental health understanding (literacy, stigma). Industry wide challenges.
White collar workers	Uneven work stream. Poor communication. Poor leadership and lack of soft skills. 'Paperwork, permits, consents and the council'.
Peak body/government representatives	Financial stress. Job demands. Stressors outside of work. Labour hire issues. Poor communication and interpersonal relationship challenges. Different psychosocial stressors for different sectors (offsite, onsite, vertical, horizontal construction).

Psychosocial stressors and solutions across occupational groups

Although the psychosocial stressors have so far been canvased by each occupational group, Table 10 shows those most common stressors across all occupational groups.

Table 10 Common psychosocial stressors and their impacts

Main psychosocial stressors identified by participants	Impacts identified by participants	Most affected occupational groups
Financial instability and the boom-bust cycle of the industry.	Uneven workload. Job insecurity. Underwork. Overwork. Staff shortages in boom period. Layoffs in quiet period. Financial pressure for businesses. Pressure to cost projects low. Health and safety issues.	Everyone in the industry. Job insecurity more impactful for those on low incomes.
Poor communication skills leading to poor relationships.	Lack of instruction at work. Lack of respect in communication. Poor relationships at work. Lack of cultural awareness and competence. Lack of instruction. Language barriers. Lack of understanding about mental health. Health and safety issues.	Apprentices, labour hire labourers, some boots on the ground, white collar workers, migrant workers, female workers.
Culture of old-school/traditional masculinity.	'Harden up' culture. Endure injury and dangerous conditions. Sexism and sexual harassment. Discrimination. Poor behaviour at work, yelling and abuse. Culture of overwork and a 'work comes first' culture. Lack of recognition for good work. Culture of silence. Health and safety issues.	Apprentices, labour hire labourers, some boots on the ground, migrant workers, female workers.
Low pay	Financial pressures at the individual level. Working additional hours to make ends meet. Seeking work elsewhere. Dissatisfaction and frustration. Taking longer to complete apprenticeships. Leaving apprenticeship. Some benefits to host organisation if apprentices kept on low wages. Health and safety issues.	Apprentices, labour hire labourers, some boots on the ground.
Lack of mental health understanding and support in the workplace.	Mental health stigma. Lack of talk around mental health. Lack of workplace options other than EAP.	All workers.

Table 11 summarises the key solutions canvassed across all the focus groups for these workplace stressors. Please note: the table reports solutions identified and discussed by the participants in the focus groups. Thus, the solutions presented do not reflect all possible solutions or all evidence-based interventions. Further, the researchers did not systematically canvass the viability or efficacy of the solutions identified by participants.

Table 11 Psychosocial stressors and solutions across occupational groups

Psychosocial stressor identified by participants	Solutions canvassed by participants
Financial instability and the boom-bust cycle Uneven workload/overwork/underwork. Staff shortages in boom period/ Layoffs in quiet period. Financial pressure for businesses. Pressure to cost projects low. Health and safety issues.	Government intervention was proposed to regulate boom-bust industry fluctuations through infrastructure spending. Better planning or regulation of government procurement of construction. Encourage business to have diverse portfolios. Limits on overtime and implement hourly limits for work done per week. Developing good relations with hire companies. Develop flexibility in workforce. Incentivising retention of skilled workers. More accurate forecasting of project costings. Collective worker efforts to manage workload pressure. Good communication about business economic situation. Financial literacy training.
Poor communication skills leading to poor relationships Lack of instruction at work. Lack of respect in communication. Poor relationships at work. Lack of cultural awareness and competence. Language barriers. Lack of understanding about mental health. Health and safety issues.	Training of leaders and site managers in interpersonal and communication skills. Selecting leaders or promoting staff with cultural competence and interpersonal skills. Fostering open communication between managers and workers. Building stronger social support networks. Pastoral care-focused health and safety approaches. Improving communication between education institutions and employers. Assigning mentors and allowing more flexibility. Better recognition of apprentice's work/overtime work. Establish higher-level liaisons with employers of migrants. Upskill language and cultural champions. English courses and identifying key migrant English speakers. Providing mental health materials in migrant languages. Targeted support for marginalised groups. Education about employment contracts.
Culture of old school masculinity 'Harden up' culture. Health and safety issues: injury and dangerous working conditions. 'Traditional' masculinity and sexism. Discrimination. Poor behaviour at work, yelling and abuse.	Foster a supportive workplace culture. Building stronger social support networks. Speak up. Find allies. Addressing sexual harassment through education. Praise and recognition for work well done. Employers to implement clear policies and procedures and fostering a collaborative work environment to combat sexism and discrimination.

Psychosocial stressor identified by participants	Solutions canvassed by participants
'Work comes first' culture. Lack of recognition for good work. Stigma around mental health. Culture of silence.	Individuals and leaders to set boundaries and prioritise personal wellbeing and family time. Fostering a family-like company culture.
Low pay Financial pressures at the individual level. Working more hours to make ends meet. Seeking work elsewhere. Dissatisfaction and frustration. Taking longer to complete apprenticeships. Leaving apprenticeships. Some benefits to host organisation if apprentices kept on low wages. Health and safety issues.	Increase hourly wages. Employers to provide additional benefits. Guaranteeing minimum hours. Government underwriting of apprenticeships to guarantee a minimum number of hours and employment stability. Government funded income support. Financial planning to cope with the high cost of living. Implementing minimum wage standards in supplier contracts and tendering processes were suggested.
Lack of mental health understanding and support in the workplace Mental health stigma. Lack of talk around mental health. Lack of workplace options other than EAP.	Integrating mental health programs across construction sites. Promoting open communication to enhance relationships and wellbeing. Embedding mental health outcomes in procurement processes and contracting agreements to prioritise worker wellbeing from the outset and hold employers accountable for prioritising employee wellbeing. Fostering a supportive, family-like workplace culture. Training managers in interpersonal skills. Providing mental health materials in migrant languages. Mental health activities like paid "blue sky" days. Guest speakers at toolbox talks. Partnerships with organisations like MATES in Construction. Need for evidence-based mental health and wellbeing interventions and clearer guidance for employers. Interpersonal skills training and pastoral care-focused health and safety approaches. Offer Employee Assistance Programs (EAP). An industry roundtable to address workplace stressors.

Discussion

This research has canvassed stakeholders' perceptions and experiences of psychosocial stressors in the construction industry, some of their mental health impacts, and participants' ideas on some of the potential solutions to these stressors and/or their impacts. The qualitative research design and analysis has allowed for a fine-grained, nuanced and deeper dive qualitative investigation of psychosocial stressors in the workplace as experienced and seen by key occupational groups in the construction industry; apprentices, 'boots on the ground' (blue-collar) workers, migrant workers, health and safety managers, white collar workers, and peak body and government agency representatives.

Psychosocial stressors and potential solutions

Focusing on the identified workplace-based stressors identified across all focus groups, five key psychosocial stressors common to and affecting all groups directly or indirectly were: the financial instability of the industry, poor communication skills leading to fractured relationships, the (often toxic) culture of old-school/traditional masculinity, low pay, and high job demands. These five psychosocial stressors impacted the mental health and wellbeing of workers and had adverse health and safety impacts.

Financial instability – the boom-bust-cycle

The financial instability of the industry was the most significant overarching stressor for all occupation groups, stemming directly from the boom-and-bust cycle that characterises the industry, and which has characterised the sector for five decades (Master Builders, 2022). It is from the boom-and-bust cycle that many of the other work-based psychosocial stressors in the industry emerged.

To remain competitive, businesses strive to keep project costs low and deliver on projects in tight timeframes, as time is money. Pressure to deliver at or under cost in tight timeframes adds to the pressure cooker nature of the industry where much of the work is done with a sense of urgency. It is possible that the de-unionisation of the NZ construction industry in the 1990s may be pertinent, as without union power to balance the market, it is possible for businesses to complete on price more aggressively than if there were a collective floor.

Participants described how effects of the boom-and-bust cycle were different for different industry sectors, business sizes, levels of business maturity, and work portfolios (e.g., private residential, public housing, public infrastructure, commercial, etc.), with some businesses managing better than others. However, the financial stresses when work slows down are experienced throughout the hierarchy of industry positions, from the CEOs, business owners, and white-collar professionals, to boots on the ground and apprentices, although in different ways and to different degrees.

Industry CEOs, business owners, and white-collar professionals were adversely affected by the economic downturn. Stakeholders described how industry is fiercely competitive on pricing, with government contracts awarded on lowest cost basis. With an increased pressure on pricing, profit margins are small, and any delays or increase in the cost of materials between pricing and delivery of the build can wreak havoc on the bottom line. Project and site managers are then charged with delivering on time and to spec in the face of an industry characterised by increasing regulatory requirements including paperwork for consents and permits, while navigating stressed workers often lacking in good communication skills, and other uncontrolled variables like poor weather, material shortages and delivery delays.

The impacts of the financial instability of the construction industry on the mental health and wellbeing of workers are significant, creating uneven workloads and income streams. In boom periods workers face long hours and overwork resulting in fatigue, stress, and short fuses in the workplace resulting in poor communication and behaviours at work, and compromised health and safety practices. Work-life balance is interrupted, and time for family and self-care falls away as work is prioritised compromising worker resilience and support networks. In the bust period, when there is less work available, workers move overseas to chase work, or are left competing for fewer work opportunities and may have to cope with lower wages. Employers may experience financial stress, have to lay off staff, have difficulties hiring and retaining skilled and experienced workers, and workers worried about job and financial security.

Proposed solutions to mitigate the effects of financial instability and the boom-bust cycle in the construction industry included, at the macro level, government intervention through infrastructure spending and better regulation of government procurement. Encouraging businesses to diversify portfolios was a strategy suggested and successfully adopted by some businesses. Solutions to other stressors experienced in the boom period included implementing limits on overtime and hourly work to help balance workloads; supporting labour hire and workforce flexibility; incentivising retention of skilled workers, and migrant workers; and successfully managing high workloads through collective worker efforts to manage pressure. Developing good relationships with hire companies, improving communication with workers about the business's economic situation, providing financial literacy training, and enhancing project cost forecasting were additional measures aimed at mitigating an unstable industry.

Poor communication leading to fractured relationships

Poor communication was undoubtably the next biggest psychosocial stressor in terms of its prevalence and multiple impacts down the line on worker wellbeing and mental health. In general, poor communication was put down to lack of or poor interpersonal communication skills of leaders and managers in the industry although it was also evident between coworkers as well.

All stakeholder groups described poor communication practices and skills often present in the construction industry, ranging from little to no communication, to unhelpful or siloed, aggressive or disrespectful, and culturally offensive communications, and sometimes, more abusive communication including instances of bullying.

There were cases where an absence of communication meant that apprentices felt they were supposed to learn by osmosis, and other workers did not know what they should be doing due to lack of direction from their own supervisor or communication between site supervisors. Poor communication higher up the chain was also discussed, with managers keeping key information to themselves rather than sharing with their staff. Lower English language proficiency of some migrant workers and a lack of material available in languages other than English further exacerbated communication problems.

The mental health impacts of poor communication were felt by many across the range of industry occupations although some groups more than others, with apprentices, labour hire labourers, some boots on the ground, migrant workers, and female workers being more often the target of disrespectful communication. Poor communication resulted in feelings of anger, resentment, discontentment, distress, and low self-esteem, and a sense of the unfairness of the industry.

An essential tenant of good communication is good interpersonal skills. This was linked in with discussions around capable leaders and managers being those that have good interpersonal skills, or social and emotional intelligence. As one participant noted, a university degree in communication

skills is not required, however, getting to know people, treating them with respect, caring about them as a whole person with a life outside of work, and acknowledging people's efforts at work, goes a long way to developing strong relationships and a work culture conducive to good mental health and an engaged and stable workforce.

Many stakeholders felt that businesses needed to invest in communication skills training for their leadership teams/managers, or select/hire managers and leaders especially for these skills if they are not going to train them. However there appears to be a role for all parties – apprentices, mentors, and site managers – to upskill (including in assertive communication) although this requires acknowledgement of the problem and a commitment and investment by businesses to address it.

Good communication in the industry is essential to the efficiency of the industry, for a safe and healthy workplace, for the construction of safe buildings and structures. More importantly, good communication is essential for strong workplace relations between owners, managers, and workers, and between contractors and sub-contractors. Strong and trustworthy workplace relationships are also critical for good mental health.

Culture of old school/traditional masculinity

The culture of old-school traditional masculinity (Iacoviello et al., 2022), experienced by many participants as toxic and harmful, remains pervasive in some parts of the construction industry and likely stems from the male-dominated workforce and socio-historical culture of the largely hard manual labouring nature of the work and its workforce. There is a great deal of research that shows that traditional masculinity can have a negative impact on individuals, the workplace culture, safety and productivity, efficiency, safety and quality (George & Loosemore, 2018).

Focus groups and interviews exposed the "harden up culture" of the industry, where to survive the strenuous physical labour and long hours, over many months and years, in all weather conditions, you needed to be physically and mentally tough, a "man's man". Labourers described enduring sometimes gruelling and dangerous work – "just breathe in asbestos" – without complaint or praise, where injuries are worn as badges of honour. Other features of the masculinity ubiquitous in much of the construction sector included an ethos of prioritising work over family life, a culture of overwork, lack of tolerance for diversity, and a culture of silence regarding making a stand or complaint that challenges the dominant cultural status quo.

The culture of silence impacts unevenly on workers, with stakeholders highlighting the adverse impacts on female workers of sexism and sexual harassment on their mental health, self-esteem, and professional status. Discrimination and poor treatment of migrant workers and indigenous Māori, exacerbated for some their pre-existing cultural silences. Both racial discrimination and sexism in the industry ultimately operated to dissuade any challenge to the cultural status quo. Another significant feature of the 'masculinity' of the industry was the "I've been through shit and so I'm fine with you going through shit" culture of more experienced workers in their treatment of apprentices and labourers.

The mental health impacts of this traditional type of masculinity include increased risk of suicide (Coleman, 2015) and the findings show it impacted on many of the construction workers. Health and safety in the workplace was often compromised, and there were adverse impacts on the mental health and wellbeing of affected workers, which, coupled with other poor behaviours in the workplace such abusive communication, caused some to leave their apprenticeships and others to walk off sites.

Embedded in the culture of traditional and hegemonic masculinity (that hinders and hurts men, women, and people who are gender diverse), was also the stigma around mental health, which

although not often articulated by participants, was evident by the absence of discussion in focus groups especially amongst men (and even more so in the case of male migrant workers), of the mental health impacts of workplaces stressors on them personally.

Stakeholders suggested several solutions to combat the prevailing culture of hegemonic or traditional masculinity. They emphasised fostering a supportive workplace culture and building stronger social support networks to create a more inclusive environment. Stakeholders also advocated for the importance of speaking up and finding allies to address issues collectively. However, participants described how speaking up was often difficult due to power imbalances and cultural differences in expected behaviours. Speaking up often did not result in the desired outcome in absence of the support of allies, employers, and proper complaint and reporting processes which were seen as crucial measures for addressing matters like sexual harassment and discrimination. Participants also suggested the need for better recognition for work well done and, to address the work-first culture, setting boundaries to prioritise personal wellbeing and family time.

Low pay

Low income is a key psychosocial stressor, and likely a driver at the individual worker level of wanting to work longer hours and longer weeks to meet financial responsibilities.

In the current context of the construction industry slowdown amidst a cost-of-living crisis, job insecurity and affording necessities are real stressors and threaten positive mental health and wellbeing, especially for workers on low incomes. Workers managed to get by on low income by working additional hours or taking on other work in the evenings, as was the case for some apprentices who did Uber driving after their construction day job.

Working overtime or taking on additional employment, while alleviating immediate financial pressures, led to other psychosocial stressors, including fatigue, interrupted work-life-balance, short fuses on the worksite, and if continued unchecked, exhaustion and burnout.

Other impacts of low pay included dissatisfaction and frustration with the industry and combined with the lengthier time taken to complete some apprenticeships due to the lack of opportunity to complete skills require to progress in their training, led to more disillusionment and distress and some to leave the industry.

Stakeholders in the construction industry suggested several solutions to the problem of low pay. These included increasing hourly wages, employers providing additional benefits, and government underwriting of apprenticeships to guarantee a minimum number of hours and employment stability, along with government-funded income support. Financial planning assistance to cope with the high cost of living was also proposed. Furthermore, implementing minimum wage standards in supplier contracts and tendering processes was suggested to ensure fair compensation across the industry.

Lack of mental health understanding and support in the workplace

Perhaps due to the culture of hegemonic or traditional masculinity which exists in parts of the industry and also stigma around talking about mental health, many participants noted that with the exception of workplaces that have MATES in Construction and some generic EAP (Employee Assistance Programme) offering in workplaces, there was otherwise a lack of formal mental health supports in the workplace. Many thought this gap was largely due to a lack of understanding across the sector around mental health.

It is worth noting that some people adopt a more medical view of mental health and see it as an issue only for those diagnosed with mental illness. However, in the context of talking about psychosocial stressors, it is essential to take a wider perspective of mental health, which recognises that it is not necessary to have a diagnoseable mental disorder in order to suffer stress and distress or mental unwellness. This is especially the case in terms of understanding factors contributing to suicide, and men's suicide in particular. We know from the social epidemiology of male suicide, often there has been no pre-existing mental illness diagnoses, but rather factors such as relationship termination, child custody issues, housing issues, financial issues, or contact with the justice sector, which have contributed to a crisis leading to a suicide (Suicide Mortality Review Committee et al., 2016). More recent work has also uncovered stressors in the workplace and working conditions that have contributed to work-related suicides (McGill, 2024) that have been found in coronial files to precipitate suicides amongst men (Bryson et al., 2019). For this reason, it is important to take a wide view on mental health and wellbeing.

A number of solutions were canvassed to improve mental health support in the workplace. These include integrating mental health programs across construction sites; promoting open communication to enhance relationships and wellbeing; embedding mental health outcomes in procurement processes to prioritise worker wellbeing from the outset; and integrating workplace wellness initiatives into contracting agreements to hold employers accountable for prioritising employee wellbeing. Specific interventions that were currently being used by some employers in the industry were also canvassed including mental health innovations like paid "blue sky" days, guest speakers at toolbox talks, and daily wellbeing check-ins. Some of the suggestions outlined above, in terms of improving communication skills amongst leaders and managers in the industry, will also help to improve worker wellbeing and mental health throughout the industry. And finally, an industry roundtable on how to best mitigate identified psychosocial stressors and their impacts would be useful to canvass acceptable and workable solutions to improve construction industry worker wellbeing.

Comparison with previous local research

Many of the findings reported here are not new and are consistent with those previously reported in NZ-based research. Bryson and Duncans' (2018) qualitative research based on 17 interviews with people in leadership positions and from industry organisations identified the financial and related stressors due to the boom-and-bust cycle, the masculine culture where workers are told to "harden up", and the intolerance of diversity. On the intolerance of diversity, the present research findings revealed some problematic social relations and behaviours in the industry that reflect and reinforce the traditional/historical social divisions regarding age, gender, ethnicity, and sexual orientation. Stereotypes seem abundant and playing out in many sectors of the industry, impacting how people are perceived, treated, and communicated with, and what opportunities are open to them. This can most clearly be seen in 1) the unfair/poor treatment of some labourers and apprentices, 2) sexism and sexual harassment of women, especially when they hold positions of power but also for some apprentices and boots on the ground female labourers, and 3) racial discrimination and cultural ignorance in relation to ethnic minorities and migrant workers.

However, there is reason for some optimism, with cultural change in the industry evident from many of the discussions among participants, especially in relation to some parts of the industry now more frequently talking about mental health and wellbeing. Some of this has been driven by the good work of MATES in Construction and other organisations that industry has partnered with to improve mental health and wellbeing.

Strengths and limitations

Strengths

Apart from two surveys and some preliminary research, there has been little qualitative investigation into psychosocial stressors in the NZ construction industry that may be contributing to poorer mental health outcomes of its workers in general, let alone for specific occupational groups.

Key strengths of this research are its comprehensiveness, especially in terms of the many voices from different occupations and sectors of the industry, the large and diverse participant sample (note translators were offered but none utilised) and focus on and analysis by key occupational groups. The semi-structured format of the focus groups and interviews was a further strength, allowing participants to decide for themselves what key stressors were up for discussion rather than the researchers asking about specific stressors as is commonly the case in quantitative research such as surveys. Canvassing stakeholders' perceptions of mitigation strategies and ideas about what could make a difference was another strength of the research, allowing participants to express their views on effective measures. This feedback enhances the research's relevance for applied future studies.

Limitations

The first limitation is geographic, in that most of the participants were from the North Island, in particular working in Auckland and Northland. The research may therefore not really speak to the key psychosocial stressors if they are different in the South Island construction industry. However, this also presents an opportunity to extend the research in the future by including the South Island and other Northern regions that were not covered. A second limitation is the lack of discussion in the focus groups around the personal mental health impacts of stressors and how individuals managed these stresses. For instance, Bryson (2018) identified drug and alcohol use as significant mental health issues in the industry; however, this topic was rarely mentioned by participants in this study. This is possibly due to the challenges of discussing personal issues in a group setting with such insights more likely to emerge from one-on-one interviews, or the difficulty of recognizing these behaviours as problems due to societal norms around excessive alcohol consumption in NZ.

There are potentially other interventions that were not canvassed that might be especially useful. Furthermore, some of the interventions canvassed may not work at all. However, it is important to note that the interventions were proposed by participants who are directly experiencing these issues, which adds significant value to their insights.

Power dynamics in some groups may have limited some individual contributions to the group discussion. This may have been the case for one of the migrant groups in particular as a senior health and safety employee accompanied the migrant workers in that group. The same could be said for women, who were a minority in all but one female-only focus group (apprentice). With hindsight, it may have been useful to run some female-only focus groups as well.

Another limitation is that the researchers did not formally seek respondent validation of the data presented in this report. However, the key issues arising from the focus groups and interviews were validated towards the end of the focus group sessions by the researchers' summation of these issues and their suggested solutions back to the participants. The authors also had a team of four researchers to verify the themes produced in this study, which was done in an iterative process throughout the various drafts and discussion that ensued, noting that the authors are essentially outsiders to this industry and worker interpretations might be different. Finally, the researchers were

careful to invite a range of expert reviewers to assess the draft report, and the authors discussed and considered their comments, making a number of changes to the language used and adding further information.

Implications

The avoidable burden and impact of suicidal behaviour in the NZ construction industry has been estimated at $1.135 billion per annum in 2023 (Doran et al., 2004). This does not quantify the impact of poor mental health on worker wellbeing and the impact on productivity and functioning of the industry. This research, although not quantifying poor mental health in the industry, has provided an in-depth insight into some of the work-related stressors and their impacts on mental health.

Understanding the psychosocial stressors of an industry or workplace is the first step towards finding some solutions to help mitigate any adverse impact on mental health and wellbeing. While acknowledging that not all psychosocial stressors can easily be mitigated or remedied, and some may come from outside of work, in NZ, businesses, according to the Health and Safety at Work Act 2015, have a responsibility to mitigate workplace risks as much as possible to support worker health and wellbeing (WorkSafe 2022).

As context, at the time of writing, Aotearoa/NZ, like many other countries in the post-COVID era, has been experiencing a cost-of-living crisis. Basic living costs, including food, rents, mortgages and insurance have increased considerably while wages have remained relatively stable. In 2023 the three-year election was happening, and as a result of this a new government party was sworn in. The priorities of the new National-led government were evident, with ongoing cuts to public expenditure, including to some major previously planned construction projects in public housing and in the education sector. In light of this political context and the current economic climate, the construction industry, at least some major sectors of it, are currently facing significant financial challenges.

From these financial stressors we know stem some of the other major psychosocial stressors experienced by the industry, around keeping businesses viable, securing or maintaining a pipeline of work, paying workers, and for workers themselves, securing enough work and adequate wages to pay for the increasing cost of living.

Future work

The evidence presented in this research is only the beginning. It is largely descriptive and future work is underway to dive deeper into the analysis for each of the occupational groups in relation to the relevant international literature through a series of academic papers. Additionally, further examination of the international evidence regarding psychosocial stressors and interventions to mitigate them would be of benefit to assist in a comparison of the solutions identified in this research with others documented in the literature. Further, the researchers have not yet undertaken any comparison or discussion of how the solutions identified by participants align (or not) with best practice, and such work is important to do in a subsequent study. As part of this ensuing study, a roundtable industry discussion would be useful to gather views on the acceptability of potential interventions to address workplace-based stressors and ways to evaluate their effectiveness and impact.

Future research could include conducting one-on-one interviews to explore the personal mental health impacts of psychosocial stressors which were not well covered due to the nature of focus

group dynamics. Additionally, interviews and focus groups should be held with small business owners and sole traders in the construction industry, as these groups were largely missing from the current research and comprise a large proportion of the construction industry workforce. Further research with women working in construction may also be useful to gather gender-specific insights, as would further research with migrant workers representing a wider diversity of migrant worker groups (e.g., Chinese, Indian) and which can dig deeper into the experiences sub-groups of workers within the migrant worker community and which applies a non-Westernised/NZ theoretical lens and psychosocial hazards framework to recognise that experiences are often different for migrants from different cultures.

Conclusion

This research provided a comprehensive exploration of the perceptions and experiences of 115 stakeholders in the construction industry regarding psychosocial stressors, their mental health impacts, and possible solutions to help mitigate their effect. Through qualitative analysis, the research identified financial instability, poor communication, a culture of old-school masculinity, low pay, and lack of mental health understanding and support in the workplace as the key workplace stressors. These factors significantly affected workers' mental health and overall wellbeing, with impacts varying across different occupational and demographic groups.

Financial instability, driven by the industry's boom-and-bust cycle, emerged as the most significant stressor, influencing almost all other workplace issues. Poor communication further exacerbated stress, contributing to a negative work environment, while the entrenched culture of old-school masculinity fostered harmful behaviours and attitudes. Low pay and job insecurity, especially in the context of a cost-of-living crisis, compounded the stress experienced by workers. Additionally, a lack of mental health understanding and support in the workplace hindered efforts to address these issues effectively.

Proposed solutions included government intervention through infrastructure spending, better regulation of procurement processes, and encouraging business diversification. Improving communication skills, fostering supportive workplace cultures, and providing financial literacy training were also suggested solutions. Specific interventions, such as limits on overtime, workplace based mental health programmes, and integrating workplace wellness initiatives, will likely be needed to improve worker wellbeing.

The findings align with previous research, highlighting persistent issues in the construction industry. However, there is optimism as cultural change is evident, with increasing discussions on mental health and wellbeing in the sector. The strengths of this research include a large participant sample and a focus on key occupational groups, while limitations involve potential gaps in exploring individual mental health impacts.

Understanding these psychosocial stressors is vital for developing solutions to mitigate their adverse effects on mental health. Future research should focus on individual interviews to delve deeper into mental health impacts, include small business owners and sole traders, and gather gender-specific insights from women in construction. An industry roundtable discussion is recommended to develop acceptable and effective interventions to improve worker wellbeing.

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