

Conversations about Life, Health and Safety: Social Supports for Young Construction Workers' Health and Safety

Qualitative Report

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This report was commissioned by icare NSW

Authors

Construction Work Health and Safety Research @ RMIT, RMIT University Helen Lingard, Rita Peihua Zhang, Jack Clarke

Research School of Population Health, College of Health and Medicine, Australian National University
Christine LaBond, Lyndall Strazdins, Tinh Doan

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Construction Work Health and Safety Research @ RMIT Building 8, Level 8, Reception 360 Swanston Street
Melbourne VIC 3000
Phone: +61 3 9925 2230

Phone: +61 3 9925 2230 Fax: +61 3 9925 1939

Email: constructionwhs@rmit.edu.au

www.rmit.edu.au/research/health-safety-research

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Executive summary

This report was funded by icare and undertaken in partnership with the Master Builders Association of New South Wales. The report presents Stage 1 results of a project titled 'Conversations about life, health and safety: Social supports for young construction workers' health and safety.' 41 interviews were conducted (30 with apprentices and 11 with supervisors from training employer organisations). The data was analysed to:

- understand the way that supervisors and apprentices talk about life, health and safety,
- · identify the characteristics of supportive interaction and supervision of apprentices, and
- identify organisational or context-related drivers of conversation failure.

The analysis will be used to inform the development of an intervention designed to improve communication and social support provided to construction apprentices in the workplace.

Young construction workers are a high-risk group for work-related injury. In Australia, young construction workers (below the age of 25) make up 17% of Australian workforce but account for 20% of all workplace injuries (Safe Work Australia, 2013). This equates to an injury rate of 66.1 per 1000 workers, which is 18% higher than the rate for workers aged 25 years and over (Safe Work Australia, 2013). Young construction workers also experience a higher rate of fatal workplace injuries compared to their young counterparts working in other industries (Safe Work Australia, 2013). Construction apprentices in Australia experience a substantially higher level of psychological distress than that of general Australian young men (Pidd et al., 2017) and young construction workers are up to 2.5 times more likely to die by suicide than other young men their age (Heller et al., 2007).

It is therefore critically important that young construction workers are provided with support structures to protect their safety, health and wellbeing, both at work and outside of work.

Interviews with apprentices and supervisors identified factors that facilitate effective communication and social support operating interactively at three levels in the social ecology of a workplace. They are graphically shown in the Figure of the model of factors facilitating effective communication and social support and include:

- intrapersonal characteristics (of apprentices and supervisors),
- characteristics of effective and supportive interpersonal interaction (between apprentices and supervisors), and
- organisational or work-context factors that enable effective communication and social support to occur.

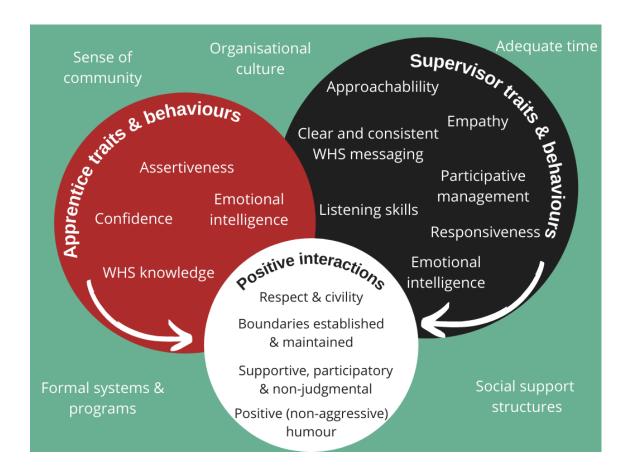


Figure: Model of factors facilitating effective communication and social support

Apprentice characteristics identified to enable them to communicate positively with supervisors include:

- Confidence and assertiveness that enable apprentices to engage in conversations
 about life, health and safety with supervisors. Apprentices were observed to lack
 confidence in the early stages of their apprenticeship, however their confidence usually
 develops as they progress through the stages of the apprenticeship. The development of
 confidence is likely to depend upon the extent to which the social context of work is
 supportive.
- The work health and safety (WHS) knowledge of apprentices facilitates their health and safety 'voice' behaviour, i.e. the extent to which they raise concerns and talk about workplace health and safety issues. Apprentices' ability in transferring WHS knowledge acquired from training into practice is affected by workplace social support structures, for example, the extent to which they are provided with resources, including time, supervision and guidance.
- The emotional intelligence of apprentices supports them to engage in effective communication. Being aware of their emotions and the emotions of others enables apprentices to recognise when they might need to seek help, as well as to understand and identify strategies to deal with difficult social situations. Being emotionally intelligent also

helps apprentices to identify the appropriate time and place to initiate a conversation and understand how to manage boundaries between work and personal matters in communication.

Supervisor characteristics identified to foster effective communication with apprentices include:

- The approachability of supervisors enables apprentices to feel comfortable to speak with them. An approachable supervisor is perceived by apprentices to be receptive, friendly and 'easy to talk to'.
- The responsiveness of supervisors provides apprentices with the confidence to raise issues, as apprentices are likely to believe that their views will be heard and acted upon by their supervisors.
- The empathy shown by supervisors enables apprentices to talk to them about personal
 issues with the potential to impact their mental and wellbeing. Apprentices feel that they
 are understood by their supervisors who are empathetic. Supervisors sometimes
 demonstrate empathy towards their apprentices through talking about their own
 experiences, e.g. experiences in parenting young people or in their own early stages of
 career development.
- Being a good listener is an important trait of supervisors that fosters effective communication. Active listening involves making time, paying careful attention to what is being said and withholding judgment.
- A participative management style is favoured by apprentices, who feel valued and
 respected when their input into workplace decision-making is sought by supervisors.
 Asking for input and encouraging suggestions from apprentices facilitates effective
 communication and is also a key component in promoting apprentices' learning.
- Clear and consistent WHS messaging conveyed by supervisors supports positive
 communication about health and safety. Supervisors who clearly and consistently talk
 about the importance of WHS demonstrate a high commitment to maintaining healthy and
 safe ways of working, which gives apprentices confidence that, if they raise a workplace
 health or safety issue, this will be met with a positive response from their supervisor.
- Emotional intelligence is an important attribute for supervisors to effectively interact with apprentices. Emotional intelligence enables supervisors to identify if and when apprentices may not be their usual selves and identify an appropriate time and way to initiate a conversation and offer support. Emotionally intelligent supervisors are able to understand boundaries in conversations between personal and work life and respond to different workers' levels of comfort in relation to where this boundary should be drawn.

Characteristics of effective and supportive interpersonal interaction, identified to enhance communication between supervisors and apprentices, include:

- Respect and civility are important interaction characteristics in facilitating effective
 communication. Apprentices value respectful communication and recognise that
 aggressive communication or yelling can potentially create psychological distress in the
 workplace. Aggressive communication is also likely to act as an impediment to
 apprentices feeling sufficiently comfortable to open up and seek help from supervisors.
- Understanding, respecting and maintaining boundaries in relation to conversation
 content (i.e. work and personal life) are an important communication skill for both
 supervisors and apprentices, who need to be able to recognise and avoid topics that are
 deeply personal and "off limits". In addition, supervisors must be able to understand the
 difference between demonstrating concern and asking about an apprentice's wellbeing
 and unwanted prying into the apprentice's personal life.
- Positive (non-aggressive) humour is generally regarded as an element of effective
 workplace interaction. Engaging in joking activity that is affiliative and not offensive or
 aggressive can build social cohesion and reduce stress. However, humour can sometimes
 'cross the line', for example relating to sexual innuendo. When humour is not appropriately
 used, it can be damaging to apprentices' mental health and wellbeing, even if it is not
 intended to cause harm.
- Being supportive, participatory and non-judgmental are important interaction
 characteristics that enable effective communication. Apprentices are more likely to open
 up and trust their supervisors if they raise health and wellbeing needs and these needs
 are supported by supervisors. Participatory supervisors who engage apprentices in
 workplace problem-solving and decision-making facilitate an expansive apprenticeship
 experience and enable apprentices to feel included and professionally respected.
 Additionally, non-judgmental supervisors help to create a psychologically safe
 environment for apprentices to seek help and ask questions.

Organisational or work-context factors identified to support communication between supervisors and apprentices include:

- The sense of community perceived by apprentices to exist in a workplace enables supportive and effective communication. The sense of community can be fostered by supervisors who create a 'family-like' work environment, in which supervisors look out for apprentices, as would an older sibling or parent, and encourage other workers to do the same. This sense of community can be reinforced by shared activities outside work, providing opportunities for non-work-related conversations to occur, and help to build social cohesion.
- Formal systems and programs are important in facilitating communication and support
 for apprentices in managing life, health and safety. Compared to managing safety-related
 issues, policies and procedures for managing mental health and wellbeing issues are not
 as well established. Large organisations are more likely than smaller organisations to offer

formal mentoring programs or implement training programs relating to mental health and/or suicide prevention. These training programs provide supervisors with confidence about how to initiate a conversation with apprentices, and how to best support them by suggesting or providing access to professional support services. Formal systems and programs are less common in smaller organisations. Instead, close interpersonal relationships and informal supports play a critical role in supporting apprentices in smaller organisations.

- Adequate time is a critical factor enabling effective and supportive conversations
 between apprentices and their supervisors. When supervisors and apprentices are facing
 time constraints associated with productivity pressures, their ability and willingness to
 engage in conversations are likely to be reduced.
- The workplace culture and social support structures within an organisation are important to apprentices' general wellbeing and satisfaction with the apprenticeship experience. An organisational culture that promotes openness and nurtures a 'caring' attitude is conductive to effective communication and support at the workplace. The social support structures within an organisation extend beyond the relationship with the individual supervisor and can include accessing support from experienced tradespeople or mentors (other than one's immediate supervisors). Characteristics of the workplace setting are also very important to apprentices' sense of self-efficacy and achievement.

 Apprentices are more likely to feel supported and valued in workplace settings in which learning is nurtured and training employers are able to satisfy apprentices' learning goals, i.e. to develop a broad range of transferable competencies.

Factors operating at each of these three levels are not independent of one another but are interrelated in many ways. For example, being able to understand and maintain appropriate boundaries in communication (an interpersonal interaction factor) is highly related to the emotional intelligence of both supervisors and apprentices (an individual characteristic). It is also important to note that positive and supportive interpersonal interactions between supervisors and apprentices are embedded within the broader culture and support structures of an organisational context. The workplace contextual factor of a sense of community in which people feel valued and supported, is also likely to shape the tenor and nature of social interactions. Further, time pressures inherent in project-based construction work can act as an impediment to effective and supportive social interaction between supervisors and apprentices.

The findings from Stage 1 of the project will inform intervention design in Stage 2 of the project. The intervention will specifically seek to improve the intrapersonal communication-related abilities and behaviours of both apprentices and supervisors, as well as the interpersonal communication that occurs between supervisors and apprentices. That is, the intervention will focus on the first two levels of the social ecological model shown in the Figure depicted above, i.e. intrapersonal factors and interpersonal processes.

While organisational factors will not be the target of the intervention to be developed in Stage 2 of the project, they are critical in creating a workplace or organisational context that would enable more effective communication between apprentices and supervisors.

Part 1: Introduction

This report presents the findings of Stage 1 of a project titled 'Conversations about life, health and safety: Social supports for young construction workers' health and safety.'

The project is funded by icare as part of the Injury Prevention in Construction (IPIC) program and is and being delivered jointly by RMIT's Construction Work Health and Safety Research Group and the Australian National University's Research School of Population Health, in partnership with the Master Builders Association (NSW) and the NSW Centre for Work Health and Safety.

The three-year project is examining the nature of supervisor-worker communication about safety issues, health (mental and physical) and experiences outside work.

Stage 1 of the project involved collecting in-depth qualitative data from 30 apprentices and 10 supervisors:

- 1. to understand the way that supervisors and workers talk about life, health and safety,
- 2. to identify the characteristics of supportive interaction and supervision of young workers, and
- 3. to identify organisational or context-related drivers of conversation failure (e.g. time pressure, lack of support etc).

In Stage 2 of the project, a randomised controlled trial will be undertaken to implement and evaluate the impact of an intervention. The intervention will be designed to improve the quality and effectiveness of communication between construction supervisors and apprentices registered with the Master Builders Association's NSW Group Training Scheme.

The content of the communication training intervention to be delivered in Stage 2 of the project will be informed by the findings from the Stage 1 analysis presented in this report.

1.1 Background

Young workers (especially males) experience high rates of workplace injury and are frequently exposed to work health and safety (WHS) hazards. Holding other factors constant, Australian workers aged between 15 and 24 are exposed to 30 per cent more hazards and significantly likely to be exposed to multiple hazards than workers aged 55 or over.

International research and statistics consistently show that young workers (frequently defined as workers under the age of 25) experience disproportionately high rates of workplace incidents and injuries compared to older workers. This is particularly the case for young male workers (Salminen, 2004; Breslin & Smith, 2006). In Australia, young workers constituted 17% of Australian workforce but accounted for 20% of all workplace injuries (Safe Work Australia, 2013). This equates to an injury rate of 66.1 (i.e. 66.1 work-related injuries per 1000 workers), which

was 18% higher than the rate for workers aged 25 years and over (Safe Work Australia, 2013). The risk of workplace injuries for young workers is further elevated if they enter high-risk industries, such as the construction industry. Australian statistics show that during 2009-2010, an injury rate of 67.3 was recorded for young construction workers, which was 1.2 higher than the injury rate for all young workers across industries and 8.1 higher than the average rate for construction workers of all ages (Safe Work Australia, 2015).

Although young workers generally have a lower probability of suffering a severe fatal accident than older workers (Bande & López-Mourelo, 2015), young workers working in the construction industry experience a much higher rate of fatal workplace injuries compared to their young counterparts working in other industries. For example, from 2008-2011 the Australian construction industry recorded the highest number of young workers who died from a work-related traumatic injury (n=19, 26%), followed by the agriculture, forestry and fishing industry (n=18, 25%) and the manufacturing industry (n=13, 18%) (Safe Work Australia, 2013). This suggests that exposure to workplace hazards may be a more critical factor in young workers' injury incidence than simply workers' age (or youth). Consistent with this argument, Breslin et al. (2007a) found that young workers' injury rate is more strongly associated with the type of work being performed (i.e. manual versus non-manual) than young workers' biological age. Specifically, young workers holding manual jobs 2.56 times more likely to experience an injury compared to young workers engaging in non-manual jobs. These findings suggest that job characteristics can be more prominent risk factors for young workers than individual characteristics such as age.

Pidd et al. (2017) reported that construction apprentices in Australia experience a substantially higher level of psychological distress than that of general Australian young men. Evidence suggests suicide rates among young construction workers are also high. For example, Heller et al. (2007) reported that young construction workers (15-24 years) in Australia are more than twice as likely to die by suicide than other Australian people in the same age group.

1.2 The workplace social context

Research has examined the influence of the workplace social environment on workers' health, safety and wellbeing. Supportive supervision and effective communication between supervisors and workers are particularly well-documented determinants of workers' health, safety and wellbeing (Sparks et al., 2001). In some instances, work demands can contribute to communication failure, which is experienced by both supervisors and workers as stressful (Sparks et al., 2001).

As the planners, organisers, and facilitators of daily work activities, supervisors play a key role in communicating work health and safety (WHS) expectations to group members on a daily basis (Hardison et al., 2014). Zohar and Polachek (2014) describe how verbal exchanges between supervisors and workers play a critical role in shaping workers' perceptions about what behaviour is expected and valued. Positive supervisor-worker communication about job-related matters has been linked to safety compliance and participation in the US construction context (Sampson et al., 2014). Sampson et al. (2014) also report that positive non-job-related communication (i.e, positive conversations about family, sport or life outside work) between

supervisors and workers is linked to proactive safety behaviours in the workplace. In Denmark, Jeschke et al. (2017) found that training construction supervisors in communication behaviours changed the way they interacted with workers and produced higher levels of WHS-related cooperation and performance.

Young workers are reported to 'make sense' of the culture of their workplace and, in relation to WHS, adapt to behavioural norms based on their social interactions with others (Nielsen, 2012). Pek et al. (2017) describe how young workers' WHS-related behaviour is influenced by their perception of the expectations of supervisors, co-workers and even their parents. Fear of being socially sanctioned for behaviour that does not conform to workplace norms and a desire to 'fit in' encourage young workers to adopt similar work practices to those that they observe in the workplace.

However, research shows that communication between young workers and their supervisors may not always be effective. The likelihood that young workers' will talk to their supervisors about health and safety is influenced by supervisors' willingness to listen (Breslin et al., 2007b). Importantly, when supervisors were seen as being 'unapproachable', the young workers they supervise were more than twice as likely to say that they would perform a dangerous task if requested (Zierold, 2017). Gender differences were also observed whereby young female workers indicated a reluctance to raise health and safety concerns with their immediate supervisors because they felt they would be dismissed, while young male workers deliberately stifled concerns in order to be accepted into the adult world of work (Breslin et al., 2007b).

1.3 Communication and interpersonal skills development

Given the documented importance of effective communication in keeping young workers safe and healthy at work, targeted education and training programs focused on engaging in effective communication and building positive relationships have been recommended for people who will supervise young workers (Zierold, 2017). Programs designed to develop WHS communication capability in young workers have also been developed, such as the Youth @ Work: Talking Safety program developed by NIOSH in the USA (CDC, 2021). Moreover, due to young workers' increased ownership and use of cell phones and portable gaming devices, technology-based means of delivering work-related health and safety training to young workers have been recommended (Rohlman et al., 2013).

Consistent with these recommendations, a targeted intervention focused on improving communication effectiveness and quality among apprentices and their supervisors¹ will be developed, implemented and evaluated in Stage 2 of the project.

Structure of this report

The remainder of this report is structured as follows:

¹ For the purposes of this project the term supervisor refers to the person within the employer training organisation from whom apprentices take their day-to-day instructions

Part 2 presents a review of the relevant literature pertaining to the characteristics of positive and negative communication, and potential factors impacting the quality and effectiveness of communication between supervisors and construction apprentices. In particular, the potential impacts of communication quality and effectiveness on young workers' health, safety and wellbeing are considered.

Part 3 describes the methods used to collect and systematically analyse the data from construction apprentices and supervisors.

Part 4 describes the way that the apprentice and supervisor interview results is structured.

Part 5 presents the results of the thematic analysis of qualitative (interview) data collected from construction apprentices.

Part 6 presents the results of the thematic analysis of qualitative (interview) data collected from construction supervisors.

Part 7 presents a discussion of the results, cross-referencing the findings back to the literature presented in Part 2.

Part 8 presents key points of focus for the intervention development and describes the next steps that will be taken in the project.

Part 2: Literature Review

2.1 Introduction

The Stage 1 research focuses on the way that young workers (construction apprentices) are supported in their work environment. In particular, the first stage of the research aimed to understand how apprentices engage in communication about life, health and safety with their work supervisors, and what are the work environment barriers to positive communication between apprentices and supervisors with regard to health, safety and wellbeing. To date, this subject has not been widely studied and so, in the first instance, a review of the literature was undertaken to identify factors that may be at play in shaping apprentice-supervisor communication and support.

Apprenticeships, work and social support

Apprenticeships are a core feature of the national approach to skills development (Couldrey & Loveder, 2016) and an important pathway for young people to transition from school to full time work (Bednarz, 2014) and from adolescence into adulthood (Buchanan et al., 2016). The Australian Government describes an Australian apprentice as someone who is:

- employed under a Training Contract that has been registered with, and validated by, their State/Territory Training Authority; and
- undertaking paid work and structured training which commonly comprises both on and off the job training; and
- undertaking a negotiated training program that involves obtaining a nationally recognised qualification. In some states and territories, Australian Apprentices may be referred to as apprentices or trainees. (Australian Government, 2021)

Apprenticeships supplement the acquisition of abstract knowledge (often learned away from the workplace) with the learning of applied skills via experienced practitioners (Buchanan et al., 2016). But apprenticeships involve a great deal more than learning technical knowledge. Because they are immersed in workplaces, apprentices also acquire the occupational values and skills that denote membership and status in a trade (Marchand, 2008; Fisher, 1986) and gain first-hand understanding of labour market policy and practices (Buchanan et al., 2016). Apprenticeship is therefore a critical phase in a young worker's socialisation into work in general and to their profession in particular (Bakkevig Dagsland et al., 2015). Of particular relevance to the current study, Gherardi and Nicolini (2002) describe how construction apprentices are socialised into workplace community of practices through which they develop competencies relative to safety and danger.

Despite their importance, the numbers of young workers commencing apprenticeships and those currently in training are reported to be the lowest for a decade (Australian Industry Group, 2016). The Australian Bureau of Statistics data also shows completion rates for apprentices in construction steadily declined between the years 2012- 2017 (ABS, 2018). Poor retention is a

particular problem among female apprentices. In Queensland, completion rates in construction trade apprenticeships are reported to be 12% lower for women than for men (CSQ, 2018).

On commencement, apprentices usually hold positive expectations towards the apprenticeship, with a strong focus on learning and professional development (Dagsland et al., 2011). However, in the three-way partnership between the apprentice, a training organisation and the training employer, apprentices' expectations towards their learning and development are sometimes unmet. This can occur if apprentices' learning expectations are not respected and if apprentices are insufficiently supported, and not allowed enough time to develop and try out new skills in the workplace.

Bednarz (2014) identify the workplace-based training experience as a key factor influencing apprentices' satisfaction and the likelihood that Australian apprentices will complete their training. The majority of apprentices who complete their training (80%) were satisfied with their employment experience, whereas just 42% of non-completers are satisfied. However, training organisations vary greatly in the experience they offer to apprentices and this is likely to impact completion rates. Bardon (2010, cited in Buchanan et al., 2016) suggests that apprentices and employers can be segmented into three tiers. In the top tier of apprentices and employers, completion rates are ~80% compared to ~25% in the lowest tier. Experiencing interpersonal difficulties with employers or colleagues, or not liking the work, are common reasons for leaving an apprenticeship (Einboden et al., 2021; Bednarz, 2014). This is consistent with the finding that, in Australia, (male) apprentices' relationships with their boss/supervisor and their co-workers are the most significant predictors of intention to quit (Gow et al., 2008). Lopata et al. (2015) identified further barriers affecting apprentices finishing their apprenticeships and found that a poor job fit, a lack of support or not being able to adhere to or follow work policies or rules contribute to non-completion. Apprentices note that having a work supervisor who is willing to teach them is one of the most important factors for them and not having a supportive supervisor or a mentor may discourage them from completing their apprenticeship (Lopata et al., 2015).

The experience of female apprentices entering male-dominated occupations may be different to that of males. For example, Jones et al. (2017) identified gendered stereotyping of trade-based work and biased perceptions of women's suitability for this work to be significant barriers to women entering electrical trades. Furthermore, those women who did commence an apprenticeship in an electrical trade were found to be confronted by:

- masculine and sometimes hostile work environments
- · discriminatory practices during training and in the workplace
- exposure to offensive or inappropriate materials (e.g. pornography), and
- an unwillingness on the part of some employers to adapt work conditions to accommodate female employees.

These findings suggest that the social context of work plays a very important role in the experience of apprentices. While a lack of support can be damaging and negatively impact completion rates, the availability of social support in the workplace can have positive benefits for apprentices' mental health and wellbeing (Buchanan et al., 2016). Importantly, effective workplace structures of support for apprentices comprised of formal supports (e.g., mentoring arrangements), as well as informal support that is embedded in daily interactions between

apprentices, supervisors and experienced co-workers (Buchanan et al., 2016). This informal support was identified by Buchanan et al. (2016) as being even more important than formal support for the health, wellbeing and satisfaction of Australian carpentry apprentices.

2.2 Factors impacting young workers' health, safety and wellbeing

Young workers' susceptibility to adverse health, safety and wellbeing outcomes was discussed in Chapter 1 of this report. Sometimes young workers' increased risk of accidental injury has been attributed to physical or developmental factors (Okun et al., 2016), immaturity and/or increased risk-taking behaviour, particularly in the presence of peer influence (Steinberg, 2004). However, attributing heightened risk to simply 'being young' ignores factors in the social context of work that contribute to poor work health, safety and wellbeing outcomes for young workers. It is this social context that is the focus of our study rather than the age (youth) of apprentices.

For example, young workers' experience of injury and/or ill health has been linked to job-related demands and conditions, including requirements to work too fast for their skill level, being provided with damaged equipment, being required to work late night shifts, being provided with inadequate training and supervision, young workers' lack of job-related knowledge and skills, and young workers' lack of awareness of their rights in relation to health and safety, and young workers' limited ability to control the way they work (Okun et al, 2016).

In relation to learning and skills development, apprentices sometimes experience restrictive learning opportunities at work (Fuller & Unwin, 2008). Apprentices' learning about working safely can be impacted, for example, by co-workers' use of unfamiliar jargon, inappropriate assumptions made about what is 'common sense', and adverse work conditions (for example, damaged tools, poor work layout or unreasonable task requirements) (Laberge et al., 2014). Learning opportunities are also reduced when apprentices are not permitted sufficient time to practise and master work tasks and when work-based learning is narrowly focused on a single (usually boring, repetitive or unpleasant) task allocated to apprentices by more experienced workers (Laberge et al., 2014).

Work hours and work schedules are also linked to young workers' experience of injury. Breslin et al. (2007a) found that, compared to working 0-60 hours in a month, the risk of experiencing an injury increases by 3.8 times for young workers who work 120-160 hours per month and increases by 6.2 times for young workers who work more than 160 hours per month. Drawing on Australian data, Loudoun (2010) also reports that young male construction workers were at significantly increased risk of injury when they worked a night shift compared to those who worked a day shift.

In international studies, young workers are reported to accept frequent experience of pain or minor injury and exposure to danger in the workplace as 'part of the job' (Breslin et al., 2007b). Research in the Australian construction industry suggests that young workers may, in some cases, be similarly disadvantaged. For example, construction apprentices report not being able to take meal/rest breaks to which they are entitled and being exposed to dangerous work conditions such as conducting work with asbestos present without being provided with suitable protective equipment (McCormack et al., 2013).

Breslin et al. (2007b) describe young workers as feeling powerless to change their situation, being reluctant to raise work health and safety concerns with their employer, given their insecure/precarious employment conditions. Precarious employment is a risk factor for poor work health and safety (Quinlan et al., 2001), and particularly affects people in unskilled jobs (Blewett et al., 2012). When young workers feel that they are dispensable or replaceable at work, they are more likely to feel the need to 'earn' their jobs, which can include taking unnecessary risks (Blewett et al., 2012). Young workers in precarious work are also likely to experience elevated levels of stress (Nielsen et al., 2017).

In a study that examined safety-related behaviours, Turner et al. (2015) Turner et al. (2015) found that young workers' safety voice, i.e. speaking up about hazardous work was lowest in workers aged 15-18 and progressively increased for young workers in older age groups, up to the age of 25. It appears that young workers' confidence in raising safety concerns, evidenced by increased safety voice behaviour increased above the age of 19, while unsafe behaviours reduce as young workers develop in maturity and/or work experience. Differences by gender also exist. Despite the fact that young male workers are statistically more likely to be injured at work even when factors linked to different risk exposures (e.g. types of occupations and industry sectors) are controlled for (Breslin & Smith, 2006), research shows that young women are more likely to raise work health and safety concerns with supervisors than young men (Tucker & Turner, 2014). Young women are also more likely to report work-related injuries to their employer than young men (Tucker et al., 2014). Importantly, young men were less likely to report a lost-time injury than young females because of their concerns relating to masculine notions of self-identity, i.e. fearing that it would make them look like "a wuss", "a pain/whiney baby" or "a pussy" (Tucker et al., 2014, p. 71).

Work, mental health and wellbeing

Although employment is usually associated with having better health, it is increasingly acknowledged that the positive health benefits of work are conditional on the quality of jobs that people perform (Findlay et al., 2013). Butterworth et al. (2013) report that being in a poor quality job is actually as bad for workers' mental health as being unemployed. Several systematic reviews of the academic literature have linked job conditions with stress disorders, mental disorders and depression (Nieuwenhuijsen et al., 2010; Stansfeld & Candy, 2006; Netterstrøm et al., 2008).

Research suggests that young workers suffer from high risk of psychological and mental ill-health when transitioning into work (Milner et al., 2019). Kessler et al. (2005) indicate that adolescence and early adulthood are risky life stages for mental health illness, with 75% of lifetime mental disorder cases start by age 24 years. Workforce entry can be challenging for young workers, who are still in the stage of ongoing psychological and physical development, and the challenges can be exacerbated by stressful work conditions. Young workers are more susceptible to work stress and psychosocial stressors compared to their older counterparts (Pidd et al., 2017). In an Australian study, Milner et al. (2017) observed that young people's mental health can be impaired by poor psychosocial quality jobs characterised by the adversities of low control, high demands, low security and unfair pay. Specifically, young people who experience two or more of these adversities when entering the workforce experienced statistically significant

decline in their mental health compared to when they were not in the workforce (Milner et al., 2017).

The job demands-resources (JD-R) model has been used to explain the experience of stress and strain outcomes as arising from an imbalance between:

- job demands, defined as physical, psychological, social or organisational aspects of a job
 that require workers to expend effort and energy and therefore create a physiological or
 psychological 'cost' for workers, and
- job resources, defined as physical, psychological, social or organisational aspects of a job that support goal achievement, reduce demands or stimulate learning, growth and development (Bakker & Demerouti, 2007).

The psychological wellbeing and drop out intentions of construction apprentices in Australia were recently explained using the JD-R model. In particular, the job-related 'interest' of apprentices was found to decline over time, while apprentices' job-related 'anxiety' increased, particularly from the second half of the first year of their apprenticeship. Job resources provided a protective buffer against the decline in job-related interest, while job demands (including excessive work demands) were associated with increased anxiety over time (Powers & Watt, 2021).

Social determinants of young workers' work health and safety

Research suggests that the social environment of the workplace shapes the health and safety practices of young workers (Gherardi & Nicolini, 2002). It is partly through social interactions with others that young workers learn what health and safety-related behaviours are expected in a given context. Laberge et al. (2012) describe how workplace social frameworks (in providing formal and informal mentoring and support) contribute substantially to the work socialisation process, the development of work skills and the acquisition of 'hands on' work experience.

Pek et al. (2017) examined social influences, associated with interactions with supervisors, co-workers and parents, on young workers' risk-taking behaviour and workplace injury experience. They report that the perceived expectations of supervisors, co-workers and parents shaped young workers' risk-taking behaviour through the development of normative behaviours about how workers should behave (injunctive norms) in a given situation. Injunctive norms influence behaviour through the promise of social sanction, i.e. important others will disapprove of behaviour that is inconsistent with behavioural expectations. It is through social processes and interactions that young workers 'make sense' of the risk culture of their workplace and adapt to what is considered to be 'normal' or acceptable work health and safety-related behaviour (Nielsen, 2012).

Given the social determinants of young workers' health and safety behaviour in the workplace, supportive management and supervision of young workers is critical. Yet an effective supervisory/mentoring relationship between a supervisor and apprentice may not develop organically within a workplace setting creating the potential for haphazard learning situations (Laberge et al., 2012).

Research also suggests supervisors may not always be supportive of the work health and safety of young workers. Being able to talk about work health and safety with others in the workplace is

an important part of learning a craft. However, Breslin et al. (2007b) report that, even when young workers raise questions or concerns about work health and safety these may be 'systematically silenced' by supervisors whose focus is on getting the job done. Laberge et al. (2012) also observe that apprentices may be uncomfortable initiating conversations with their supervisors and more likely to seek advice from others who did not occupy positions of formal authority, including more experienced co-workers. Similarly, Zierold (2017) reports that some young workers do not feel comfortable talking to their supervisors about workplace health and safety issues. The 'approachability' of supervisors is an important factor shaping young workers' health and safety-related behaviour. Research shows that when supervisors are seen as unapproachable or unhelpful or they do not listen well, young workers are substantially more likely to engage in unsafe work practices (Zierold, 2017). Importantly, Zierold (2017) found that young male workers are particularly susceptible to social pressure from supervisors and are significantly more likely to perform unsafe work if requested to do so by a supervisor than young female workers (Zierold, 2017).

The social environment of the workplace (in particular the extent to which social support is available) is also of importance to young workers' mental health and wellbeing (Buchanan et al., 2016). A supportive work environment can help young workers to thrive i.e. experience positive meaning and a sense of wellbeing at work but an unsupportive environment is likely to be detrimental to mental health and wellbeing (Conway & Foskey, 2015). Contextual factors that enable or hinder thriving at work include how decisions are made, how information is shared and whether interactions are respectful and interpersonal relationships characterised by trust. Research examining the experiences of Australian apprentices revealed the positive impacts of supervisors providing positive feedback and providing a supportive environment in which apprentices feel comfortable exploring new ways of doing things and acting with agency (Conway & Foskey, 2015).

2.3 Social support in the workplace

In the workplace, social support describes the degree to which individuals perceive that their wellbeing is valued. This support can come from different sources:

- organisational support describes perceptions of workers regarding the extent to which their organisation appreciates their effort and cares about their wellbeing (Eisenberger et al. 1986)
- supervisor support describes perceptions of workers regarding the degree to which supervisors value their contributions and care about their wellbeing (Eisenberger et al., 2002), and
- co-worker support describes perceptions that co-workers are helpful, can be relied upon in times of need, and are receptive to work-related problems (Menguc & Boichuk, 2012).

Support from within the workplace is believed to be the effective in helping people to deal with stressful aspects of their work, because the stress 'treatment' occurs in the context of the stressful situation (Beehr, 1985). Johnson and Hall (1988) incorporated social support into the Job Demand-Control model of occupational stress (Karasek, 1979) and demonstrated that in

environments characterised by high demands and low control, workers experienced reduced levels of strain when social support was high.

Supervisor support is of particular relevance to the present study and has been identified as being important for workers' health and wellbeing at work. For example, the absence of support in a supervisor-subordinate relationship has been linked to lower levels of workforce engagement and performance, reduced work satisfaction and increased burnout (Baruch-Feldman et al, 2002; Neves & Eisenberger, 2014).

Supervisors' support is important for workplace safety (Yanar et al., 2019). When workers are vulnerable in terms of having low levels of safety awareness or empowerment, they are significantly more likely to experience workplace injuries in conditions of low compared to high supervisor support. Yanar et al. (2019) conclude that the combination of vulnerability and lack of supervisor safety support on injury risk is greater than the independent effect of either of these factors in isolation.

Supervisor-worker communication

Open and regular communication about work health and safety between managers and employees has been recognised as a key feature of organisations that demonstrate a strong safety performance (Vredenburgh, 2002). In the construction industry, being able to effectively communicate about safety has been identified as an important competence for construction supervisors (Hardison et al., 2014). Effective safety communication between supervisors and workers is a two-way process involving information exchange (Liao et al., 2014). Supervisor-to-worker communication involves passing on safety policies and statements, disseminating information related to risks and safety, such as hazard analysis and prevention measures, and providing feedback to workers about their safety performance (HSE, 2005; Kines et al., 2010; Olive et al., 2006). Worker-to-supervisor communication is primarily concerned with safety engagement and reporting, through which workers report safety issues and concerns to supervisors for action and improvement (HSE, 2005; Olive et al., 2006). Safety communication in both directions is critical for maintaining a safe work environment.

In the construction industry, research shows that communication about work health and safety between supervisors and workers is an important determinant of the safety climate (i.e, shared expectations regarding safe and healthy ways of working) within workgroups (Lingard et al., 2019). Research also shows that work health and safety are socially negotiated within workplace in daily informal interactions between supervisors and workers (Lingard & Oswald, 2020).

The supervisor-worker relationship

Good interpersonal relationships at work are an important determinant of apprentices' successful completion rates. For example, Australian research by Gow et al. (2008) showed that the quality of the relationship with their supervisors and co-workers are the most significant predictors of apprentices' intention to quit their apprenticeship. Gow et al. (2008) also found that apprentices' intention to quit is significantly associated with motivational factors, including the extent to which they are motivated by the recognition and positive reinforcement they receive from others. Supervisors and co-workers are the main sources of recognition for apprentices at the workplace

and social support in the work environment is likely to be an important factor shaping apprentices' self-efficacy, as well as their mental health and wellbeing (Buchanan et al., 2016). Conversely, poor relationships at work are likely to be damaging to mental health and wellbeing (Cortina et al., 2001).

Mentoring

Effective mentoring relationships can be of significant value for young people (DuBois et al., 2011). Rhodes (2004) proposed that the first and foremost condition for an effective mentoring relationship is a meaningful personal connection forged between a mentor and a young person. Such a personal connection is characterised by mutuality, trust and empathy, which engenders a sense that one is understood, appreciated and respected (Rhodes, 2004). The personal connection between a mentor and mentee helps to create a non-judgmental and nonthreatening context where young people feel safe in expressing their feelings and thoughts to their mentors.

In the process of enhancing young people's cognitive development, Rhodes (2004) emphasised the crucial role of conversations between mentors and young people. Conversations, where mentors listen to young people with patience and attempt to understand and show respect for what young people say without judgment, are considered as significant opportunities for young people to critically think about the world, to stay in touch with feelings and thoughts, and to express themselves fully (Rhodes, 2004). Through conversations with mentors, young people can also refine their ideas and acquire new thinking skills and become more receptive to others' advice and perspective (DuBois et al., 2011).

Mentoring for apprentices has been a key component of Australian Government reform designed to improve levels of satisfaction with apprenticeship experiences and boost rates of completion. Given this, it is perhaps unsurprising that Buchanan et al. (2016) found that formal mentoring arrangements are common in Australian construction organisations, particularly large firms. In some cases, Buchanan et al. (2016) report construction organisations employ apprentice development coordinators to support the development of life skills among apprentices. Group training program field officers also provide pastoral care for apprentices but importantly, can also act as mentors for employers/managers taking on apprentices in their workplaces.

Notwithstanding the beneficial effects of formal mentoring as a form of social support, Buchanan et al. (2016) argue that informal more de facto social support from supervisors and experienced co-workers is potentially more important for apprentice health and wellbeing and, in order to be truly beneficial, formal mentoring programs need to be part of a coherent support framework embedded in a positive and expansive apprenticeship experience.

Participatory leadership

Participation is a process by which "influence is shared among individuals who are otherwise hierarchical unequals" (Wagner, 1994, p. 312). Participative leadership is defined as sharing of problem solving by consulting with subordinates before making a decision (Sauer, 2011). Participative leaders use consultation rather than direction to engage subordinates. A positive relationship between participative leadership and job satisfaction has been evidenced. For example, Kim (2002) found that workers who perceived their supervisors' use of a participative management style and who were engaged in a participative work process reported a high level

of job satisfaction. In addition, Kim (2002) reported that employee job satisfaction can be further enhanced when participative management is integrated with effective supervisory communication.

Research evidence also indicates that personality impacts the relationship between participative leadership and worker outcomes. For example, Benoliel and Somech (2014) found that the positive association between participative leadership and role performance is strengthened among employees high in extraversion and agreeableness. Individuals with high extraversion tend to be sociable, talkative, assertive and active (Roccas, et al., 2002). With the presence of participative leaders, workers high in extraversion develop a sense of competency and self-worth associated with being involved in decision-making leading them to pursue more challenging work. Individuals high in agreeableness tend to be good-natured, compliant, modest, gentle and cooperative (Roccas, et al., 2002). People with these characteristics perform well in jobs in which good interpersonal relationships and cooperation are important factors for success (Benoliel & Somech, 2014). In participative decision-making, workers high in agreeableness are likely to actively share knowledge, suggesting ideas, and communicating with peers and supervisors to produce better work outcomes.

In contrast, participative leadership may increase the levels of job strain experienced by workers high in neuroticism or low in consciousness (i.e. being irresponsible, disorganised, and undependable) (Benoliel & Somech, 2014).

Participative management—in which leaders listen and engage with colleagues, involve them in the decision-making process, and routinely build consensus—is also strongly associated with higher levels of emotional intelligence (Ruderman et al., 2001, p. 5) (see below).

Interpersonal skills and emotional intelligence

An Australian study reports that interpersonal and generic skills, such as communication, emotional cognition, self-awareness and teamwork, are a critical success factors in apprenticeship training (Pagnoccolo & Bertone, 2021). Although current training standards for apprentices do not include so-called 'soft skills', these skills are important to work-based learning and valued by employers.

The concept of emotional intelligence is based on work by psychologist Daniel Goleman, who identified four basic competencies of emotionally intelligent people: self-awareness, social awareness, self-management, and social skills (Ruderman et al., 2001). Mayer et al. (1999, p. 264) highlighted that emotional intelligence involves "the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them".

Emotional intelligence influences various aspects of people's everyday life, including their cognitive abilities, mental health and wellbeing, social functioning, academic performance and workplace performance (Brackett et al., 2011). In the workplace, emotional intelligence influences workers' interactions with their colleagues, the strategies that they use to manage conflict and stress, and their overall job performance (Brackett et al., 2011). Emotional intelligence enables people to effectively develop workplace interpersonal relationships and

successfully manage work-related problems (Wan et al., 2014). Workers with higher levels of emotional intelligence are believed to be more capable of maintaining positive affective states, using their emotions to cope with workplace challenges, enhancing their own and others' moods, and managing emotions while motivating others to work towards meeting an intended goal (Wan et al., 2014). However, workers with low levels of emotional intelligence are likely experience work as being more stressful, challenging and less fulfilling (Nikolaou et al., 2002).

Pagnoccolo and Bertone (2021) describe how Australian apprentices use emotional intelligence and self-control when faced with stressful work situations. By being aware of their own emotions as well as those of other people, apprentices are able to decide upon behaviours that were appropriate for a given situation. The apprentices also described strategies to cope with frustration and resolve workplace problems, including making the conscious decision to speak up, report problems or make suggestions. When they experienced challenging interpersonal behaviour, the apprentices described re-framing the situation to focus on work outcomes, rather than the problematic behaviour.

The following highly-valued leadership capabilities are also connected to emotional intelligence:

- the ability to put employees at ease with a good sense of humour
- the ability to build and mend relationships without alienating others
- maintaining composure during crises and recovering from mistakes/difficulties in a calm and straightforward manner, and
- being centred and grounded (Ruderman et al., 2001).

Workplace aggression and conflict management

Relationship conflict and psychological aggression in the workplace are demands that require sustained psychological effort, and which can give rise to strain or stress reactions (Way et al., 2016). Consequently, psychological aggression in the workplace has been linked to adverse physical and psychological health and, in turn, lower levels of performance (Schat & Frone, 2011). Workplace aggression has also been significantly related to job satisfaction, affective commitment, intention to turnover, general health, emotional exhaustion (burnout), depression and physical wellbeing, interpersonal deviance, organisational deviance and performance (Hershcovis & Barling, 2010). Psychological distress is particularly acute when workplace aggression is perpetrated by a supervisor/boss, potentially because the supervisors' position of formal power enables them to control work assignments, pay, job security and career development (Hershcovis & Barling, 2010).

A relationship between abusive leadership, health and wellbeing and deviant behaviour was also documented in a Canadian study of young workers (Starratt & Grandey, 2010). Abusive leadership was identified as having the following characteristics:

- playing favourites
- dealing dirty work as punishment
- threatening workers
- blurring the lines between professional and personal
- talking behind workers' backs

- · putting workers down
- · public criticism
- unrealistic expectations
- telling lies, and
- illegal practices

The young workers described how an abusive work environment contributed to anxiety inside and outside work and led them to actively try to avoid their supervisors to decrease the likelihood of conflict (Starratt & Grandey, 2010).

Humour in the workplace

Djurkovic et al. (2020) suggest joking is a deeply entrenched cultural characteristic of Australian workplaces, which are often imbued with a 'masculine' humour culture. The 'joking culture of a workplace distinguishes members from others (Romero & Cruthirds, 2006) and can serve to regulate social interactions between members by:

- · smoothing group interaction and diffusing conflict,
- supporting the development of social cohesion
- sharing jokes and stories, often linked to triggering events, such as practical jokes played by group members. An important aspect of a shared joking culture is an understanding of the limits as to what members can 'get away with' in their humour.
- differentiating group members from non-members who do not share the humour tradition of the group, and
- allowing the use of jokes to maintain social control and constrain the behaviour of members in a way that does not appear to be oppressive (Fine & Soucey, 2005).

When it is appropriately used, humour in the workplace can have psychological and social benefits. However, this depends upon the nature of humour and way in which it is used. Different humour styles have been identified as follows:

- affiliative humour, which is non-threatening, non-hostile humour used to enhance social interactions.
- self-enhancing humour, which is used by individuals as a coping mechanism to buffer against stress,
- aggressive humour, which victimises, ridicules or belittles others,
- mild-aggressive humour, which includes teasing or communicating criticism in a humorous tone, and
- self-defeating humour, which is used to lower one's own social status and appear more approachable (Martin et al., 2003).

Affiliative and self-enhancing humour are believed to enhance group cohesiveness, communication and creativity, as well as reducing stress. For example, Plester (2009a) describes how workplace humour relieves frustration and helps people to deal with difficult or unpleasant situations. Workplace banter and 'horseplay' can also provide relief from boring work and build social cohesion and camaraderie in the workplace (Plester & Sayers, 2007, cited in

Plester 2009a). Humour can be used as a socially acceptable 'cover' through which to criticise or admonish others without damaging interpersonal relationships (Holmes & Marra, 2002; Romero & Cruthirds, 2006). Humour can also serve to maintain the status quo, i.e. to 'test' new members of a workgroup, ensure they understand the normative expectations of the group, and rebuke them if they violate these norms (Fine & Soucey, 2005).

However, there is no universal understanding of what is funny and what is not, meaning that what is perceived to be funny to one person can be insulting and offensive to others. In some instances, workplace cultures develop in which humour that exceeds typical workplace levels of acceptability (e.g. sexist and aggressive humour) is normalised (Plester, 2009b). In such cultures, Plester (2009b) describes how workers who are critical of the extreme humour on display (which included references to bestiality, referring to co-workers as homosexuals in a derogatory way and food throwing) were treated as 'outsiders'. Ethnicity and gender (of both humour initiator and recipient) are reported to affect the experience of humour in the workplace (Romero & Cruthirds, 2006). Typically, humour that 'crosses the line' or 'goes too far' for the prevailing workplace joking culture is socially sanctioned (Plester 2009b). Djurkovic et al. (2020) suggest there is a 'fine line' between what constitutes acceptable joking behaviours and what should be identified as bullying in Australian workplaces. However, joking behaviour that threatens the health and safety of workers, or which targets a 'protected category' in Equal; Employment Opportunity law (such as race, religion, sexual orientation etc.) is almost universally regarded as offensive and unacceptable (Djurkovic et al., 2020). Notwithstanding this, human resource professionals and union representatives interviewed by Djurkovic et al., (2020) suggested that the acceptability of humour should be determined in reference to contextual characteristics of a given workplace.

Aggressive workplace humour (which includes teasing) can be harmful to mental health (Hogh et al., 2005) and is particularly harmful when targeted workers are low in power or social status, such as those relatively new to a role, inexperienced or still undergoing education or training (Mortensen & Baarts, 2018).

Humour is a deeply ingrained characteristic of construction work environments, with sarcasm, banter, mocking and irony prevalent in office-based environments and joke-telling (often using crude language, mimicry and innuendo commonly used on-site (Watts, 2007). Watts (2007) suggest that women in the construction industry sometimes join in with sexist workplace humour in order to 'fit in'. However, gender-based joking and teasing by the dominant male group can also result in 'othering' female construction workers and, in some circumstances, can be excessive, inappropriate and damaging (Watts, 2007). Holdsworth et al. (2021) describe a similar experience among tradeswomen in the Australian construction industry, reporting inappropriate or abusive language (e.g. offensive banters and threats) and behaviour (e.g. sexual harassment and sexual violence). The Australian tradeswomen indicated the situation is made worse by low levels of workplace support and lack of a transparent reporting system. Jenkins et al. (2018) suggest that women in construction are also reluctant to raise concerns about inappropriate or abusive conduct in case this results in them being regarded as 'prickly' or easily offended.

2.4 Workplace health and safety communication interventions

Leader-based verbal safety communication

Kines et al. (2010) developed a leader-based verbal safety communication intervention to coach construction frontline supervisors to include safety in their daily verbal exchanges with workers. The intervention was based on the proposition that: (i) leaders' priorities (communicated in daily interactions with workers) have a cascading influence on workers' attitudes and behaviours, and (ii) that workers pick up on cues relating to the type of behaviours that will be recognised and rewarded through the interactions and communications with the leader.

The intervention involved providing frontline supervisors with bi-weekly feedback in terms of the proportion of all supervisor-worker communication that was related to workplace safety. The supervisor-worker safety communication was assessed using short interviews (Experience Sampling Methodology) in which workers were asked to indicate: 1) when was the last time that they had verbal exchange with their foremen; 2) who initiated the verbal exchange; 3) the main themes of the exchange; and 4) the importance of productivity, quality, safety, welfare, and/or other topics in the exchange. The assessment enabled the calculation of the proportion of communication that was safety-related.

To evaluate the effectiveness of the intervention, Kines et al. (2010) designed a pre-post intervention-control study with two intervention groups and three control groups. A baseline measurement was conducted among all the five groups before the intervention. The baseline measurement assessed the frequency/quantity of foreman-worker safety communication, as well as safety performance and safety climate. Safety performance was measured through weekly walk-rounds at the construction site to observe safety related working conditions and behaviours and calculated as the percentage of positive safety observations out of all safety observations. Safety climate measurement focused on: supervisory leadership, safety representatives' engagement in safety, safety instruction, safety compliance, attention to safety, and workplace involvement. The implementation of the intervention lasted for 16 weeks in the two intervention groups. A subsequent follow-up measurement was undertaken among the intervention and control groups to ascertain any changes in supervisor-worker safety communication, safety performance and safety climate.

The baseline and follow-up measurements showed that supervisor-worker safety communication significantly increased in one of the intervention groups, and a small but significant increase was identified when the two intervention groups were combined. Significant improvement in safety performance was identified for both intervention groups. A significant positive change in the safety climate dimension of worker attention to safety was found for one of the intervention groups. In the three control groups, no significant change in supervisor-worker safety communication, safety performance or safety climate was observed between the baseline and follow-up measurements.

Kines et al. (2010) also found that while safety-related verbal exchanges between supervisors and workers increased in the intervention groups from baseline to follow-up measurement, the production-related verbal exchanges remained constantly high. The result indicates that increasing safety-related topics in the verbal exchanges between supervisors and workers would

not compromise production-related topics. Instead, safety and production should be communicated in an integrated way to ensure that production objectives are achieved in a safe manner.

Discourse-based intervention for modifying supervisory communication

Zohar and Polachek (2014) designed an intervention to modify daily messages in supervisor-member communications, with the aim to improve safety climate and resultant safety performance. Safety climate was defined as workers' shared perceptions of the relative priority that a supervisor places on safety compared to other potentially competing goals such as production speed and cost. Therefore, modifying supervisory practices that are indicative of relative priorities and/or trade-offs among competing work demands can serve as leverage for climate-improvement interventions. Zohar and Polachek (2014) further recognise that organisational processes are discourse driven, and that it is through communication that individuals clarify role expectations and identify role-behaviour contingences, i.e. what behaviours will be recognised and rewarded in a work context. Therefore, the intervention was designed to be discourse-based, with the purpose of modifying supervisory verbal exchanges with group members to subsequently modify workers' perceptions of supervisors' expectations.

Zohar and Polachek (2014) implemented the intervention in a heavy manufacturing company constructing and assembling steel and aluminium structural sections, where supervisors of 26 workgroups were randomly assigned to 13 experiment groups and 13 control groups. The intervention lasted for 12 weeks and involved two consecutive sessions (i.e. each six weeks). During the first three weeks of each session, researchers called seven to nine randomly selected workers from each of the experimental groups at random times to collect data about perceived priority of supervisory daily communication in relation to three categories, i.e. safety, productivity, and teamwork. Six items were used to capture workers' perceptions of the importance of the three message categories, using a scale ranging from 1 (low/none) to 3 (high). In the next three works, supervisors of the experimental groups were invited to attend a feedback session, where they were provided with data graphically presented as a three-bar diagram representing the aggregated workgroup scores for the three message categories of communication topic. They were also provided information of the average score of other supervisors in the experimental groups. Guidance was provided to supervisors to interpret the bar diagrams and set goals for future verbal exchanges. Supervisors from the control groups did not receive any feedback, but their workers were also contacted to elicit the same information of perceived supervisory messages during daily exchanges. There was no significant difference in the three supervisory message categories perceived by workers between experimental groups and control groups in the first feedback session. However, significant differences emerged in the second feedback session, suggesting that the intervention effectively modified the daily messages communicated by supervisors in the experimental groups.

Zohar and Polachek (2014) adopted a before-after design to further evaluate the intervention. Specifically, all workers were requested to complete a questionnaire survey 6-8 weeks before the intervention phase, and 6-8 weeks after the intervention phase. The before-after measurement comparison revealed significant positive changes in workers' perceptions of safety climate, safety behaviour, workload, teamwork and safety audit scores for the intervention

groups (independently measured by external consultants). However, no significant change (except for safety behaviour) was identified for the control groups.

This intervention by Zohar and Polachek (2014) highlights the value of discourse and communication analysis in work health and safety research, as the health and safety climate of a workplace is determined by social interaction that occurs between supervisors and workers. This, in turn, shapes workers' health and safety attitudes and behaviours.

Safety and Health Improvement Program (SHIP)

While the interventions described above targeted only supervisors, Hammer et al. (2015) introduced an intervention, i.e. the Safety and Health Improvement Program (SHIP), which targeted both supervisors and workgroups. The SHIP was designed to address work-family stress and safety risk factors so as to improve workers' health and safety experiences. The idea of SHIP is aligned with a Total Worker Health (TWH) approach to improving the health and safety of workers, i.e. it is designed to "integrate protection from work-related safety and health hazards with promotion of injury and illness-prevention efforts to advance worker wellbeing" (CDC, 2021).

Based on the proposition that a multilevel intervention approach is likely to be more effective than a single level intervention approach, Hammer et al. (2015) designed the intervention to consist of two components:

- a top-down component that focused on supervisors, i.e. computer-based supervisor training in supportive supervision, and
- a bottom-up component that focused on workgroup members, i.e. process training focused on building team effectiveness.

It was expected that the SHIP would improve worker health and safety by reducing occupational stress and safety risk through improved supervisor support and team effectiveness (Hammer et al., 2015). Hammer et al. (2015) involved 21 workgroups in the study. The 21 workgroups were randomly allocated into 11 intervention groups to receive the SHIP program and 10 control groups which did not receive the intervention. Supervisors of the intervention groups all attended the supervisor supportiveness training, which addressed family-supportive behaviours and safety-supportive behaviours. After attending the training session, supervisors were requested to choose specific supportive behaviours that they would like to improve. Their behaviours were monitored for two weeks. All intervention group members including their supervisors then participated in the team effectiveness process (TEP) training, which aimed to enhance planning and problem-solving and to encourage supportive behaviours in relation to health, safety, worklife balance within workgroups. At the end of the TEP training, each workgroup was required to develop an action plan outlining what improvements they would like to make and what actions would be taken to achieve the improvements. Each supervisor then had check-in meetings with their workgroup 30, 60, and 90 days following the TEP training session to review the workgroup's progress and update the action plan.

Hammer et al. (2015) developed an intervention evaluation strategy for both process evaluation (i.e. how did an intervention work?) and effect evaluation (i.e. what impact did the intervention

have?). Regarding the process evaluation, supervisors completed an assessment form at each of the 30, 60, and 90 days check-in meetings. The assessment form included updates in a workgroup's action plan and evaluation of changes in the four aspects of morale and work climate, efficient use of time and resources, focus on safety practices, and communication within the team using a scale. The process evaluation revealed improvements in all the four aspects at the 60 days check-in meeting, with the greatest improvements recorded in relation to focus on safety practices and communication within the team. The effect evaluation involved assessing supervisor training outcome via a computer-based quiz as well as assessing changes in workgroup members' safety behaviours and health status through a before and after-intervention questionnaire survey. Supervisors had an average score of 85% on the quiz indicating a good knowledge training outcome. The survey identified a significant improvement in workers' health in the intervention groups between baseline and follow-up surveys.

The improvement in workers' health is considered to be the result of both supervisor supportiveness and team effectiveness training elements.

POWER project: Fostering youth leadership in health and safety

Delp et al. (2005) described a pilot project named the "POWER (People Organising for Workplace and Environmental Rights) Project" to develop youth leadership in workplace and community health and safety. This project adopts a social-ecological approach and is based on an empowerment model of education. This approach goes beyond the individual behaviour change emphasised by traditional training programs and recognises that health and safety interventions need to consider the social environment in which individuals live and work (Delp et al., 2005). Empowerment is the means to strengthen individual and community capacity to influence health and safety-related decisions and policies within the social, economic and political context (Delp et al., 2005).

The POWER project is the result of a collaboration between a university, high schools, and community based-organisations. A key element of the project was to value, identify and build on existing community capacity, such as community-based organisations, government agencies, unions, etc. (Delp et al., 2005). The empowerment process in this project recognises youth as important community resources with leadership potential to address important workplace and community health and safety issues (Delp et al., 2005). The empowerment education model consisted of three steps, including listening, dialogue, and action. Specifically:

- listening education starts from participants' own experiences, so it must include community participation and the opportunity for youth to discuss their collective knowledge and experiences,
- dialogue empowerment education must include dialogue to build critical consciousness, i.e. the ability to analyse and address the root causes of social problems, and
- action education programs should build skills, confidence, and opportunities for individual and collective action (Delp et al., 2005).

The implementation of the POWER project was built on close collaboration between school and community-based activities. It occurred at three levels:

- Level 1 a 2-week curriculum unit, 'Safe Jobs for Youth', was designed to educate 9thgrade students about teen workers' health and safety rights. This was the first step in analysing and addressing work health and safety issues.
- Level 2 a 16-week leadership curriculum, 'Healthy Jobs, Healthy Communities', was designed to develop critical analysis skills and environmental leadership through the development of research, peer education, and community-organising skills.
- Level 3 the community-based component of the project placed students from the level 2 leadership curriculum into internships to enhance students' empowerment and to strengthen organisational and community capacity to change workplace and environmental policies. Both short-term internships (2-month) and long-term internships (3-year) were organised with community organisations.

The curriculum at levels 1 and 2 featured a typical empowerment education approach in which the learning activities began with students' own experiences. For example, in the level 1 curriculum, students identified hazards by drawing 'risk maps' of their own workplaces and discussing common problems and potential solutions. Students were also provided with workplace scenarios and stories that presented risks to young workers, through which students learned about their rights in the workplace and discussed strategies to develop support and to exercise health and safety related rights on the job. In the level 2 leadership class, students mapped their neighbourhoods and constructed 'power analysis' to identify the political structures responsible for the environmental decisions that affect their community. Class projects were designed to teach leadership skills for community-based campaigns. All students became peer educators and taught other students and youth in the community about their workplace rights.

Delp et al. (2005) evaluated both the impact of the program, as well as the process of the intervention. They used individual and community level measures as intermediate indicators of progress toward longer-term empowerment goals. The key evaluation methods and results are listed in Table 2.1.

Table 2.1: Key evaluation methods and evaluation results

Intervention levels	Evaluation methods	Evaluation results
Level 1 – Safe Jobs for Youth 9 th – Grade curriculum	Pre-test – post-test	Students' knowledge of resource organisations (e.g. unions and government agencies) significantly increased
	Focus groups with students	Students' awareness of their health and safety rights was increased, particularly in the aspects of: • awareness of workplace problems and available resources and support • knowledge of hazards and legal rights • responses to hazardous and/or abusive workplace scenarios • dissemination of information learned in the class Students also described a sense of confidence and empowerment as a result of learning that they have rights at work and that resource organisations exist
Level 2 - Healthy Jobs, Healthy Communities Leadership Class	Pretest-posttest	Students' awareness and knowledge of resource organisations increased
	Focus groups with students	 Key observations from the focus groups note that students: developed critical consciousness of the causes of workplace and environmental abuses put in the knowledge of the hazards and abuses they discussed in class into a larger social and political context described how peer education and research and organising skills empowered them by increasing their self-efficacy and competency to "work together to get more done" translated the consciousness and skills they acquired from class into action beyond their immediate classroom, and became more aware of job hazards and environmental problems
	The 6-month follow-up interviews	Students continued to play the important role as conduits of information in their community, for example, they spoke with supervisors and coworkers about issues at work
Level 3 - Community internship	Focus groups with students and interviews with their supervisors	The internship has further raised students' health and safety awareness and provided students with the opportunities to apply the information and skills they acquired from the class to collective action to enhance community empowerment

Source: Delp et al. (2005)

These results suggest that interventions like the POWER project can serve as an important foundation to develop youth leadership in health and safety. Communities of Practice (CoPs) can also be established for young workers to engage in peer learning and experience sharing to enhance their awareness of and capabilities in work health and safety. However, those programs do require a strong commitment and input from various partners. For example, educational institutions and training providers need to be willing to implement relevant curriculum, and employers and community-based organisations should be committed to supervising and supporting young workers in their learning and development.

Part 3: Research Methods

3.1 Purpose of interviews

The findings discussed in this report are the result of the first phase of data collection for the project *Conversations about Life, Health, and Safety: Social Supports for Young Construction Workers' Safety and Wellbeing.* This first phase consisted of semi-structured interviews with 30 construction apprentices and 11 construction supervisors. The purpose of these interviews was to explore the following:

- the ways that supervisors and apprentices talk about life, health, and safety, and the nature of supervisor-apprentice communication about these topics;
- · the characteristics of supportive interaction with supervisors and young workers; and
- the organisational or context-related drivers of conversation failure and success for apprentices and supervisors.

It is important to note that the purpose of the interviews was exploratory. As such, we developed a list of open-ended questions designed to elicit participants' own reflections, opinions, and personal experiences as they related to the topic area. Although the questions were informed by published research on the relationship between communication, safety, and wellbeing for young workers, as a suite, they were designed to allow apprentices and supervisors to describe their experiences in this space. The purpose of the interviews was not to prove or disprove a hypothesis, but rather to gather information from the ground on the way in which participants experience workplace communication about safety and wellbeing.

The interviews were semi-structured, meaning they followed an interview guide (please see the Appendix) with a set list of questions to cover, to allow for reliable, comparable data, but they were also flexible, in that they allowed for the interviewer to probe and follow leads raised by the participant. Insights from these semi-structured interviews, shared in the results section, will inform interventions for the next phase of the study.

3.2 Recruitment and sampling

Apprentice and supervisor participants were recruited in partnership with the Master Builders Association of New South Wales (MBA-NSW). An initial recruitment message was circulated by the MBA-NSW to their Sydney cohort of apprentices registered with MBA-NSW Group Training Organisation (GTO) via email calling for apprentice participants. When this failed to generate volunteers, the email was circulated with an incentive (\$50 gift voucher) to apprentices registered with the Newcastle MBA Group Training & Personnel. This generated expressions of interest from the Newcastle cohort, of which 14 completed an interview. The MBA-NSW then provided the researchers with a list of 30 apprentices from the Sydney cohort. Apprentices were contacted by phone and invited to take part in the study. Sixteen apprentices from the Sydney cohort completed an interview.

Researchers interviewed male and female apprentices, apprentices in all stages of their program (stage one through four), mature age apprentices in adult programs, and Indigenous apprentices. Participants were completing electrical, carpentry and joinery, and plumbing apprenticeships, and were employed by residential and/or commercial training employers.

The MBA-NSW also provided researchers with a list of 18 supervisors to invite to participate in an interview. Supervisors had to give apprentice(s) daily instruction to be eligible for an interview. Among the 18 supervisors, 11 supervisors agreed to take part.

3.3 Interviews

Interviews were conducted with 30 apprentices and 11 supervisors. Their demographic information is shown in Table 3.1.

Table 3.1: Demographic information of participants

Apprentices			Supervisors		
Item	Categories	Number	Item	Categories	Number
Age range	15-19	8	Age range	30-34	1
	20-24	15		35-39	2
	25-29	4		40-44	2
	30-34	2		45-49	2
	40-44	1		50-54	2
Gender	Male	22		55-59	1
	Female	8		65-69	1
Aboriginal or Torres Strait Islander?	Yes	3	Aboriginal or Torres Strait Islander?	Yes	0
	No	27		No	11
Apprenticeship stage	1 st year	8	Gender	Male	11
	2 nd year	8		Female	0
	3 rd year	6	Job role	Site manager	8
	4 th year	8		Company owner	3
Apprentice trade	Plumbing	8			
	Carpentry and joinery	20			
	Electrical	1			

Due to ongoing travel restrictions related to Covid-19, interviews were conducted over the phone, or via video, depending on the participant's preference, and audio recorded. The interview guide, which was developed jointly by the research team, and in consultation with the MBA-NSW, covered participants' experiences with, and communication about, physical safety hazards, mental health and wellbeing at work and in one's personal life, apprentice-supervisor relationships, and key challenges facing young apprentices.

Each apprentice interview lasted between 30 minutes and one hour. The length of the interview depended on the amount of time available to each participant, and the degree to which they elaborated on their answers. Some apprentices conducted the interview during a break at work and were necessarily limited in the amount of time they could spend on the interview. Other apprentices conducted the interview outside of work hours, or provided more in-depth responses to the questions, spending up to an hour speaking to the researchers. Most supervisors conducted the interview outside of work hours, and most interviews with supervisors lasted 40 to 90 minutes.

3.4 Data analysis

Interviews were professionally transcribed and uploaded into Atlas.ti qualitative data analysis software. The interviews were analysed using an inductive, grounded approach. This consisted of reading each interview, and assigning small, successive samples of text throughout the transcript a code according to a theme or analytic category. As successive interviews were coded, running notes were kept on emerging patterns and relationships between analytic categories, such as which codes co-occurred, or were common across the 41 interviews. These notes about emerging patterns and relationships were checked against the data as coding continued, with the ongoing refinement of both codes and observations about patterns and relationships. When coding was completed, and emergent themes and relationships were identified, the research team met to discuss findings, and further possible insights from the data. It is the common, recurring themes, and their patterns and relationships, which inform the findings, below. These findings are grounded in the words of participants, and as such, are illustrated with excerpts from the interviews, quotes which serve as "exemplars" to illustrate key themes and patterns in the data.

Part 4: The Structure of Apprentice and Supervisor Interview Findings

The findings present the analysis of semi-structured interviews with 30 construction apprentices and 11 construction supervisors.

The findings are organised to address experiences with, and communication about, both the physical safety of apprentices, and their mental health and wellbeing. While there is overlap in common themes that emerged from both the apprentice and supervisor interviews, the results are presented separately.

The findings show that there are interactive relationships between apprentice confidence and supportive conversations with supervisors, and between supportive organisational environments and supervisors' responses or receptivity to apprentice communication. In other words, apprentices must have the confidence and skills to initiate conversations about their physical safety or mental wellbeing and they must be supported by a supervisor and larger workplace environment that are receptive to them when they reach out. Similarly, supervisors must have the confidence to recognise the need for conversations about physical and mental safety, and the skills to engage in such conversations productively, but they can only do so if they are supported by a workplace environment that encourages and enables this.

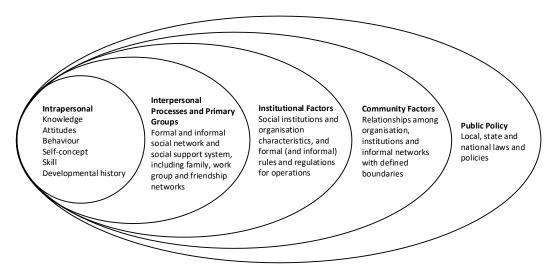


Figure 4.1: Social ecological model of health determinants (after McLeroy et al. 1988)

The interactive relationships identified in the findings are consistent with the social ecological model of health and wellbeing, which recognise that individuals are embedded within social systems and the interdependencies, reciprocal relationships and mutual interactions between people and their environments are fundamental to understanding how health is created or impacted (McLaren & Hawe 2005; Sallis et al., 2008; Stokols, 1992). McLeroy et al. (1988) suggested five levels of influence specific to health. These are: intrapersonal factors,

interpersonal processes and primary groups, institutional factors, community factors, and public policy (depicted in Figure 4.1).

The social ecological model will be used as a guide to structure the findings, reflecting intrapersonal, interpersonal, and organisational factors that interactively influence the abilities of apprentices and supervisors to communicate about life, health and safety.

Part 5: Apprentice Interview Findings

5.1 Apprentice-supervisor communication about physical safety

The interviews indicated that apprentices must have the confidence and necessary skills to engage in safety communication with their supervisors, and they must be supported by a receptive and responsive supervisor and an overall enabling organisational environment.

The following sections presented intrapersonal, interpersonal interaction factors, and organisational factors that have interactively influenced apprentice-supervisor safety communication.

Intrapersonal factors influencing apprentice-supervisor safety communication

Apprentices' awareness, confidence and competence

Most apprentices were aware of the processes and procedures for physical safety. They seemed confident and were not hesitant about dealing with safety problems. They described safety processes and reporting procedures that were clear to them. The following comments are representative of apprentices' responses when asked what they would do if they saw something unsafe on site:

"So if I see something on site that's unsafe, I inform the tradesperson and if it's, um, if it can't be, um, eliminated, then we inform our boss, or, like, our head of our department and, um, he then makes a decision and determines whether it's, you know, if we can do it another way or another day or anything like that where we can work safer. And if we can't, then we don't do the job." (Alexis, female carpentry and joinery apprentice, 22)

"I would usually say "Stop - um - do you know what you're doing, because there is so and so - like, a power line or something there, be careful". And as they go "Oh, okay, thank you, I'll let my - I'll let so-and-so just - I'll let them come and see, like, what's the go around this". Usually because we were doing windows and doors, the power - like you know, telephone and all of that, would always be in the way of, you know, cutting down a wall or something along like that."

(Kayla, female carpentry and joinery apprentice, 18)

"Ah, I'd either call the supervisor in charge of that site, so it wouldn't be my boss it would be, um, say we were working for [company name] I'd have to call like the head supervisor of the site, or um, I'd call my own boss, or I'd just deem it unsafe, like if we were on a scaffold and the scaffolding was missing, or yeah, you'd just - just like call someone and that – yeah. But you know, when you do that, you don't go up there, so you do other things. Just stay on the ground, really. Do anything that was, you know, in the house, or just leave and go to another job that had work." (Cameron, male carpentry and joinery apprentice, 22)

"Um well usually what I do is – first things first is that I'll – if say for a hazard for example I'll warn the person you know that what they're doing is wrong and that they can't do it or that they're

going to hurt themselves in doing it anyway. Pretty much get told to bugger off or whatever and the next stop I would take is that we have a safety officer that we call and ah which pretty much it's just a full lockdown so you don't really want to give that phone call if you need to – like if it happens. That's pretty much it." (Ryan, male plumbing apprentice, 23)

Apprentices also spoke about instances when they assessed the safety issue and decided they could fix it themselves. This illustrates both the confidence and agency of apprentices, but also raises the question: when might a safety problem be too dangerous for an apprentice to fix, and how do apprentices assess this accurately? Apprentices demonstrated their safety competence in risk assessment and judgment. The following quotes capture this:

"Oh, I – I always talk to my foreman, but if it's something that – like there's a penetration in the ground like I can easily use my initiative, do it then and there." (Connor, male carpentry apprentice, 22)

"Oh, so, If I – if I see something, um – if you're talking about like, a scale from one to ten, if I see something between the one being the lowest, maybe a one to, like, a three, I can kind of fix it myself, if it's like, you know, like something's on the ground that needs to be picked up or, you know, a piece of metal's sticking of the ground, I try to pick it up myself, but if it's anything, you know, bigger than that, that's potentially dangerous to the point where it can seriously hurt you, um, yeah, that's when I, um, approach a supervisor or someone on site who, um – who's been there longer than me and knows what to do, and that's definitely when I'd approach them and get their hand to help me out of it... Yeah, pretty much, that's how it goes." (Logan, male plumbing apprentice, 18)

"You know, in a perfect world you want your supervisor to do, like, most of the dangerous stuff, but if they're busy, you can't keep going up to them saying, "Hey, I found, you know, something in the ground, it could be dangerous." If it's a fixable thing in my eyes, I feel like I can fix it, but anything other than that, you know, I'd be approaching a, uh, a supervisor." (Logan, male plumbing apprentice, 18)

Apprentices' age and experience

Apprentices who were confident and assertive spoke of the relative ease with which they could raise safety concerns. When probed, they attributed this to their mature age, often coupled with previous work experience in an environment that promoted safety, or life experience that allowed them to recognise the value of not taking risks. The following quotes illustrate this:

"Well, see, for me being an older bloke, um, plus my background [in the military], I could just go up and say, "hey, what are you doing?" And pull them into line. Um, if it was something - like, unsafe with the site, you should go to the supervisors and say, like, no, that's not very safe. But - yeah, I'm - I'm sure it's fairly easy just to go up and have a chat to your supervisor if you're a bit shy, or if - if it's someone themselves being unsafe (say, they're on a roof without a harness) and they're - you know, you can always - I suppose you can always just yell out, ask them what they're doing up there and why aren't they wearing a harness? So, I don't think most 17-year-old apprentices would. I've never seen one of the younger blokes do it." (Marcus, male electrical apprentice, 29)

"But I've kind of – I've had my – you know, this is my second kind of job, second industry, and I had that moment where I just went why don't – I'm going to take the step back from kind of working my arse off in life and, you know, there's more to do than just go to work, so... I've run a couple of kitchens in the last few years, so I don't know if it kind of comes from that... Maybe, you know, knowing – you know, having different crew on different days, and knowing who's capable of doing what and that's why – why I'm happy to stick my neck out and say it how it is." (Kaden, male plumbing apprentice, 28)

Younger apprentices named family background and navigating personal challenges when explaining why they were assertive about safety. When asked how comfortable he would be raising a safety issue, one apprentice explained:

"Oh, heaps comfortable. I could – like, I'll say it how it is. Like, I don't really care if it offends someone if I know it's going to – you know, like, everyone's pretty good, but, like and I'm not going to do anything that's going to hurt myself or anyone else... Oh, I'd probably just say that's how I've been brought up, and I suppose just with what I've – you know, you've seen, you know, you deal with situations over the years." (Cole, male carpentry and joinery apprentice, 19)

Another apprentice had learned through trial and error with previous training employers that she needed to be up front about her learning needs, especially if she felt uncomfortable with a new technique or task:

"I usually just tell them I'm not – I'm not good with this. I – I have an approach of trying it at the beginning and if I don't feel comfortable with it I will just speak my mind and say it...I have a learning disability... Because it's a lot of effort to have to – like I said before to have to show me, then to watching me do it like a couple of times and then you're able to leave me be to do it... With this [supervisor] as soon as he came to my site, I let them know that this is the only way that I can learn. As soon as I left my last job I changed my, ah, the way I approached things. [Now] instead of just waiting to be heard, I tell them. If it's something to do with me, I tell them what needs to be done." (Natalie, female carpentry and joinery apprentice, 21)

However, apprentices also recognised that having confidence to raise safety issues or ask questions can be a key challenge for younger apprentices, who newly started their apprenticeship and were inexperienced. The following quotes illustrated this:

"Joining a new team, starting a new job, you're nervous. You don't really know the boys that well - asking questions might be hard to do or - you don't want to feel like you're a bit below the rest of the group. But it's what an apprentice is. You're learning and you just ask questions. The boys will tell you what to do or make a lot - like, or make a joke out of it, have some banter, and they're like, "nah, do it this way" and then help you out for a bit, and like leave you on your own and then off you go." (Liam, male carpentry and joinery apprentice, 20)

"Um, I feel like with young apprentices, being comfortable about asking questions – is huge. Like, I – Like, whenever I've had a new apprentice start with us, that – that's honestly one of the first things I've – I've said to them. Like, no question's a dumb question. Even if it is a dumb question, it's still not a dumb question. Like, you feel free to ask about anything you're not sure of, or anything like that, 'cause it's the only way you're going to learn. Rather than just going into doing something, and realising it's wrong after." (Caleb, male carpentry apprentice, 26)

"Um, obviously I was - I was pretty nervous starting because everyone else was a bit older than me, and I didn't even know anyone, but, um, I suppose you've just got to ask as many questions as you can. Not be afraid to ask questions, that's - that's the biggest thing, I reckon...Yeah, I-I definitely think it's worked really well for me. Something I got told as well just ask, don't be afraid to ask questions really, just ask as many as you can." (Bryce, plumbing apprentice, 21)

Supervisors' responsiveness

Apprentices explained that having a supervisor who was responsive and took immediate action to rectify reported safety issue was important for effective apprentice-supervisor safety communication. One apprentice commented that:

"Like, yeah, our - our boss is very, like, safety is number one. Um, and if he sees tradies being unsafe on site, like not wearing their PPE, um. He tells them. He tells me that if I happen to see it, I bring it up to the tradie straight away and let them know that they're not being safe, and then they have to adjust - like, if they're not wearing PPE, they've got to put their PPE on. Um, but if they don't put it on at all after I've told them, then I ring my boss and let them know that the tradie is not being safe and I have warned them, and then he reprimands them." (Alexis, female plumbing apprentice, 21)

Interpersonal factors influencing apprentice-supervisor safety communication

Repeated messaging about the importance of safety

Apprentices felt supported in their ability to raise safety concerns or ask questions when their supervisors repeatedly talked about the importance of safety. One apprentice shared that:

"I was working with a bloke named [supervisor's name]. He was pretty good. He was hard – he was hard to work with 'cause everything like... he's a real perfectionist. But one good thing about him, he was really safety conscious, like he'd make you wear your safeties all the time, like your gloves, like long longs on all the time. Like, he'd just drill it into ya. Really. Which was a bit annoying, but at the same time it's also good. Good as well, I think. Because if something does happen, you know, at least, you know, you've got ya – ya safety and like, it could s – it could save, I don't know, your eye or who knows." (Thomas, male plumbing apprentice, 21)

However, one apprentice described that supervisory message about safety can sometimes be ambiguous when under time pressure:

"If someone asked me to run over and do something, like grind up some rod or any other material, I would say, I would have to quickly run to my tool bag over at the shed to get my safety glasses. And he said, "Oh, it's only one cut. You'll be alright." (Alexis, female plumbing apprentice, 21)

Non-judgmental communication environment

Apprentices considered a non-judgmental or psychologically safe communication environment as important for them to be able to speak up about safety:

"And I don't know, yeah, ... like being comfortable with – with the people I work with onsite. Like, being very comfortable enough to kind of just like openly speak, and not like worry that they're going to be like judging or anything like that. Kind of – I guess you could say it gives me the confidence to stand in and jump in straight away if I see something could go south of what they're doing." (Caleb, male carpentry apprentice, 26)

"[My supervisor is] absolutely really good with it. There's no real judgment if I can't do this work if that makes sense. If it's something I can't – I just can't do because I'm not strong or I'm not as sure. There's no actual judgment towards me about it. You know he's very understanding and he usually gets on top of it very quickly." (Natalie, female carpentry and joinery apprentice, 21)

"We get along well. He's pretty easy to talk to and pretty approachable sort of a man. Um, a couple of times, like, when I got confused on, like, safety or just, like, general stuff, like, learning and you know he just like explains it again, nice and thoroughly. Before each task, he'll go through and explain how – like, what the main, like, he'll ask questions, like, what's the main problems here and we have to try and figure it out. If we figure it out, it's all good, but if not, he'll tell us what needs to be done. And – like, if I'm doing a task and don't understand, I'll go and ask him a question, how the proper way to do it is, or if I'm doing something wrong and I don't understand, I'll go ask him to help." (Noah, carpentry and joinery apprentice, 20)

Participatory process

Apprentices felt that they were respected and included when they were engaged by supervisors in workplace discussions, decision making and problem solving:

"So with, like, I'll always ask him and he'll always put it back onto me, would you do it? Or, if you don't think you should, but would you do it? So he would always flip the question around, like, do you think it's safe to do so, or do you think it's not?" (Gavin, male carpentry and joinery apprentice, 20)

"Yeah, everyone stops their job. We usually talk about the situation and what we can do to overcome it...[Our supervisor] would ask us, the boys, saying, "how would you guys handle this situation?" We would give our ideas and then he'd be like, "Yeah, that's all good ideas", or he would be like, "Nah, maybe do it this way". And we would just, like, we - just feed back off each other and the best way to go about it." (Liam, male carpentry and joinery apprentice, 20)

Case study: Safety enabling supervisors

The following case study illustrates the ways in which shared decision making, immediate action on safety issues, and repeated messaging that safety is a priority combine to create a working environment in which apprentices feel that they can raise safety issues, and that their safety is supported. Kevin is a 33-year-old mature age apprentice with previous experience

working in the mines. He works with a large commercial and residential construction company as part of a small maintenance and construction crew assigned to repairs and small construction work at a site. While Kevin recognises that he is, himself, safety oriented due to the repeated safety messaging he was exposed to in the mines, he explains that his supervisors, Luke and Kyle are unequivocally supportive of resolving safety issues immediately, problem solving safety issues together, and reiterating to apprentices and tradespeople that safety is a priority. His case also illustrates the observation made by some apprentices that sometimes supervisors of different ages respond to safety concerns differently. In this case, Kevin finds that the older tradespeople he works with are not as receptive when he raises issues about safety as are his younger supervisors.

When asked what he normally does if he sees something unsafe onsite, Kevin explained:

"Well, for me, I'm a mature age, so I suppose for me I feel it's slightly different. I worked in the mines prior to this job, so safety - to me - is something that's been drilled into me for a number of years now. So we do a lot of work on rooves at [site name], as well, so I'll just speak to the tradesman that I'm with about it. And nine times out of 10 they're all on the same page anyway, but I mean, further to that, we go to our supervisor and... we've got great bosses here, so we always come together and we talk about it, and come up with a different way to do something, or we just don't do the job at all. And that's - I think that's really good, you know, that sort of attitude that we've got here coming from our bosses as well, is we don't do anything - anything unsafe."

Kevin explained that he was confident raising safety concerns and valued the importance of safety, and that sometimes his older co-workers were not as concerned about the same safety issue:

"I mean, I suppose it can come across a bit over the top at times, but I definitely don't do anything unsafe. If I feel like something is unsafe, or I don't feel comfortable with the situation, I'd definitely bring it up, because I - again, maybe that's my age, and I've got two children, as well, so I realise there's more to life than getting that little job done which might be unsafe... So I'm definitely very vocal when it comes to safety, and I think it's big for a lot of the older guys here, as well, because I think they've been sort of stuck in their ways for a number of years, and with all the training that you can do these days, it's a bit of an eye-opener for them, as well. But yeah, I'm definitely one to raise or voice my concerns, if I have any."

Kevin also explained that his supervisors respond quickly to his safety concerns:

Again, like I said, I'm very vocal if something doesn't feel right, or it doesn't feel quite - I will say. But if you ever need anything, whether it be specific shoes to get on a roof with, or you know, our harnesses are out of date, or you know, our PPE isn't up to scratch, all I have to do is ask and it normally is right there and then. If not, you know, we can go and get it from the supplier. But the MBA will always supply us with what they have to, so it be safety boots and clothes and hard hats and things like that. But I mean, when I'm on the site with [the company I work for], if I need anything, you know, nine times out of 10, if they haven't got it, we just go and get it to make that job safe. And like I said, that's a great... having two bosses that are a little bit younger than a lot, I suppose, in that they're very 'on the ball' with that, as well.

When asked if he felt that he had the equipment he needed to work safely, Kevin replied:

One hundred per cent. So our supervisors - so we've got our two bosses that sit in the office, and then we've just got all us workers are out on campus at uni, so doing the work. So yeah,

Luke and Kyle, who are in the office at the university, they're amazing, like you can talk to them about anything, they're always willing to listen, as well. Like I said, because of their age, I feel like they're a bit more understanding. And like I said, if we need anything - like we brought up the other day we want the volleys to get on the roof, we don't want to wear our big steel toe-caps; they were ordered straight away without even a question, because we do a lot of work on the rooves. So whatever makes our job easier and safer, I suppose, they're on the ball, which is good.

Kevin reiterated that his supervisors were receptive to his safety concerns, he was not judged negatively for raising safety concerns, and they responded immediately to these concerns:

"You're never made to feel bad about anything. Like I said, on top of that, if you're at work and you have any concerns, or you need them to come down and explain a job or what things do, they're always - if it's not straight away, they're only minutes away."

Kevin also stressed that his supervisors were good listeners, that they supported shared decision making with their team, and that they were receptive to, and encouraged, new ideas raised by apprentices:

And they're willing to listen to everyone: it's not like a boss who comes and tells you what the job is, and you do the whole job as a crew, and if someone sees something that thinks 'oh this could be a little bit easier', regardless if you're an apprentice or not, you just - you speak up. And sometimes there is an easier way. That's what they like, because... we're at TAFE and we're getting the brand new ways of doing things. They're not aware of that, so they like to have that input from apprentices, as well... So they're just really - they're just really easy to talk to, they listen to everyone, and I think that probably comes down to their age, as well. Yeah, they're good to have as bosses.

Kevin's case captures a constellation of supervisor characteristics identified by apprentices as helping them feel supported when their physical safety was a concern. While Kevin, a mature age apprentice with previous exposure to consistent safety messaging during his work in the mines, was clearly safety oriented himself, his supervisors met his concerns with responsiveness and receptivity. They valued his insights, listened well, and responded immediately to resolve the safety issues raised. They fostered a consultative dynamic with their team. As Kevin explained, this made them good bosses, made for a good working environment, and led to high workplace satisfaction:

"I love my job. And I never thought I'd ever say that, but I actually genuinely look forward to coming to work now, rather than going 'Oh it's just another day at work'; I actually enjoy work, so it's really good."

Organisational factors influencing apprentice-supervisor safety communication

Time pressure

Despite apprentices' clarity about what to do if they saw something unsafe, and confidence in fixing a safety issue themselves, they also discussed negative experiences surrounding safety issues. They explained that time pressure led to cutting corners, in turn leading to safety risks. As one apprentice commented:

"So, a lot of the boys wouldn't use their safety gear. Like, it's just – you just can't – you can't get all those jobs done, with using your safety gear [under time pressure]. It's just ridiculous." (Thomas, male plumbing apprentice, 21)

Another added:

"Oh, you know, not having a crane on site to, um, you know, lift maybe one or two trusses into a spot that's a bit sketchy, and it's either lose a day and have to come back, and you know, time is money, but in the end it's safety. But, you know, it's two trusses and then I've just moved them without, you know, having any fall stop or anything, but yeah, do that quite often, or you know, not just not having a handrail putting second storey frames up or, you know, just anything really, walking on heights.... It's more time pressure. It's like you've got to get that done, otherwise you're just going to have to come back for two hours tomorrow, but then it actually wastes half a day just going there to do, you know, one thing. So, you know, instead of having to organise a crane to come that might take, you know, two days to get there, you just - you just do it. It's not actually, you know, verbally said by someone higher than you. It's more that you know that they'd be pissed off if it wasn't done, you know." (Cameron, male carpentry apprentice, 22)

Formal safety support in large organisations vs. informal safety support in small organisations

Large organisations

Factors specific to large organisations that facilitated apprentices' communication about safety issues included a systematic approach to safety processes, and the inclusion of apprentices on safety walks and other opportunities for safety related learning. The following comments from apprentices attest to this:

"The boss is pretty crazy on safety things...You've got things like, um, pretty on the ball, but everything has to always be workplace safety meetings and stuff before we start this job, so we all know what's going on." (Noah, male carpentry and joinery apprentice, 20)

"Yeah, I'd say so, yeah. They've been, um, crushing down on it a fair bit, so - and I know our company's, like, pretty – pretty big on safety and stuff like that, so... Every few weeks or so, we review and revise the SWMS, like, we do Take Five's every morning." (Bryce, plumbing apprentice, 21)

"I'll go on safety walks, um, just so I know some of the requirements on site that need to be done. So, if I can spot anything I can fix it... Because we've got a site management team everyone has done safety courses. Like, it's just stuff like gaps in-between the scaffold, if they're too big... Like, just learning what sort of – like, what sizes – what's right, what's not right, really. So, I can raise any issues if I see any... Uh, I haven't done the safety courses, but – Because we're on commercial sites, on our last site we had, like, a safety officer who's just, just there for safety. So, on our last time I did walks with him and, um, stuff like that." (Owen, male carpentry and joinery apprentice, 18)

"I mostly help the supervisor. So um whatever he needs done in safety wise and stuff and it's something when I need to do and then I'll go fix it so. For example...I had to build to the emergency exit so that it was safe for people to leave and there was no trip hazards. Other things we've been doing a bit of documentation. Ah – ah documents like I do the induction forms. And now I inspect the EWP...Just inspect that it's right and everything is up to date so that it's workable." (Natalie, female carpentry and joinery apprentice, 21)

"So our motto, well we've got a thing, it's not on this shirt but it's Zero Fatalities or something like that. And they've done like a massive safety course and that for our company, so every worker — I think every worker's done it, but every worker on my other site did it. And yeah, they went through all the incidents that have happened and occurred. And they just want to prevent it all, so we've got safety measures on everything now and yeah. Yeah, we've got a full safety committee in the office and onsite... Yeah. Well, my supervisor I've really got like — yeah, well all of, because I've got a few supervisors and that here working on this job site because it's big. But everyone very — they don't beat around the bush; they'll tell you direct, and they make sure it's safe. So if they say — if they see that it's dusty or something we'll have to wear dust masks, so we have to always be clean shaven so we can wear dust masks and that. They're pretty clicked on." (Sean, male carpentry and joinery apprentice, 21)

However, the effectiveness of a safety management system can be compromised if there are no shared perceptions of the importance of safety in the workplace. One apprentice shared that he experienced ambiguity about safety at the workplace:

"Um well usually what I do is – first things first is that I'll – if say for a hazard for example I'll warn the person you know that what they're doing is wrong and that they can't do it or that they're going to hurt themselves in doing it anyway. Pretty much get told to bugger off or whatever and the next stop I would take is that we have a safety officer that we call and ah which pretty much it's just a full lockdown so you don't really want to give that phone call if you need to – like if it happens. That's pretty much it." (Ryan, male plumbing apprentice, 23)

Small organisations

In small companies, the close one-on-one supervision of apprentices, and shared decision making and problem-solving fostered communication about safety. The following quote is characteristic of this:

"Yep, so my supervisor, who is also my employer because I have quite a small company, I work with him every single day. He does not leave us, because he doesn't leave the apprentice. Um. Yeah, he's with us side by side, so he's a qualified builder. Um, so he shows me correct methods of doing stuff, where like for instance if we're using a tool, he'll show how to use it without hurting ourselves. He'll run us through things. And if he thinks that, for instance, we're carrying something that's too heavy, we'll reassess how to do it. So he's constantly supervising and monitoring the situation and – and basically just tells us how to do things correctly and safely." (Savannah, female carpentry and joinery apprentice, 21)

Workplace hierarchies

Apprentices also identified features of their workplace that inhibited their ability to communicate about safety problems, including the role of hierarchy in discouraging apprentices to note safety problems. For example, one apprentice commented:

"I'm sure I've probably said something before to my boss and been, like, "Oh, that's so unsafe". And, like, it's more of a just - we don't want to intervene 'cause it's not our place. I feel like I would get ridiculed if I did say something.... I know there's a feeling of being like - it was probably last year when I was, um, like, first year. I still wasn't being taken seriously as a plumber. So, I know that I - if I was to, like, step in and try and tell someone that they're doing the wrong thing when they've got years behind their belt, um, I wouldn't feel comfortable." (Brooke, female plumbing apprentice, 20)

When asked if older co-workers listen to the safety advice of apprentices, another apprentice replied:

"Not at all. Um, I just think they have their own ways of doing things, and that they know best. And they've done it for however long, and we're just starting, so we wouldn't know anything." (Nicole, female plumbing apprentice, 21)

Safety training

Apprentices identified that safety training they received at workplace equipped them with safety knowledge and skills, which in turn provided them with the confidence to speak out about safety issues. As one apprentice shared:

"I've got all – like confined space training and things like that, that I've been asked to do tasks and I haven't been like pressured into it. It's more just me saying, "Well yeah, I'll do it, but you just need to make sure that all the correct gear's here." Like, you know, if it's a going into a underground tank or something, and making sure you've got a gas monitor, and tripod, and harness, and all that correct gear, and – that stuff happened, so." (Kaden, male plumbing apprentice, 28)

5.2 Apprentice-supervisor communication about mental health and wellbeing

Apprentices were clear and confident about the processes for discussing safety concerns with their supervisors. However, discussions about mental health and wellbeing constituted more of a grey area. Few training employers had formal policies for addressing the mental health concerns of apprentices, apprentices were less clear about how to discuss these issues, and some felt strongly that it was inappropriate to share such information with supervisors. Our interviews revealed that apprentices' willingness to discuss mental health and wellbeing issues tended to be based on the individual characteristics and skills of their supervisors and co-workers, workplace culture, and in some cases, deliberate workplace policies targeting employee mental health which provided the framework for supporting these discussions.

The following sections present intrapersonal, interpersonal interaction factors, and organisational factors that have influenced apprentice-supervisor communication about mental health and wellbeing.

Intrapersonal factors influencing apprentice-supervisor mental health and wellbeing communication

Apprentices' confidence

Apprentices noted that a key challenge for young apprentices was having the confidence to talk about problems and struggles. This could be due to their newcomer status and inexperience. One apprenticed discussed the sense of vulnerability experienced by some young apprentices when she reflected on her first-year apprenticeship experience, but also commented that confidence could be built gradually through developing experience and skills:

"Um. I think initially, um, I've been noticing particularly with my – the – we've got a first year on – on this job site that I'm on. Um. I've been watching his sort of behaviours and probably referencing it back to what I was like as a first year as well. And I think there's just the - le there's a level of confidence that you will have to build which, um, obviously I - you - you can only build it as you go and you learn your skills and get more confident in what you do. But I think for a lot of people, probably when they first start out, um, they won't have that confidence. And sometimes you'll feel a little bit silly or like you're just – you're stupid and you can't do things 'cause you're not able to pick up a task. And I think that turns a lot of people off. Um... it's one of those trades that you have to start off on the bottom, you have no confidence, and you - and you just don't know anything. And that can feel scary for a lot of people. But it - it - that's what makes you once you've become a qualified, um, carpenter or whatever you're going into in your apprenticeship, you're such a more confident person because you had to overpass all of your personal sort of thoughts about things. And build your confidence and build your skills. So it's it's – it's – it takes some time. And I think 'cause for people when they first start out, it can be a little intimidating just because you're going in a bit blind. But as long as, but it - but if you keep an op – open mind and keep learning, then it – the more confidence you get, it's not as scary." (Savannah, female carpentry and joinery apprentice, 21)

One apprentice commented that young apprentices who were inexperienced and not confident could be intimidated by the culture of banter at the workplace:

Maybe if, um, if you join a crew before you come – like, if you join first year and you're not really confident about the work, um, maybe the supervisor, before you go on the site, can talk to the, um, people already on there saying, like, "Hey you guys are going to have maybe [apprentice name] for a while, you know, this is how he is, this is what he does." Like, not in my case, but I know other people who, um, like, are a bit more sensitive in the work type and, um – you know how some people like, you can have a joke with someone and they'll know it's a joke... There have been a couple of times where – not in my case, I've never seen it before, but it's just stories where some kid's – some dude's having a joke with him, but he doesn't know it's a joke, so, you know, he gets, like, upset. But, um, maybe, um – yeah, maybe if they say, "Hey, there's a kid coming on with you guys who's a bit more sensitive than other people, so maybe just take it easy on him until he understands what a joke is with you guys or not"... Yeah, no, definitely, when I

first started – I've been around – I've been around – like, my dad's a carpenter, so I've been around with him for a bit and I've been on the job site, so I knew what I was getting myself into when I started, like, with banter, but um, you know, with a couple of other people I see, you know, when they first start, they, they're not sure if someone's joking or not. (Logan, plumbing apprentice, 18)

Supervisor's approachability

Apprentices identified qualities in their supervisors that allowed them to feel comfortable, and willing to open up about mental health and wellbeing needs if necessary. These included a boss who was "easy to talk to", approachable and friendly.

When asked if he would feel comfortable talking about personal issues, this apprentice responded:

"Yeah, for sure... I've been around him for a year and a half, I'm pretty comfortable with him. He's, he's a good bloke. He, he always helps me out a lot on site, so — Oh, that and talking to him about, you know, other stuff, like — I don't know, it's just comfortable and he just gives off — You know, you can tell when — You can — you can talk to someone and they'd give you a hand or if they don't really care. He does [care]. Ah, obviously if he's seen me having a shit day he'd ask if I'm all right." (Owen, male carpentry and joinery apprentice, 18)

Another explained:

"Um, he's just easy to talk to. Um, you know, you can ring him up and have a chat. He's pretty chatty, so - um, if you've got any problems - he's - he's got kids of his own, so he understands, like, with the younger blokes and being as manager as - as well, so he - he looks after the younger blokes as well." (Liam, male carpentry and joinery apprentice, 20)

When this apprentice asked if he would be comfortable talking to his supervisor about mental health or personal issues, and why, this apprentice explained:

"Oh yes, 100%. Just – just the way that he's come across me for this – this whole time. And how I've – I don't – just the way that he's made you feel immediately very at home. But also just asked me constantly – more – more treated me less as an apprentice but more as a – as a, ah, on the same level if that makes sense. So he's asked me for my opinion, what works best for me, and all of that." (Savannah, female carpentry and joinery apprentice, 21)

Interpersonal factors influencing apprentice-supervisor mental health and wellbeing communication

Apprentices reported a variety of interpersonal interaction factors that encouraged them to talk about mental health and wellbeing with their supervisors.

Supervisory support

Apprentices considered perceived supervisory support as critical for them to talk about mental health and wellbeing issues with their supervisor. One apprentice shared his experience with depression, miscarriage, and how he was supported by his supervisor and workplace:

"Yeah. I went into a bit of a depression stage a few years back, and he was always there for me, and with work he was very understanding; he knew that I could get back to my best, so he was - yeah, I could talk to all that's - about that stuff with him... He was just - if I needed time to myself at work, he allowed me to have that, and he was - if I needed to start later/finish later, he was happy to accommodate working around myself, which was really good at the time. And I do feel I paid him back with my work effort, but yeah, he was - he was fair, but he always bent the rules a little bit for me, as well... I - so what actually happened was we had a miscarriage. We'd been trying to have a kid for about 18 months, and after 10 weeks I'd told everyone that would listen, and then we had a miscarriage and it was devastating. And then we fell pregnant straight away, and it took me a long time to get over having the miscarriage, even though I had another one on the way" (Justin, male plumbing apprentice, 33)

However, apprentices commented that not all supervisors were supportive of apprentices' mental health and wellbeing. The following case illustrates the way in which supervisors' punitive responses to speaking about mental health and wellbeing needs erode this apprentice's trust in his supervisor's ability to respond to his needs. The apprentice also recognised that the supervisors' unresponsiveness to his mental health and wellbeing needs was partly attributed to the workplace time pressure.

Case study: Lack of supervisory support as a barrier to apprenticesupervisor mental health and wellbeing communication

When Thomas, a 21-year-old plumbing apprentice was asked if he discussed personal topics with his work colleagues or supervisor, he replied:

"Oh, not really. Nah. Um, I prob - I had a pretty hard year last year. Like, me parents — parents split up. Oh, it was a terrible year really. I had me parents split up then both me dogs passed away. Then my nan passed away and then we moved houses. Like, that was a pretty full-on year. But that was — yeah, I didn't really talk to any of me colleagues about it. Like, work - Sort of, I kept sort of quiet, I suppose."

When asked if he thought he could speak to his supervisor about personal issues, he explained that he didn't think his supervisor would understand, and that time pressure would cause his supervisor to pressure him to come to work if he needed leave:

The problem is I – I feel like, oh some supervisors, they don't really – they're not understanding, if that makes sense. Like, you say, "Oh, I don't know, I've got a bit of shit going on," you know, like, I don't know. Like, you're still under the pump or, you know. Like nah, you've got to do this, you've got to do that. Like, I don't know. Hard to really describe. Like, if I had – say everything that was happening with me, like, last year. If I said, "Oh, can I have some time off without pay or something like, I'm not feeling right" me boss be like, "Nah, I need ya. Are you coming to work?"

When asked what could be done to better support apprentices in times like this, he answered:

Um. I don't know. Just I think maybe just pulling them aside and saying, "How you going?" I suppose. Like, like rather than someone being there, like well other people listen. Just sort of pull 'em aside and say, "Are you all right? Like, how do you honestly feel?" Um, "How's working going, like, are you learning?" I don't know, just sort of stuff like that, I suppose...If someone just pulls you aside and just have a one on one more. Oh, just — I just think like if there was something was going on, that person might probably open up a bit and tell them how they sort of feel a bit... I think like, you know, if you've got a bunch of people listening you never, you know, you're not going to open up as much because you've got everyone listening. Like, yeah and then if you say something, it's like dobbing someone in sort of thing. Like, if you say something with people around it's just like, you know. It makes you sort of look stupid, I suppose

He added that he did take time off when his grandmother passed away, but he was punished for this when he returned to work:

"Um, probably good to take a little bit of time off. When me Nan passed away I had it – I had two days off. Because that was Dad's Mum and like, I was pretty close with her. And um, then as soon I come back to work, I – I was sent to the Central Coast for like a month. Just digging, like potholes. Because like, me boss got the shits with me for that. And I was just like, "Really mate? Like, I just lost me Nan." That was – that was a bit annoying, like I found out why I was down there. Because one of the boys said, "Oh, [supervisor's name] got the shits with ya for having two days off. And then I was just like, well come on, like me Nan - I was pretty close to her and that. And Dad wasn't like, you know, he was split up with Mum and – and his Mum's passed away, like, fuck. Wasn't real good."

He added that this experience had broken his trust in his colleagues and supervisor:

"And like, yeah, that's why, you know, I trusted the boys. I suppose you can't tell people, like, they just get the shits and that."

One apprentice explained that although his supervisors, including two foremen and a union delegate, were great and they would ask him how things were at home, he did not feel really connected with them. Instead he was able to gain support from an older co-worker, who acted as a surrogate type of supervisor to him. This apprentice was expecting his third child, and when he stopped showing up at work, this co-worker called him to provide support:

"He's actually a very good mate of mine. He's probably – I don't know, 40 something. He's helped me out a lot over the years or over the year I've known him. He sort of just give me some – because I had – the last job I sort of... I wasn't turning up to work and that, and he used to – every time... he would be "Come on, man, you've got to come into work" and that. Like "We all want you to stay with [company name]" and shit. He gives us – he's always there. But I just – it's just a lot of shit at home and that...I've actually got two kids and one more on the way. Yeah, it just sort of put too much on my plate and that. Yeah, and just – yeah, that's all really.... Yeah, so he's sort of like – I don't know if he sees a bit of me in him but – when I was his age or something but yeah." (Sean, male carpentry and joinery apprentice, 21)

Supervisors fostering a family atmosphere at work

Apprentices also spoke about opening up to supervisors who fostered a family atmosphere and a sense of belonging at work, which helped them feel that they could discuss mental health and wellbeing topics:

"[We are] pretty close because me and his mother have a laugh because we've got a good relationship too. I'm like a little younger brother to him because he's an only child, and he's always having a laugh, having a little bit of banter. So he's always like oh, I'm like a little brother because he's always... If he's got something he'll tell me, or if I've got something I'll tell him. Yes, so, like, I've had — my brother's been in a little bit of trouble, like when he was 13 he started being a troublemaker. It sort of just progressed and progressed, like he's got to the point where it's just like okay... The boss sort of has a laugh, he has a laugh about it, and then he'll tell me what to do, sort of thing...He just gives me a little bit of advice, or he would make a joke out of it, make it sound funny, so we have a laugh about it." (Gavin, male carpentry and joinery apprentice, 20)

Another apprentice explained that his supervisor shared some information about his own personal struggles with his crew, and that the apprentice and his co-workers felt like family members who could lean on one another for support. He explained how the conversations might unfold, and how he and his co-workers might rally – at the suggestion of their supervisor – to support a co-worker:

"Uh, just every day. So, might say 'hi', um, while we're doing the job. Might be something a bit simple, just bring it up, have a – a chat. Say, like, "I've got issues here" or "I need your advice for this situation". It might be while you're doing job, while we're at lunch, or maybe after work we sometimes muck around and just talk about life... Yeah, so a mate of mine spoke to my boss about he's gone through a rough day, rough week, actually, with his missus and stuff was going on. So, my boss went around to all the boys, saying to keep it easy on [co-worker's name], just ask if he's all right. Give him a hand. Just talk to him. Just be there for him like a mate. And the easiest way, because we're doing a task while we're just being mates with each other, talk about what's goin' on". (Liam, male carpentry and joinery apprentice, 20)

Example: Family-orientated work culture supports apprentice mental health

The following example illustrates the ways in which a supervisor who promotes a tightly-knit, family-oriented work culture that supports apprentice mental health and wellbeing is met by an apprentice who needed support and was enabled speak up about her needs.

Alexis, a 22-year-old plumbing apprentice, explained how a supportive work environment and supervisor helped her navigate an anxiety attack related to a previous workplace injury:

"At [training employer name] they're quite a tight-knit community, and like a family, so we all look out for each other... Um, yeah, we just, um, if we aren't feeling fantastic, like, we can always go to our boss and have some discussion, or if we need advice, they're happy to give some, um, which is really good. Um, we really, like, um – [training employer name] really treats all their employees like a part of a family. So, we're very - we can be very confidential

towards each other, or, like, you know, if there's, um, one of us shares something publicly between multiple people, then we're happy to share it with the rest of the company sort of thing. Um, but, yeah, unless we give that - get that specific permission, we don't go around sharing other people's business. So, yeah."

When asked if she had ever approached her supervisor about anything personal or for advice, she explained that at a previous employer, she had been injured while carrying Besser blocks in the rain, which later impacted her work at her current training employer.

"Um, so, I was working for a residential builder and we had to take Besser blocks to, um, a job site that we were going to work in. And that day it was, um, pouring down rain, um, but our boss still wanted us to work. So, we had to take these Besser blocks down a few flights of stairs and underneath this house that we were going to work on to build the retaining wall. And I was being really careful going down these tim - exposed timber stairs, and right at the last set of stairs I slipped and fell backwards on the stairs, carrying these Besser blocks and they landed on top of me."

The accident resulted in soft tissue injury to one of her arms, and Alexis was unable to work for three months. Later, she moved to her current training employer. When she was faced with carrying materials down a steep set of stairs, she experienced a panic attack. As she explains, she was able to discuss this with her supervisor:

"Um, one of the jobs, it was on a two-storey building and, ah, we were replacing both the decks, and I had to carry this hard-wood timber down these steep timber stairs and at the time I felt like I couldn't talk to the tradies about it 'cause I was - like, I just started working with them. So, I sort of had, like, a mild panic attack and I wasn't comfortable with it. But I brought it up to my boss and I let him know, and he suggested that if it's a serious issue, maybe I should get, you know, some therapy to discuss with that, 'cause they - he knows that he can say something, but it might be wrong, so he tried to suggest, like, you know, professional help rather than give the wrong advice. So, um - but I said that it shouldn't really be a problem and, like, a few weeks later we did another job on even steeper wooden stairs and I carried, like, some really heavy stuff down it and I was all good and I didn't have a problem. So I told him about that and I told him how much I improved and, like, that was like a one-off thing 'cause I, like, just started working on timber stairs again. So, I was just, like, scared and not comfortable and I - at the time I felt like I couldn't tell the tradies because I feel like they - I felt like they would just go, "well, toughen up, sweet - sweetheart" or "have some concrete" sort of thing and get on with the job and, like, I don't know how I would have handled it if I got that response. So, um, but I did tell him about it and I did tell him that I wasn't comfortable telling the guys about it because I felt like I would get that response. And he goes, "well, if you feel that way on site and one of them says that to you, call me 'cause that's not okay". So, I was like, "okay"."

As this example illustrates, the apprentice felt that her workplace fostered a family atmosphere where employees looked out for one another. She noted that confidential information was not shared with others, and that boundaries were respected. When she recognised her need for help, she felt comfortable explaining her needs to her supervisor. He recommended that she seek professional support, and also advised her to call him if her co-workers challenged her with sexist comments.

Boundaries and the work-personal divide

Some apprentices did not want to share information about their personal lives with their supervisors or felt that their supervisors shared too much information. They felt there were clear boundaries about what was appropriate to share at work, and what was not. Some thought it was unprofessional to raise personal issues at work. Emotional intelligence can be an important skill for apprentices and supervisors to understand and respect the boundaries.

When asked to elaborate on why they would not discuss mental health or wellbeing issues with their supervisors, the following apprentices explained that they thought it was inappropriate due to clear boundaries between personal and professional lives, and that they had other supports to whom they would turn first:

"Well for me I don't really take personal issues to work 'cause it just – it kind of just gets in the way of everybody, really so if I need – if I had a personal issue I'd just usually – I'd leave it at the door in a sense of terms of I'll go to talk to like my family or my own personal friends take it into work. Because work is work, work isn't a place where you go and just put all your problems on somebody else 'cause at the end of the day everyone's got problems but we're all therefor the same thing which is just to go home at the end of the day, simple as that." (Ryan, male plumbing apprentice, 23)

"Oh, well, yeah. I - I just, the line is - well, as - as much as, you know, we get on and - and, uh, we're mates, 'cause there's only two of us - like, it's just the way I was kind of brought up: he is my boss. Like, he's - he's not my best friend. He's not my buddy. Like, I don't want to go there and talk to him about - I mean, I'm - I'm 21 and he's I think 45. I mean - I'm not going to go to him - I - I - it's not that I can't approach him, it's just that I - I do have other people I can approach before - I approach my boss, you know?" (Zach, male carpentry and joinery apprentice, 21)

One apprentice explained that he would not talk to his supervisor about personal issues because he was well connected to co-workers and was able to get adequate support from co-workers. He explained that his co-workers were a source of help. He noted they spent a significant amount of time together, could tell if he was not coping well, and would check up on him, which signalled that they cared:

"No, I've got a good connection with the boys that I work with because I'm constantly working with them and that. So like my other union delegate and the union delegate here I'm very, very comfortable with them, so I'll talk to them about everything that's happening and that. And even my other delegate he'll ring me up, he's very good like that and always checking in on me and that. So I got like a good, a good, good group here that actually cares and supports me and helps me out a lot." (Sean, male carpentry and joinery apprentice, 21)

One apprentice explained that her supervisor had shared deeply personal information about mental health struggles amongst family members, and inappropriate information about his relationship with his partner. She observed that he did not respect professional boundaries, and that because he was her employer, she did not feel that she could ask him to stop sharing this information:

"You, know, this guy, I'm just not sure he understood boundaries. And – because I'm such an open person, he felt comfortable, and that's fine. And not that I encourage that kind of conversation, but it's hard when you're in, uh, that position, to not, mm, listen, I guess. I'm not sure if – But yeah, kind of – He was – I just got the impression that he didn't talk to many people about real things like that. And, um – And I was someone that could, because I'm quite, mm, um – I don't know what the word is, but that I made him feel comfortable, I guess. So, you know – So sex, um, you know, I know everything about his life, everything. Every, every little detail of everything, I know... So I'm old enough to know that, you know, gah, he needs to learn some boundaries and stuff, and maybe I need to be a bit more aggressive with putting my boundaries up." (Jenna, female carpentry and joinery apprentice, 40)

This apprentice left her training employer and was actively seeking a new one at the time of the interview.

Humour

Humour represented another characteristic of interpersonal communication impacting on young workers' mental health and wellbeing. It was both essential and a deeply embedded feature of workplace culture, but also potentially offensive. Apprentices discussed both the benefits and drawbacks of "having a laugh". Most insisted that humour was a vital part of getting through the day. However, some also noted that it could go too far, and that it was important to be able to discern when this was happening, and to respond accordingly.

Overwhelmingly, apprentices stressed the importance of humour at work, and that it helped them bond with their co-workers, as the following comments illustrate:

"Um, it was always pretty good because you can always have a laugh with someone, because if you can't have a laugh at work, there's no point of being happy at work." (Gavin, male carpentry and joinery apprentice, 20)

"And, uh, now it's just me and my boss, it's always back and forward with each other, having a laugh. Yeah, we have a good relationship." (Gavin, male carpentry and joinery apprentice, 20)

"Oh, fuck yeah. Everyone has a banter. Everyone loves having jokes. Like, you know, it's not fun unless you get in it, like." (Logan, plumbing apprentice, 18)

However, apprentices recognised that discerning the boundaries between helpful and harmful humour could be a challenge. They noted that younger apprentices, or those with little exposure to construction sites, might find some banter confronting. The apprentices interviewed acknowledged that boundaries surrounding humour needed to be respected, and in most cases, were. However, they also talked about the benefits of openly discussing when someone had crossed a line, and how to deal with it, and that co-workers needed to be aware of each person's limits:

"Like, we're a team. We work together and we want to keep, like, the working environment, like, chill and relaxed and be able to have that laughter without, like, seriously offending somebody. But, then again, like, if we did offend, we - we would apologise." (Alexis, female carpentry and joinery apprentice, 22)

"Um, it can be pretty, um, pretty intense but they are pretty respectful at the end of the day. So say if someone does make a joke or something, they will you know make up for it and say you know I was just joking or something like that." (Jackson, male carpentry and joinery apprentice, 17)

"I have seen, um, let's say guys who maybe aren't as much as the bantery type of boy. They might be more reserved and more quiet. Um. I – I more see then they'll just keep – they won't say much or won't contribute. But generally when it comes down to it, everyone on site can tell when they've taken a joke too far." (Savannah, female carpentry and joinery apprentice, 21)

"Oh, yeah, the banter - the banter's high. Yeah, there's some good banter. Um, oh not - I don't know, it just - just comes up, like if you're just talking about something and I don't know, talking about something on the weekend, or you know - you know, if one of the apprentices does something dumb on the - on the - on the site and you just, you know, you give them a bit of banter. Just - just the - anything - anything that's happening at one point, or like if it's happened previously and you just give 'em shit for it, but you know, it - it's all a joke... Depends on how you give it. So... Oh okay, well like if you go too far then I guess they're going to, you know - they won't be happy about it, but you know, if you - if you go too far then you know you've gone too far, so you normally just apologise or something like that. I've never - I've never had - never had - never gone too far, it's just a bit of banter." (Cameron, male carpentry and joinery apprentice, 22)

"I was – obviously, you get ripped on too, but that's part of the fun, like, you wait your turn and when someone else stuffs up on the site, that's when you get him back, and, you know, that's the whole fun of it really, but, um. You know there's always banter going on, always shit talk, but at the end of the day we're all there to help each other, so no one's taking it like – no one's, obviously, trying to make anyone feel bad, but, um, we're all just having a bit of a laugh."

"Yeah, no, definitely, when I first started – I've been around – I've been around – like, my dad's a carpenter, so I've been around with him for a bit and I've been on the job site, so I knew what I was getting myself into when I started, like, with banter, but um, you know, with a couple of other people I see, you know, when they first start, they, they're not sure if someone's joking or not. Like if someone says, like, um, like, you know, "Oh mate, Christmas is coming before you finish digging this hole." Like, because some people think, "Oh, he's making me feel bad because I can't dig fast." Like, you know what I mean? So, like, it's kind of like, you've kind of gotta understand the situation a bit, but that's what I mean, like, um, if you talk to the tradies before the kids start, then you can have an understanding of like – the tradies have an understanding of how far they can a joke and still feel comfortable, you know what I mean?"

"Yeah deadset, like, I guess if you're working on a big site, with a, you know, a bunch of blokes, everyone has a high ego, everyone wants to be like, just throwing shots out there, but, you know, got to have a laugh. You've just gotta... You know, you've just got to give people a heads up of how far some people can take it and some people can't.... Yeah, you wouldn't want someone getting, um, you know, feeling like, feeling like everyone's taking out of them just for, like, you know, being new, when, um, that's never the case, it's always just a bit of banter, you know, a bit of – yeah... after a while what's – what banter is and how to give it back, but when

you first start, you know, it's just typical to – for it to shock you." (Logan, plumbing apprentice, 18)

Gender and humour

There was also a gendered dimension to the use of humour. Apprentices spoke about the boundaries being formally delineated in contracts, and how boundaries were informally enforced by women on site. Some female apprentices used sexist humour themselves, others ignored it, and several spoke up when they thought their colleagues had crossed a line. The final example in this section illustrates the ways in which a male and female apprentice at the same training employer experienced sexual humour.

In some larger organisations, apprentices spoke of clauses in their contracts outlining disciplinary action, including dismissal, for sexual harassment, including offensive language.

When asked what the banter was like in his workplace, one apprentice explained:

"Yeah, pretty funny. Nothing too crazy, obviously, because we have – um, yeah, you say the wrong thing you can get in quite a bit of trouble. Well, usually whoever you say to it, but they take it up with your supervisor and your supervisor had a chat with you... We have a lot – obviously a lot more females, um participating now, so they're being a lot more respectful and – that kind of stuff." (Connor, male carpentry and joinery apprentice, 22)

Another female apprentice explained that she enjoyed the sexual humour at her workplace, but would speak up if a joke crossed the line:

"I – I really enjoy it. Um. I find that I'm – I would describe myself more as a – I – I would definitely describe myself as quite a tomboy. Um. So I quite enjoy that sort of – I enjoy the banter. I enjoy the – the few dirty jokes and so it's kind of like hanging around with a bunch of young guys to that sort of thing, where you're – you're making silly jokes and doing all of that. Um. None of – none of them are personal. And – and if anything was personal said to me, I'd pull it up. But it's – that's not the sort of attitude that that is. It's just like playing little jokes during the day, making the day pass better. Um. Some of the jokes I think a lot of people consider inappropriate. But I wouldn't consider it inappropriate on a job site because it's just – it's laughing and it's – and it's jokes. It's never personal."

When asked if she had ever had to call someone on an inappropriate joke, she replied:

"No, I've never had to do that. I think sometimes I'll – for instance, if I'm laughing at a joke or something, and I think that the joke was starting to get taken too far, I would just say, "Ah, that's enough. Piss off. That's it." And no – I've never had anyone not respect me saying that's enough. The moment I'm like, "All right, moving on," they will – they'll move on. I've – I've never had – I've never had an instance where I've said, "No, that's enough. Move on," and they haven't." (Savannah, female carpentry and joinery apprentice, 21)

Another apprentice explained that she thought it was acceptable to tell her male colleagues to "toughen up sweetheart", but it would be unacceptable for them to speak to her that way, suggesting sexual humour can be received differently by males and females:

I mean, I say it, like, to the guys, um, but, like, only, like, in a joking manner. I never mean anything. Like, we can all have like a ha ha with each other.... Um, but, no, they've never personally said it to me, um, because I feel like if they did say it to me, I would - I don't know how I would take it. I feel like I might take it a bit offensive. 'Cause, like, saying it to a guy, I don't know, it's hard to explain, but it's, like, it's okay sort of thing because they know it's a joke, but if you say it to, like, a girl, then they could take it the wrong way. So, like, I would try - I try not to be, like, offended at all. (Alexis, female carpentry and joinery apprentice, 22)

Case study: Internalising sexual humour in the workplace: two perspectives

The following example illustrates the different ways in which men and women can interpret sexual humour in the workplace. We interviewed Caleb, 26, a male carpentry apprentice, and Kayla, 18, a female carpentry apprentice, who had worked together at the same training employer, a small residential construction company. When asked how they navigated humour at work, this is what they said.

Caleb explained that he had been concerned about offending Kayla, but was reassured when she seemed to like the banter on site:

"That was something that we definitely thought about like and spoke about before she started. And like, you worry like how it's going to go. I – I worried that one of the young apprentices was going to say something inappropriate, and – and then she could go sideways from there. And like I said to [training employer] myself, I was like, "Are you – are you sure, 'cause like, you know, like stuff could go wrong?" But– he was under the – he required – and I think she just – she was available to hire, and he was looking, so – yep, it was going. But when she did – did start, you know, I was actually pretty impressed. Evidently, everyone – like everyone showed respect for her, and it, kind of just eased in, like what kind of banter they said with her, kind of like sussed her out first and – what her banter is like. And it turned out she just – she liked it just as much as us, so by the end of it, like no-one was really holding back. So, it was – it was pretty good in the end. And – and she was hap – she – she was – she was happy in the end."

When Kayla was asked what the banter was like at her work, she replied:

"Well, it was - it was kind of bad, but if you don't have a sense of humour with the boys in this industry you generally will not get along with them. Mainly it was about females, and like, you know, like sexual jokes and all of that, but however it was really under - not understanding, but it was hilarious. And the way that they took it out and how they laughed, it was just - it was a good time <laughs>.... It's just - to be completely honest, it was literally just like hanging out with typical males on a like - about or something. It wasn't anything, like, crazy - well, maybe it would be with some other people, but for me it wasn't crazy.... Like they will somewhat hurt you, like rattle you in a way, but then at the same time you're like 'I'm going to hear this for the rest of my life from other people', and people are going to say it to other people, like even if it's in a friendly way or not friendly way, you know? Like being - saying like - because I'm a female, they're going to call me different things. But, like, saying like 'you stupid bitch' or like, you know, the 'C' word or like - It's just those things on the lines, like the swear words kind of thing. Like nothing too bad, like not to the point where it's racist or, like, discriminative or anything like that."

When asked if she had been called these names at work, she replied:

"Yeah, I've been called a bitch before < laughts>...Yeah. In - there was obviously in friendly ways - from the apprentices, because I had a relationship with them, like friend-wise, and occasional, like not - when I was, let's say, doing something slow, they'd be like 'oh stop being such a girl about it' or like - or 'don't be a bitch, like just do it' or something like that."

When asked how this made her feel, she replied that she drew on her experience being bullied in school to guide her response:

"Um, well, I've been personally, like, bullied throughout my whole childhood from, like, school and all that, so I've got that support from my mum saying, like, 'if anyone calls you anything, just be like 'yeah, maybe I am that'. So you've just got to push it aside and just keep doing what you've got to do'. However, if it is in a different context, like that really, like, gets to the heart, like, you've kind of just got to walk away from the situation, or you know, just keep calm, or just be like 'that's not a place to say, you're not allowed to say that to me, or anyone'."

As these comments illustrate, Caleb and Kayla had different experiences with sexual humour. As Caleb explained, much to his relief, his co-workers had behaved respectfully towards Kayla, and gradually tested the boundaries around humour. When he and his colleagues saw that "she liked it just as much as us", they thought she enjoyed it. Kayla provided a much more nuanced interpretation of the sexual jokes. At first, she described them as "hilarious", and that to her the jokes were in line with what she would expect from "typical males" and so were "nothing too crazy". She added that she was called names at work, but that this was "nothing too bad". Her account of the humour is not only very different from that of her male counterparts, but also illustrates the normalisation of sexual humour to conform to workplace culture.

Workplace aggression

Apprentices discussed the inevitability of workplace aggression. Some downplayed its impact or had internalised it as a normal part of workplace culture. However, others recognised it as problematic, and indicated that they would feel more supported if there were less aggression on site. Those who did not experience workplace aggression felt respected at work in part because they were not yelled at. The responses of apprentices illustrate both the normalisation of workplace aggression, and that apprentices recognise that it is not supportive.

Normalisation and internalisation

When asked if co-workers, including supervisor, were aggressive on site, these apprentices replied:

"Yeah. I've been, yeah, I've been yelled out like my fair share of times. Um, you know, the boss or yeah, it's - it's mainly just the boss normally, like no one else really gives you a hard time." (Cameron, male carpentry and joinery apprentice, 22)

"Oh yeah, the – the boss and the boss' son. Yeah, they shout at each other when someone does something wrong, but it's all – it's all in good fun. They - they just argue at each other and then

they just prove one – prove one right and that's it, I guess." (Adrian, male carpentry and joinery apprentice, 16)

"Um, yeah, my last job there was a bit of yelling. It wasn't really with my supervisor, though, it was because I used to, ah, liaise with, um, supervisors of other companies, so - about work they'd done. So we would argue a bit there sometimes, but yeah, never frequently bad. Oh, well I - yeah, they yelled at me, and then I would yell back, then - yeah. It was sort of just part of my job. People get - people get fired up sometimes when you're showing them how to do stuff, and trying to get them to do their work. Yeah... Yeah, after a while you just - people yell at you and you're just not even fazed by it." (Eli, male carpentry and joinery apprentice, 20)

"Oh, all the time. Yeah. Oh, it's just, um – not physically aggressive, more verbally aggressive. Just, um, to someone – if a foreman catches someone doing something wrong, yeah, they have a spit at them... It bothers the person getting yelled at, obviously. 'Cause it's – when they get yelled at, there's obviously a lot of other workers around. So it puts on a show, but at the end of the day, my foreman's not wrong... something very unsafe or, you know, that they kind of have to get told if that happens. It's not – it – no, I don't think it's okay but – because at the end of the day if, um, something does happen, someone gets hurt, it's the foreman that has to front court or he's the supervisor. That's his area. So he – he cops the consequences. I can understand their frustration as well when someone doesn't listen after you've explicitly told them." (Connor, male carpentry and joinery apprentice, 22)

Example: Reproduction of aggression at work

The following apprentice explains that his supervisor yells at work and offers insight into why aggression may be embedded in workplace culture: that his supervisor was yelled at when he was younger, and that his supervisor thinks he needs to yell in order to teach his employees. He also explains that as an apprentice, he would respond better to being spoken to calmly:

Um, the only person that yells like I'd say is [my supervisor]. Um, but the only time that he will yell is when he's told one of the guys how to do something – like explained. Or – or actually onsite yeah, they've - they've done something, and they've done it wrong. They've screwed up, maybe they've screwed up a cut or something the wrong way, wasted a bit of material, whatever it is. Look, not straight away got angry. Been like, "You're - like you - you're doing it wrong. Like this is how you're meant to do it." And then later on, they've gone and - and done the same mistake. That's - that's - that's what really ticks off [my supervisor], when he has to explain himself twice, the guy's doing the same mistake over and over again. He'd yeah, and [my supervisor] feels that the only way that they're going to really learn that is if he, I guess, you could say loses his shit at them. Yesterday, he's like, "How are they going to learn?" And like that - that - that definitely has come up from like the way he was taught, and his builders or whatever. Like he's said that, like his builders used to scream at him and all this stuff um, so, you know, it gets passed down. But I don't - I don't necessarily agree with that, just - I - I just like put myself on like the receiving end of it, and I - I just know I would respond a lot better to like discussion over screaming at - getting yelled at. (Caleb, male carpentry apprentice, 26)

When asked if he felt respected at work, Caleb explained that he did, because he had not been yelled at:

I'm probably the – Yeah, 'cause – 'cause I'm still an apprentice, and in the year-and-a-half I've been there, I've never once been yelled at.

Not yelling as a mark of respect

Like Caleb, the following apprentices saw the value in a workplace in which employees were not aggressive with one another. They described a respectful workplace as one in which they were not yelled at:

"Ah, it's great. Very respectful and, um, ah, what would you say, like helpful in a way like of me learning, they are not very angry at me when I get something wrong or they are very supportive. Um, well they don't really yell or anything they just explain what I've done wrong and what to do better next time. You know they really don't yell at me or criticise me for what I've done, well they do criticise me but not in a bad way. Yeah, so it's helpful, is all I was going to say." (Jackson, male carpentry and joinery apprentice, 17)

"I don't - I don't think - I think in four years, like, we've never had a fight. I don't chat - I never chat back to him.... like, never had a fight. If I, uh - if I, like, uh - if I make a mistake, he - he - you know, doesn't blow his lid. He's very understanding... 'Cause usually if I've made a mistake, he'll come along and say, "Oh, look, like, that's - that's not right. This is the way to do it" and coaches me through it... Oh, like, he's - he's pretty calm. He just goes like, "you've done it wrong. You'll need to redo it"." (Zach, male carpentry and joinery apprentice, 21)

Organisational factors influencing apprentice-supervisor mental health and wellbeing communication

Apprentices also described specific features of their organisation that allowed them to feel they could share and troubleshoot challenging personal issues.

Provision of communication platforms through social activities

Apprentice reported that a family atmosphere, fostered through social activities such as shared meals, allowed the opportunity for supervisors and co-workers to build rapport. This occurred in both large and small organisations.

For example, one apprentice commented:

"And, like, yeah, so, and then they try to make social events and functions so we can all get closer to each other. So, that just makes working together a lot easier if we're all very comfortable with each other. Um, well, we actually had a barbecue today, um, for the company, but I was unable to attend, and then we have, um, like a Saturday barbecue, um, coming up in April. Um, so it's - it happens when, um, social restrictions allow us to." (Alexis, female carpentry and joinery apprentice, 22)

As she explained, shared meals not only brought them closer together, it also offered the opportunity to discuss workplace behaviour and how they would, as a team, respond to banter if it made others uncomfortable:

"Um, so, like, it comes up with my boss and comes up with all the tradies. Like, we all talk like that. Um, we had a Christmas party lunch, um, back in December, where we all got to, like, sit and eat with each other and, like, have a good time and chat and banter, and we did discuss it as, like, if one of us did get offended about a certain topic, like none of us would bring it up." (Alexis, female carpentry and joinery apprentice, 22).

Formal mental health support in large organisations vs. information mental health support in small organisations

Apprentices discussed the ways in which their training employers provided mental health support. Both large and small organisations were able to do so, but this usually looked different depending on the size of the company, with large organisations offering formal access to mental health support, and smaller companies addressing it in more informal ways.

Large organisations

This apprentice explained that his company's safety representative had reached out to employees to let them know he was trained in mental health first aid, emphasised his availability, and that the process was confidential:

"Yeah, I'm fairly – so we have a safety, like a safety representative guy on site for us, and he – I'm pretty sure he said, um – he's, like, mental health trained and first aid trained and stuff like that, and he said, um, "There are pathways, like, if you're - ", like, he does talk about it a lot, like it's something he's proud of. And he says, like, "If you ever need – need to talk to someone, um, like, just come and talk to me." Or there's – and there's about I think, I don't know, there's about five to 10 other blokes on site, um, that are all, like, connectors to him as well and they said it all stays kind of behind the doors, like no one will know, kind of thing." (Bryce, plumbing apprentice, 21)

Another apprentice shared his experience of receiving counselling from his company. He also stressed that his supervisor was very supportive of employees, which provided him with the confidence to seek mental health support by speaking with his supervisor, who then coordinated with his company's HR team to provide the apprentice with counselling. When asked what helped him in this situation, he explained:

"Well, without the apprentice taking too much of the cake, if you know what I mean, just - I don't know, it's a real delicate situation. Just space, someone to talk to. They actually offered me a counsellor; I got 10 free counsellor lessons. And which they paid for, and it was totally anonymous through the company. So my supervisor went to our HR and said, "Yeah, I've got someone that needs to go see a counsellor." They didn't find out who it was, even though I've been very loud about who - what had happened. It's knowledge, and if - if you come out the other side, I've been pretty loud about it, but yeah...." (Justin, male plumbing apprentice, 33)

In this apprentice's case, it appeared that supervisory support was augmented by the organisational support, and together they cultivated a supportive workplace environment. The apprentice added that people at his workplace were respectful and non-judgmental about his circumstances, offered to help him, and that ultimately, having the time and space to deal with personal challenges were helpful. He also felt that he repaid his supervisor and workplace's support with his effort at work:

They didn't care what had happened, but they were happy to help. But they weren't - yeah, I suppose you just don't ask too many questions, and if people want to talk about it that's when you can talk about it. I suppose that's how you can help apprentices, in that way...I think it really depends on the apprentice. But if they're given space they will repay them. So I don't know, if they need a day off and it's personal leave, like let them take leave without pay or something; instead of being angry about them not coming in, be sort of accepting that they're going to be stronger... (Justin, male plumbing apprentice, 33)

Another large company provided a mentor program dedicated to Indigenous apprentices. Indigenous carpentry and joinery apprentice, Sean, 21, spoke about how much the program had helped him. When asked what it was like working with his training employer, he replied:

"It's bloody fantastic. We just got the best – my best interest in my sort of thing. So you don't get treated like a number with [company name], you actually get treated right. Yeah, it's very good working for them. They've helped me out a lot."

When asked to elaborate, he explained:

"Well, they got me – when I started, I started with another – another couple of apprentices and they got us all mentoring, like a mentor that would come out and would talk to us and make sure we have goals set and that we're got long-term goals and short-term goals and that we're going to achieve them. And she made sure that we would achieve them. Also, when I got my Ls they paid for driving lessons for me. So I could get my Ps. But I haven't got my Ps. Yeah, they've just been – been there the whole way really...I've just started project management and that. Like that's a goal, a long-term goal for me now sort of thing to get into that. And really all I want to do is just have my own family, buy a house, it doesn't have to be too big. I'm not – don't really want much, just want to be happy and own my own home." (Sean, carpentry and joinery apprentice, 21)

Small organisations

Apprentices also shared the ways in which smaller training employers supported their mental health. Where larger organisations potentially had access to formal processes for ensuring apprentices received mental health support, these processes were more informal in smaller companies. Here, working closely with their supervisor, who in many cases was also the company owner, on a daily basis allowed supervisors to build rapport with their apprentices, and for supervisors to act informally to help support apprentice mental health.

In the following example, the apprentice explained that he worked closely with the owner of the company, who subcontracted work to a small group of tradespeople with whom he had

longstanding relationships. He explained that as a group, they provided each other with emotional support and check in on one another, and that his supervisor organised "mental health mornings" where he and his employees went surfing together:

"Oh, it's - I suppose it's pretty low-key, because it's only just me and him... But, um, so it's just me and him, but we, uh, sub out people. So we get people to come work for us. At the moment there's only two other people that are working for us... I suppose I'd say people have something that's going on... Like one of the guys working was going through like a lot of stuff with, like, just family issues and crap like that, which got resolved. But, like, but - and we all talk about... all that stuff. And it just goes from there. So with a serious topic like that, people will - like everyone will be serious. Everyone's got enough common sense to, you know, know what's right and wrong."

"But yeah.... It's like - we all talk about stuff. They only live down the road from me, which is pretty handy, so - but yeah, no, yeah, everyone just checks in on each other, like — especially like with, um, with COVID and all that crap. I know a lot of people were going through stuff. I knew a couple of people that died and stuff, so that was pretty heavy. But, um, but yeah, like, everyone just checks in on each other. I check in on everyone else. That's just who I am. But, um, but yeah, it's pretty good. Everyone makes sure everyone's head is good. Because if your head's not good, you're not going to work good and all the rest of it. You know, you're not going to do your best work that you can when you're capable of it, if you've got stuff going on."

"But, but yeah, I suppose it's personal stuff, I suppose. Like we all surf and stuff, so you can talk about the surf, you can talk about your weekend, like if you went out. Um, we usually ask how was last night, or what you did, and stuff like that. And they're all, like, just common stuff, I suppose. You just talk about that. And I suppose if you've got anything going on you – like I was saying before, like "oh, I'm feeling a bit like this," and stuff, and you just have a chat about it. Um, but I think last year we'd go – we just call it a 'mental health morning', I suppose. It's just an excuse to go surfing in the morning before work. Yeah, it was good. So, you know, we had a couple of them. It was good. We got some waves. So, yeah, like, we've got things like that, which is good, when you can have a chat and take your mind off stuff." (Cole, male carpentry and joinery apprentice, 19)

Time pressure

The research team's experience recruiting supervisors for the study reinforced the ever present nature of time pressure on work sites. Specifically, when attempting to contact supervisors to ascertain availability for a 30-minute interview, the researchers noted they were either unable to answer their phone or did not return voice or text messages, and if they did answer the phone, they were often unable to discuss participation. Of the 18 supervisors invited to participate in an interview, 8 declined to do so due to lack of time. The recruitment experience reinforces the salience of time pressure as a factor inhibiting supportive conversations about mental health and wellbeing. As Thomas, who shared his experience with supervisors' punitive responses above, indicated, these conversations may be best held away from others, which may be difficult in such a time poor work environment. And as he noted, time pressure may work to shut down not only discussion of mental health and wellbeing needs, but also access to the leave required to help manage such challenges.

Restrictive learning experiences

Some aspects of apprenticeships erode mental health and wellbeing, and this can reflect the relationship between the apprentice and his or her supervisor or training employer. During the interviews, apprentices identified work related stressors. One of the most commonly discussed challenges identified by young apprentices was that their apprenticeship offered limited training in their trade. This had the potential to impact not only apprentices' sense of self-efficacy, but also their long-term skills acquisition, and safety training. However, apprentices were most vocal about the ways in which their apprenticeships limited their progression in their trade. This was identified by apprentices placed with both large and small companies. Those in large companies relayed that they progressed slowly with their learning, often stuck in repetitive, low-skill tasks like cleaning. Apprentices in small companies found they were doing the same task repeatedly (such as hanging doors and windows), thus limiting their acquisition of a broad base of skills in their trade.

For example, one apprentice who had worked at a large commercial organisation commented:

"I just found that it was — I was never treated as a third year or first year. It was more like babied through anything that you did. And even if - if - if they would - instead of teaching you, they'd rather you just go clean something or move something... Because I've been in commercial for so long, I haven't had the chance to have someone work with me with things and teach me things and, you know, really, really let me do something." (Savannah, female carpentry and joinery apprentice, 21)

This apprentice spoke about her experience at her previous training employer, a large organisation:

"The last two years I felt like I probably shouldn't be going with the apprenticeship. Well a couple of times I thought about going back to my old job. Because it's just been too much to deal with, because I didn't feel like I was learning enough so what's the point of – not knowing enough if you can't – if it doesn't help you in the end of it. The whole point of us getting paid this way and having to work with someone and stuff like that is so that you are qualified at the end of it but – what's the point if the people won't put in the effort? I did like the job, like I liked the last place but it was only because of the people. There were a couple of people I could have learnt a lot from and I enjoyed being in that joinery part of the side. But I never got the opportunity to go onsite. So usually when you go to places and they have onsite and also a factory – you're meant to do one week onsite, one week not. I never got the option to them. Which I don't know whether I should be talking about it or not but it's also – it's – it just helps apprentices and I wouldn't want another apprentice to go through that." (Natalie, female carpentry and joinery apprentice, 21)

Part 6: Supervisor Interview Findings

6.1 Supervisor-apprentice communication about safety

To a large extent, supervisors' responses mirrored those of apprentices. However supervisors provided explanations based on their own experiences, which might manifest differently from those of apprentices.

Intrapersonal factors influencing apprentice-supervisor safety communication

Supervisor's approachability

Supervisors recognised the value in discussing safety and work issues in a way that made them approachable and non-judgmental:

"Yeah first and foremost, you come, and any concern or complaint that anybody has we need to address it. So sometimes instead of running up there and saying, you know, there's an issue onsite and they go, "Oh the apprentice told me, you know, you're making him do something unsafe." Or something like that. You just go and have a look for yourself. And usually when you look at something you can see if it's safe or unsafe. You know, so usually I just try that. The main thing as I said about being approachable, it's not to accuse them, to blame them, anything like that, just go and address an issue at hand and then maybe explain to them um just the general sequence of how things come together." (Mick, male site manager, 48)

"For instance, myself, if I saw [apprentice name] doing something unsafe, he's pulled up straight away obviously, and then talked to him about what he's doing - and how it could be better. Because it - the other thing is, sometimes what we have to realise as older people, there's more than one way to skin a cat. Um, so we'd talk to him in that way and say, "well, I think what you're doing's wrong - I would do it..." and let him think about it. But I - I've obviously stopped him straight away." (Don, male site manager, 65)

Apprentices' confidence

Like apprentices, supervisors thought apprentices faced challenges related to confidence, in terms of navigating workplace relationships, workplace safety, and larger life challenges. They noted building confidence was important in communicating about both physical and mental health, and that it could take time and experience for apprentices to gain confidence.

As one supervisor commented:

"Uhm. I think there's – there's a pattern I've noticed that when somebody's 16 and starts an apprenticeship, it does take a while for them to come out of their shell - before, uhm, you know, they gain a bit of confidence in how they act around you." (Dustin, male company owner, 39)

Another supervisor added:

"Yeah well that's what we do like when we induct them, when someone's inducted, when we explain to them as a young worker, you know – that you know, don't endanger yourself to these risks – right don't work – don't work in isolation right. Always make sure you're supervised, you're working with somebody - right. And if certainly that most things, you're not happy about someone or you feel in the workplace you don't with a workplace you're not confident, right, because that's a big one, confidence." (Mick, male site manager, 48)

This supervisor explained:

"Um, yes, I have, um over my career, had apprentices when I was a lot younger and, um, I guess, from memory that, um, that comes into it, because they're fresh out of school. They're-they're a small fish in a big-big pond again suddenly. Um, and yeah, there's a bit of vulnerability there as well."

He suggested that his company's apprentice mentor program helped these younger apprentices build confidence by supporting them in a safe environment:

"Well, I think what-what we're doing, um, the-the mentor program and the training program andand structuring that, um, and it is quite structured, um, now, this time around. Um, I think that — I think that alone gives them some security, a-a-a feeling of security. That they're in a structured environment that is there to help, and-and the help's been offered. Um, and-and it's offered in a way that, um, accepts and recognises the level of propensity to take, take the initiative on their part. So-so it's sort of forced a little bit. Um, until they are — they do see that there's initiative required on their side." (Rick, male site manager, 58)

Supervisors' responsiveness

Supervisors indicated that they took immediate action when an apprentice identified an issue. The following quotes are illustrative of supervisors' comments about being responsive and addressing safety concerns immediately:

"Oh, if they come to me, I'll go and have a look at it straight away. So I'll stop what I'm doing or I'll - if I'm too busy, I'll get my foreman or leading hand to go for a walk with the apprentice and have a look at the situation. If it's a safety issue where there's a fence missing or whatever else, um - yeah, put - put it this way, safety is... to be the top priority on most construction sites, especially these days." (Dennis, male site manager, 50)

"Yep. Oh, well we'd usually, um – we would usually deal with it over – we would usually deal with it straightaway. So, um, if something's not right in terms of OH&S or WOH&S it's sort of dealt with then and there." (Craig, male company owner, 44)

"Uh, depending on the severity, um, we-we have, um, different levels of — um, of issues. So, um, an issue that's, um, almost certainly going to cause harm, um, would be classed as critical and, um, it's-it's fixed immediately without leaving the area. Um — we-we're all on radio contact. Um, if there was, um — the-the handrail I was referring to was on the edge of a trench that was two metres deep. If we had a multistorey and there was a walk off, you know, on the fifth, sixth floor, um, that would be something that is just fixed straightaway without, um, what — cordoning off the site and not leaving it undone." (Rick, male site manager, 58)

Interpersonal factors influencing supervisor-apprentice safety communication

Supervisors described responses to safety issues that mirrored the supportive interactions described by apprentices. Specifically, they indicated that they engaged in shared decision making when trouble shooting safety issues and being careful to involve apprentices in the process.

Participatory process

Patrick, 50, a site manager at a large commercial construction company, described how he would respond if an apprentice approached him with a safety concern. His response illustrates that he encouraged apprentices to follow safety processes and not take risks, and in the event that these processes needed modification, the supervisor and apprentices could share in the troubleshooting. As Patrick explained, he hoped this approach would encourage apprentices to actively contribute to problem solving safety issues:

"If you're not happy doing it, don't do it. Everything would have a site-specific task. Some would have risk assessments, and then what we'd do is we'd have the usual uh, SWMS, JSAs, whatever you want to call it. But I actually see that as a rolling document, so then we'll pick the SWMS up and go, "Oi, this doesn't actually work. How are we going to do – how are we going to do this?" So, the majority of SWMS that we have, there'd be scribbled on the back and they'd be written – they'd be hand-written, "We've actually gotta do this. This is how we're gonna do it."

"And then we'll talk about how we're gonna do it. "Hey, do you need another guy to help you with this?" "Hey, do you need three guys?" "Yeah, that wouldn't go amiss. Right, are we happy with doing that? That's what we'll do." If something – if something crops up during this process, stop what we're doing and we'll have another chat about it. And if it doesn't work, we'll come up with something that does. So, they're all – it's basically communication, discussion, making people feel that they can say something, not that whatever they say might be silly. Even – anyone can chip in, anyone can contribute. Uh, different pair of eyes, whether it's a young pair of eyes or an old pair of eyes, what does it matter? So, just making them feel comfortable that they can contribute to that conversation, 'cause they'll be doing it."

Organisational factors influencing apprentice-supervisor safety communication

Safety systems and programs

Large organisations

Supervisors identified organisational features that supported communication about safety. Within large organisations, a systematic process for addressing safety problems, the inclusion of apprentices on safety walks, and programs devoted to educating apprentices about safety were all cited by supervisors as features of their workplace that facilitated and enabled safety communication.

As one supervisor commented, he and his company have multiple vehicles to encourage the reporting of safety problems:

"So, with the entire staff, we encourage reporting, – Um, we've had, through the encouragement of raising issues, yeah, we do have the apprentices come to us and point things out that need fixing. Um, well first of all, they're part of the prestart which is, um, where we start the – where we reiterate pretty much every morning, um, the importance of reporting hazards, um, back to, you know, up the line and then we also, on the noticeboard have a list of people, a hierarchy that can be contacted if-if, um, what their concern is, isn't addressed. So they're part of that. Um, and we also encourage them, or the trainer would encourage them as well. They'd be often brought along on safety walks, probably not every morning, but, um, we have what is called a monthly safety pulse where, um, management would visit a site, um, and we would have a safety walk and list issues and pretty much assess the safety on the job and list issues to be addressed and fixed and the apprentices are included in that. Um, our apprentice is currently on the safety committee's role which-which walks, um, fortnightly." (Rick, male site manager, 58)

Supervisors described that formal and systematic training programs offered by large organisations facilitated safety communication. This is illustrated in the following case study.

Case study: Promoting safety through apprentice training programs

Russ, a 53-year-old site manager, explained that his company had developed a dedicated program for incoming apprentices that provided a staged introduction to work sites. This allowed the large commercial construction company to provide safety training at a separate facility and ensure apprentices had met specific training milestones before working on site. The company clearly identified tasks they deemed appropriate for apprentices at different stages in their apprenticeships, and apprentices with coloured clothing and hard hats, so that others could provide them with supervision and guidance. Here he describes this graduated program for safety training, and the company's systematic approach:

"So what, what I'm looking to do within [company name]... this is our program, um, is we have an apprentice, we have them attend the booking process. And then instead of sending the apprentice straight to a – to a, um, a project, I want to introduce them to our business, where they go to a training facility. We have a training – an apprentice manager. And so they're finished not in four, five, six months, whatever it takes. There's a process whereby they'll do their, their, um, site inductions. They get trained in their Safe Work method statements for general things that they do in their job - They get trained in Safe Work method statements for general tasks that they do. They do skill – skills-based assessments. You know, we can monitor their attendance. They have responsibility in terms of cleaning the factory, the roster, and, and do VOC training in all of the various power tools, et cetera, et cetera."

"So out of that, they end up finishing at that training facility what we've called a – um, ready for site certificate. So that when, when they go out to the sites, the sites aren't having to try and do all these things. They're already geared up and ready to go. We have a matrix of activities that they can and can't do, depending on which year they are in; first, second, third, fourth. So I think the next half of that year, they will spend that half a year out on site. They have a different coloured vest, a different coloured hat, so that people can see they're apprentices. And it doesn't matter whether they're a first year, or within that, they're a first year but they're 30 years old.... So that everyone that's around them can see that they're being new to the industry, or they're, they're junior in, and they need to be watched, they need to be looked after."

"As I said, we will have a matrix, and it doesn't matter whether you're a [company name] employee, or a, uh, a [contractor name] employee working on the site. Um, if you're an apprentice, there are only certain activities you can do. Like, if you're a first-year apprentice, there's no way you're going up on a roof. If you're a third-year apprentice that works for [contractor name], yes, you can go up on the roof, but you must verify that you've got working at heights safety, you know, you've done the, the roof induction, whatever the case may be."

"That's happening regularly throughout the year. But going back to the first-year, so the first-year apprentice, after he's done his training facility, he comes to site and he spends the rest of that year just learning about our projects, and how big they are, and getting used to being in this environment."

He added that this graduated approach to apprentice training applied to all stages of an apprentice's training with his company, with an end goal of training apprentices who are skilled and competent:

"And they've been, from the moment you start, to the moment you finish. Part of that process too is if — and we're looking at X number of apprentices every year — is the fourth-year apprentices would come out to, uh, depending on how many you have, there would be a roster system. They would come out to that facility maybe, you know, two three, four — two, three, four months. And they would actually, part of that, be mentors to the second-years, so that second-years looking up to a fourth-year, "oh, jeez, this is how -" — and, and in their fourth years encouraging them, "no, you need to do it this way," or, you know, "you might want to think about this," et cetera. But there's — they're setting up a mentoring relationship."

"Then, at the end of that second year, they then go into their third year. And the third year is about, uh, being involved in another construction site, where we set up the secondment process, where they actually go to – now they're back on big construction, they actually go to – you know, they might spend a month with the foreworker. They might spend a month with, uh, the façade contractor. They might spend a month with, um, you know, a door hanger, et cetera."

"But again, it's about skilling them, um, and getting an understanding of all the different things. Being in the fourth year is more about starting to develop the fourth-year apprentices into managers of the future. They would start to get involved, do some leading hand stuff, and get involved in the management systems, et cetera, doing their mentoring stint with the second-years, et cetera, um, at the house. So that at the end of that time, the purpose being — obviously our goal is to try and deliver future leaders within the business. Future managers within the business. However, as I keep on saying to our directors of the business, we've got to be realistic. If we train our people properly — and that should be our goal. Our goal should be that apprentices are skilled as best as possible. It would not be unrealistic to lose 50% of them at the end of their fourth year. The point being is those apprentices feel that they are skilled enough that they can make it on their own. They can suddenly go, "I've got the skills, I've got the training. I can do this." And, and it doesn't matter whether they've done that or they've stayed with the business. We should be proud in the fact that we have trained somebody that is skilled, is competent, thinks about what he's doing. We've, we've achieved our goals." (Russ, male site manager, 53)

Small organisations

Although apprentice interviews identified that small organisations tended to rely on informal safety support to apprentices, some supervisors from small organisations reported that they also had safety processes in place to ensure a thorough and systematic approach to safety.

Dustin, 39, the owner of a small company, had invested heavily in processes to manage safety issues. He explained that he had a systematic approach to documenting and rectifying safety problems on site, and that he had trained his apprentices to follow this system:

"I always say to them, "Take that photo and write in the book what you saw was unsafe, and how you fixed it." Because if SafeWork – don't just fix it and don't do anything about it. Because if SafeWork come and go through that book, even though no one else has that book, but – if they don't see anything written in it, it looks like it's not being used. And there's no site in Australia that's never had anything go wrong. So, if we write in there that, "Here's some issues and here's how we're fixing them"...[Apprentice name] could go, "Oh, they haven't put that handrail back," he would go, uhm, you know, get the – the safety book, -write in there that, uhm, 'handrail had been removed,' and then that he had replaced it." (Dustin, male company owner, 39)

Restricted training experience

All supervisors interviewed indicated that they thought apprentices today did not get adequate training in their trade, especially in contrast to the training they received when they were doing their apprenticeship. These limited skills may restrict apprentices from positively interacting with supervisors and co-workers about safety and work.

They spoke in general about apprentices having limited skill acquisition:

"Um, and he's – he's such a great person and I'm happy to wear that. Um, he came to me sort of midway through his apprenticeship and he – and he doesn't know anything so, to put it into – to put it into figures he – he earns what a fourth year apprentice earns but he has the experience as a first year, so - It's – that's – that's a problem and not many will wear that. But he's – he's a great young fella and he's very strong and he – he fits in and suits – suits what we do, so if I can – I can justify it that way." (Craig, male company owner, 44)

"It - it's - it's bred into them these days that they go to school, certain things are taught the way that they're taught and then they go to - if they come into the construction industry, TAFE don't teach them that much on safety anymore. They don't - they don't teach them a lot of hands skills these days. And they don't teach them about sites. Um, they - they walk around - and you'll see, they walk around blindfolded half the time, you might as well say - with blinkers on. Because they're - they're taught that it's got to be on a SWMS. If it's not on the SWMS, you - you don't do it. Safe work method statements. It's a - it's a - so, basically, it's a procedure of - of any hazardous tasks that you're doing but from a day-to-day walking around on - on a building site, anything can be dangerous. So, a lot of general works that, um, sometimes you look at - you look at job sites and you look at people and the way that they do things, you just - and - and I shouldn't categorise it, but they're normally all the young guys, or young girls. And they - they just don't have the skills that was taught back in 20 years ago - 30 years ago. Uh, that's both common-sense-type skills as well as physical hand-tool skills and that because a lot of the tools

these days are - are mechanical or bat - battery-operated and stuff like that, where you're not using your hands like you used to." (Don, male site manager, 65)

6.2 Apprentice-supervisor communication about mental health and wellbeing

Intrapersonal factors influencing apprentice-supervisor mental health and wellbeing communication

In discussing mental health and wellbeing supports for apprentices, a number of characteristics, skills, and actions emerged in the ways in which supervisors fostered communication with apprentices.

Being a good listener

Often, supervisors indicated that they were good listeners. As one supervisor commented:

"Oh, I mainly just listen more than anything else. 'Cause I - I - it's not my job to give 'em too much advice, um, it's more let - let them speak to me about things and I'll - I'll say a few things but I try not to give too much advice because, you know, I think the advice I might be giving might be... I just basically try to reassure them that, you know, everything will be okay. You know, you can talk to me at any time, um, whatever else." (Dennis, male site manager, 50)

Another said:

"I guess, my-my personality, um, although I wouldn't say I'm loud and boisterous, I-I am a good listener I guess and that's only been enhanced by becoming a parent as well... Um, there-there is a lot of different personalities in the world, in life, but, um, in, even in construction. You'll have guys that are very open and will talk and other guys who are very private and, um, shy and it takes a bit to act-actually gain their trust and let-let them understand that you're there to, or you can help. What, what I normally do is say, "Look, I'm here to listen, but I'm not the only one in this company who understands maybe what you're going through and there's a lot of people, probably more — more than you think that would understand if you happen to want to, you know, ask. Ask-ask for someone to listen"." (Rick, male site manager, 58)

Emotional intelligence

Supervisors also elaborated on how they knew an apprentice might need help, and how they offered support. As the following quotes illustrate, they were attuned to changes in apprentices' behaviour, and used this emotional intelligence not only to read their apprentices' need for help, but to open the conversation with them:

"Well, you-you reach out - I'll give one example, who was my apprentice and I'm probably going back 15 years or more. Um, it started with absenteeism, um, he kept saying, "Sorry, can't make it today." Um, so, I reached out, said, you know, "Is everything okay? How are you feeling?" Um, and typically with, um, - he was dealing with depression and when asked, you know, what's wrong, well, and I know this personally, um, sometimes there's nothing wrong that you can say is

wrong. In fact, that is part of the problem is, "I'm feeling this way, but I can't really tell you why." Um, so, in that particular case, um, it actually got down to - well, we put him onto some professional help as well and by the way, [company name], for a long time has had, um, a resource available, made available, um, a mental health - I can't think of the name now." (Rick, male site manager, 58)

"There was definitely one time when he basically cracked the shits about me about work and whatever. And it was over nothing. And said he wasn't coming back. And from that, I knew something was wrong. So, uhm, you know, I – I had a meeting with him - and just asked him, you know, this isn't you, and what – what – what's wrong. And then, yeah, he – he opened up and told me some things with his family and, uhm, you know, I gave him a couple of days off and – just to sort some things out..." (Dustin, male company owner, 39)

Interpersonal factors influencing apprentice-supervisor mental health and wellbeing communication

Supervisory support

Supervisors reported that they utilised various strategies to support apprentices' mental health and wellbeing. Phil, 38, a site manager at a large commercial construction company, discussed the ways in which he helped apprentices manage health and wellbeing needs. According to him, one of the best things he could do for apprentices was provide them with leave:

"Yeah, yeah. Most of - most of the time they've come to me with a personal issue, mum and dad got divorced or I've got issues with my girlfriend, all that sort of - sort of stuff. So usually, um, the best thing I can do for them is, um, to give them time off, to be honest with you, to - to collect their thoughts and - and, um, and, you know, get some time away from the job. They do pretty big hours, these apprentices. Um, my thinking with them is that, um, if you're not in the right headspace to be at work, you're really no good to me, if that makes sense? Um, so I'd rather them go away, rest up, um, see who they need to see, go see mum and dad, go and see their girlfriend, work on whatever and then come back. You know, so I've had a - apprentices, one apprentice went away for a two-week vacation when his parents got divorced, so I just on short notice approved it and, um, sent him. So they're young guys..."

Phil also used an open-door policy to encourage apprentices to talk about struggles:

"They approach - they approach me. They approach me. Oh, um, if it's - look, any time during the day, ah, it's open door policy, but you'd be surprised, you get text messages in the middle of the night or early morning, um, outside of work, um, they could text me on a Sunday. Look, I'm open or call me, it's fine. But generally at work, they'll - they'll give me a call. It's very impromptu. They don't make an appointment or anything like that, they'll just come up and speak to me in person, um, whenever it suits them pretty much." (Phil, male site manager, 38)

Another supervisor encouraged and supported apprentices to seek help:

"I've had a couple of guys that have had gambling and alcohol and drug issues. They've never opened up and I said, "Well, look, I can help", you know? So it's not - you're not - you're not weak if you go and get help. You know, don't think you're a weak person because, to be honest,

I think it's the total opposite. You're actually stronger - Where a lot of - a lot of guys don't think that but they - they should, but yeah - Yeah, well - well, one of the guys that I - he went to, um, see someone about it and he turned his whole life around. He stopped drinking and got back with his partner, so it was - All I did was tell him, you know, "This is what you should maybe do," and he went and did it himself, I didn't, you know, tell him which direction to go. I just said, "Go and get some help, mate." Which he did. So - Which was good because at the end of the day he's back with his wife and his kids." (Dennis, male site manager, 50)

Experience sharing

In some cases, supervisors supported apprentices by sharing their own personal experiences with mental health and wellbeing challenges.

When asked if he shared his personal experiences with apprentices, one supervisor replied:

"Oh, I have - I have before, yeah, when people have come to me about certain things, I say, "Look, I went through a bad stage with my ex-partner and stuff like that and I went and got help and, you know, it helped me a lot. So yeah, so to tell people that sort of stuff sometimes, it helps them to understand that, you know, other people have done it as well." (Dennis, male site manager, 50)

Another supervisor added:

"Ah, I did with a kid with a divorce, my parents are divorced as well actually. And I sort of, ah, used some of my life experiences. He was going through a very similar situation - as what I did at a - at the same age and just sort of gave him my perspective on what happened to me when my parents got divorced. So I guess you could say that. And he - I think he found it quite useful actually." (Phil, male site manager, 38)

Other supervisors shared their mental health experiences with apprentices, in some cases as a way to open up conversation on the topic:

"Oh yeah, yep, most definitely I had a few anxiety attacks and things like that and, um, I was – I was in a situation where I did a project that was way too – it was – I was out of my depth for probably 18 months and it – it - weighed on me heavily. Well, it took me – it took me 18 months to work out the – the real cause of why I was so anxious - um, and it was under my nose the whole time but it's pretty typical, right, you – you can - easily see what's going on in someone else's life but not your own. Um, you know, that can be – that can be heightened from binge drinking or party drug taking or – or whatever - it might be but, um – so that is – my – my guys all know that I've – I've had a few struggles. Yeah, for sure."

"Look, I - I - you know, I'll tell anybody. I've - I've had mental health issues in - in my past and - and I had to work through those for a couple of years when I was in my early 20s and, um, I'm just thankful that I was able to work through them myself - and I - I sort of give people an option to - to speak, and if they don't I'll - I'll speak about myself but, um, you know, and try and give them an in..." (Craig, male company owner, 44)

Boundaries and the work-personal divide

While some supervisors were comfortable sharing their personal experiences with apprentices, some were not. As with apprentices, some supervisors saw clear boundaries defining what was appropriate to discuss with apprentices, and what was not.

Like some apprentices, some supervisors thought it was unprofessional to discuss personal matters at work. In some cases, this was because of their role as a supervisor: they thought discussing personal challenges detracted from others' perception of their control in the workplace.

One supervisor explained that he would not share personal information with apprentices because he thought it would detract from his position of authority, and his credibility in his role:

"I wouldn't burden an apprentice with any issues. Even if there were any...No, I – if I'm responsible for, you know, the majority of the safety on site, and safety, I don't want him to think I've got problems. I want them to – I want them to know I've got my shit together and I'm in control. So, no. I mean, imagine if I went up to them and said, "Oh, yeah, I've got a problem with drink or drugs." And I'm in charge of their safety. That would be bizarre. No, I wouldn't." (Patrick, site manager, 50)

Most supervisors explained that they respected the boundaries of their apprentices; they might provide apprentices with the opportunity to open up to them, but if the apprentice did not do so, the supervisor did not press them.

"Um, so, you know, if you work with someone you sort of get – get the feel if – if they're a bit off one day or – or something's going on... Um, at the same time it's – it's a – just the way work is I guess, it's not going to always – you know, you can't pry too hard because at the end of the day it's not really the boss' business ... I guess about their personal life but... Oh, I guess – I guess it will be different for each person. So each – each apprentice that I've ever had has been very different. Um, sometimes – sometimes if you push someone and they've – they're not going to tell you anything anyway. Sometimes it'll be a matter of "Look, if you do want us to talk," it – you know – you know, sometimes the best thing for someone is going to work and working solidly for eight hours... So, I guess – I guess you've got to – you've got to judge it on – on a gut feel as to how far you can – you can – I wouldn't say interrogate someone but how far you can – you can push with – with questioning someone to make sure they're all right before you've got to say, look, I've – I've actually reached out and that's as far as I can push today. And all you can really do is just watch for changes in behaviour I guess." (Craig, male company owner, 44)

"Look - I don't try to pry. I open up the conversation and I allow that person to speak to me as soon as they want to. I try not to intrude in people's personal lives. Some people you can, some people are easy, they're quite open and talk to, some people clam up and they just want to deal with themselves, but I just try to start the conversation by just saying, "How's your weekend? What ya do? What are you up to?" Stuff like that." (Mick, male site manager, 48)

Workplace aggression

While most supervisors felt that they and their workplaces were receptive to the mental health and wellbeing needs of apprentices, throughout the interviews, both apprentices and supervisors discussed whether or not employees were aggressive towards one another on site. As indicated below, one supervisor in particular identified this as a barrier to building rapport with his employees and apprentices. As he explained, yelling was part of his role as a supervisor, and he felt this reinforced the boundary between supervisors and employees, inhibiting conversation about personal issues. That workplace aggression is normalised for both supervisors and apprentices is attested to by another supervisor, below, who instructs his employees and apprentices *not* to yell, to instil respectful behaviour amongst co-workers.

Barriers to supportive relationships

Eric, 43, owns a small residential construction company and employs two apprentices. He explained that he felt like it was not possible to be both a boss and build close rapport with apprentices because of this hierarchy. One feature of this power dynamic was disciplining apprentices, and this involved yelling at them, which prevented them from building rapport:

"So - so yeah, I - I probably don't discuss my personal stuff with them and - and also too it's - it's my situation, 'cause I'm in a small firm where I'm the boss but I'm also like - I'm the work colleague as well. So I'm sort of playing two roles, like - it's being - it's hard being the boss and sort of being sort of, um, talking with them about this stuff and then - and then the next sort of like hour you've then got to be like tough on them and try and - because they're not doing their job properly or they're being slack and you've got to sort of like give them a rev up, you know, so - It's sort of - it'd be different if I was like just a worker in the company, just on wages and I was just working side by side with a kid. Like, you know, you might discuss things a bit more 'cause you're at the same - You know, you're the same sort of position in the company. But where I'm the boss, you know, and I - I could be yelling at 'em one day, "Oh, you know, come on, you've made that mistake three times already. You know, you've got - got to step up a bit. You know, don't" - so I can be saying stuff like to 'em and then it's hard then to sort of then engage with them on a - you know, sort of level that you're sort of at the same level, if that makes sense?"

Enabling respectful conversations

The following quotes illustrate that supervisors recognise that workplace aggression and yelling can be damaging and counterproductive, and they instruct their employees to be calm and respectful in their interactions:

"[So] some people need, you know, to be spoken to differently. So and I always say, "Try to speak calmly to people. If you tell people rudely to do something, they're going to basically tell you to piss off, so - and which doesn't [help the] situation, it just puts more fuel on the fire"." (Dennis, male site manager, 50)

"I try to let them interact. They all tend to be relatively similar. People aren't that different. You are going to get different personalities, so I do a regular toolbox talk. And one of the main points

is, "Hey, I don't want any raised voices. I don't want any swearing. I want you all to treat each other with respect"." (Patrick, male site manager, 50)

Organisational factors influencing apprentice-supervisor mental health and wellbeing communication

Supervisors identified organisational factors that supported both conversations and action surrounding mental health and wellbeing. These included training with organisations focusing on mental health in the construction industry, and programs within their organisation that facilitated action. They also included opportunities for bonding and building rapport between apprentices and supervisors.

Provision of platforms through shared activities

Supervisors indicated that shared activities were a good way to build rapport amongst employees, including apprentices and supervisors. These activities usually consisted of shared meals and social events. A supervisor shared his experience in his company:

"So... they've got a good rapport with us, so, you know, look, there's 24 of the staff I've got on this site, there's two of them who are apprentices, they're welcome into our office any time, they come up for a coffee, we buy 'em lunch every Friday, ah, we do lots of social functions."

"Um, you know, we're one team. The guys know that, um, doesn't matter who you are, you don't have to knock on the door, you come straight in. So - Ah, what have we done? Couple of sort of Saturday afternoon, Saturday night sort of pub crawls, if that makes sense, um - we also do company updates, which they come along to, which, um, might be barefoot bowls, we'll do a company update and some barefoot bowls or a social function or - um, and the Christmas parties, um, the normal sort of stuff you do, the business will do. So - um, they're welcome to everything. Um, what else? Yeah, every lunch every Friday is a good one, they like getting involved in that. Ah, we - we buy - I think... about 400 bucks worth of food every Friday, it's different every week, at 12.30 lunch is on the table for 'em. We come up and sit down as a team. And, um, have lunch together. So it's just a good way of bonding." (Phil, male site manager, 38)

Organisational mental health support training

In the following example, a supervisor explains how he followed training through Mates in Construction and MEND Services to provide support to apprentices, which emphasise the importance of listening and asking questions:

"No, no, so if I can see there's something wrong and I think that might be - something mightn't be right, I'll - I'll ask them, um, you know, "Is everything okay? You know, you're not your usual self." I won't push 'em but I'll - I'll definitely ask because at the end of the day, um, well you have that MATES in Construction, you know what that is? Have you heard of MATES in Construction? So yeah, so, you know, so suicides and stuff like that. So I'd rather ask the question than not ask the question. You know, won't push 'em on it but I'll always say, "Is everything okay? Are you sure you're okay?" Some - some - some say, "Yeah, I'm fine" but some will open up, so..."

"If they want to talk about, they - there's - it's come up before where they've had some personal issues, they - they speak to me about it. Yeah. It happens sometimes. Yeah. So it's totally just something that you're sort of got to be careful what you say and what you don't say. Ah, it's more - more - more - it's more listening than anything else, I think. Um - Oh, they'll talk about their personal - their personal lives, if they've got a few issues at home and stuff like that... Ah, I had one - had one a couple of years ago had an issue with his girlfriend, um, he was pretty upset. I dragged him into the office and said, "Look, what's up? Is everything okay?" And he goes "No, not really." I said, "Well, do you need to talk about it? Are you okay? Do you need some time off?" So that sort of stuff. Um, you know, not everyone's got a - an easy life, so - it just sort of you know, you can tell when someone's sort of down and not their usual self"

He added that he had also had training through MEND Services, which had guided his interactions with apprentices:

"So, a few of us have been trained by Mend in that as well. Uh, funnily enough, very, very similar to what we were trained which was, um, mainly listening and mainly – and-and-and being quite, um – abrupt's not the word. Um, forward in bringing up what was the obvious issue – um, which is, you know, um. But basically, if you think you need to, you ask someone, "Are you thinking of suicide?" which is very blunt and even in the course, some people found that quite confronting. Um, uh, so yeah, as I said, I-I, um, follow probably quite closely what I was later trained to do [chuckles]. And-and that's basically listening." (Rick, male site manager, 58)

Company based mentor program

Supervisors at two large commercial companies drew on their mentor programs to help support apprentices.

Case study: Formal mentor program

Rick, 58, a site manager and supervisor at a large commercial company that employs 20-30 apprentices nationally, now leads the company's apprentice mentor program. Here he explains how it works, and its goal of addressing larger apprentice welfare issues. He adds that he expects progress with the program may be incremental, partly due to the difficulty some young male apprentices have with opening up, and because the construction company has – traditionally – tended not to focus on the mental health and wellbeing needs of its workforce. He indicates that although the program is relatively new, he has had positive feedback from those enrolled.

And we also have a mentoring program as well. Um, we pair them up with a – well, just that, a-a mentor. So we'll-we'll select a suitable mentor and assign him to an apprentice, give them some, um, background on what the mentor role is and that allows the apprentice to have someone not on site to speak to who is well tuned into the way [company name] works. Um, just as a go-to, um, I guess, to help them with any questions that aren't related to technical building or training. But they'll have a trainer on site with them and they'll have a mentor off site. Usually maybe another site manager or foreman on another project, – um, and someone they can just pick up the phone and ring.

It's-it's made known that the mentor's role, um, can also or should help them out on a personal

level. Um, whereas they would ask technical questions of their trainer, yeah.

I haven't had any formal training-training on apprentice mentoring or apprentice coordination, other than just a lot of experience in the industry. My personal view with the mentor is - and I describe this to both apprentice and mentors, it's a big brother role or-or even a, maybe, uh, a parental role even if-if you want to go that far, but I do like to choose mentors that, um, are parents – and it's better if they're parents of older children. For example, my – I've got two. I've got a daughter, 28 and a son, 26 who's also in the construction industry, he's a contract administrator for another company. Um, but I think that's probably a good qualification for a mentor is to have raised your own child. Uh, we have, we have female apprentices. I-I won't say raised your own son, raised your child and, um, and has got that mindset, I guess. Um, but having said that, we've got a few guys that really are, um, doing a good job at being a big brother role as well. Big brother as in older brother, not overseeing, but - um, so that's how I've gone about the selection with the - not that I've selected them solely myself, um, but that was the idea and how we went about selecting our mentors.... I've also, um, selected a couple of guys that have, just in the last years, come over from other companies, but I've known them long enough to understand how they operate and, um, I was confident in putting them forward as mentors or asking them would they like to take that role as well.

Look, look, they do, um, you've got to remember, it's construction and HR is not big in construction. I-I'm — I probably do a lot of the chasing, um, and I'll ring them and ask them how things are going. I'll encourage, um, catch ups between them. Um, we send out, um, like a mentoring guide. Um, I've got a counterpart up at, um, up in Queensland who pretty much oversees the whole program nationally and he puts out these mentor guide books and stuff. Just information, I guess. A little bit of training for our guys. Um. But, uh, if you're asking if it's proactive, it-it is, but probably not as proactive as some other industries probably, I would imagine would be.

Um, it's – as I said, it's early days for me. I've probably been the role only three or four months per se. I've seen the mentor program, um, over the – over the last 10 years take a few false starts and peter out. This time it's been going for a while and happening very well and I thinks it's, um, it's probably on the back of, um, a few, as I said, false starts and a bit of experience on how and what does work and what doesn't. Um, as far as, um, is it working on a personal level, I-I, I've had some anecdotal feedback, um, which is quite good. Again, um, I'm measuring from a construction industry bar which is quite low on HR [chuckles] but – yeah, look, I-I think it's working and it's worthwhile. Um, as I said, I have had some feedback. Um, I'm slowly getting the apprentices to – oh, by the way, the-the apprentices joined with the group of cadets. So we've got apprentices and cadets, um, which – all of our cadets which are, you know, office-based, um, also have appointed mentors.

Um, I look after new apprentices and I'm slowly getting them to come around to realise that, um, the company is interested in their welfare beyond what they can produce. And, uh, they're-they're responding to that. They're-they're opening up a little more. Um, but it is - it is quite slow and it's predominately, um, male. I – we don't have – I don't have any female apprentices amongst the nine that are here. There are a couple of female cadets. We do have female apprentices in the business nationally. Um, but yeah, the guys-guys especially that age, although we have some mature apprentices, um, you know, the average is 18 to 20. You know, early 20s and, um, you know, they don't open up that easily necessarily without a bit of encouragement, but, um, that-that is happening.

Supervisors also introduced mentor programs that targeted Indigenous apprentices, and supported the mental health of Indigenous apprentices.

Example: Indigenous mentor program

Russ, 53, is a site manager and supervisor at a large commercial construction company, which provides offsite graduated safety training for apprentices. In addition to providing dedicated safety training for apprentices, his company also provides a mentor program for Indigenous apprentices to support their mental health and wellbeing needs. In the following example, Russ describes the Indigenous mentor program, provided to Indigenous apprentices working at a specific site, and facilitated by an Indigenous woman consultant. He provides an example of an instance in which an Indigenous apprentice, who had stopped participating in the program, was struggling. Russ reached out to him and put him in contact with the facilitator of the mentor program.

We did a mentoring program at [city suburb] because we had a lot of Indigenous, um, apprentices. And we ended up engaging a company. [Indigenous mentor's name] was here name, but her company is called [company name]. And we would have the, um, at least once a month [she] would come and sit down with them, and talk through their — any issues. They could talk to her — don't know what they talked to her about. They would talk to — but what we found through that mentoring program is a lot of the Indigenous apprentices which would sometimes go [mentor name] - for no, no good reason. Um, were in — they were engaged with [woman's name] and she would set up a rapport with them. They were engaged with us, and they were happy to be at work, and, and get involved in what we were doing...

Russ then elaborated on how an apprentice might be put in touch with the mentoring program:

Like we had young, young, uh, [male apprentice name], uh, who was an Indigenous apprentice that we had at [city suburb]. And when that project finished, obviously the mentor programming, at that point, sort of stopped. And he was in his third year. And, and then he moved over to [city suburb]. And then I had our WHS manager contact me and said, "Oh, look, we're having a few issues with [male apprentice name]." Um, you know, he's a young Indigenous guy, but, you know, his partner was having their second kid at 20 years of age or something. And so we had a discussion and said, "Well, how about we get [Indigenous mentor] involved?"And see whether — so we contacted [male apprentice name] and said, "Look, um, do you have any objections to, to sitting down with, with [Indigenous mentor] on a regular basis again and having discussions?" And he — and then he said, "No, I'd love to." So - And from that, um, I don't know what he spoke about, not — uh, it's their business. Um, but from that, you know, um, he started to blossom again - Et cetera. Whatever they were talking about.

Russ emphasised that although the program was provided to Indigenous apprentices, his company would provide the same type of support to non-Indigenous apprentices, as well:

Um, and, and it wouldn't matter; race, colour, creed, we'd have the same approach to any of them.

A positive organisational culture

Supervisors explained that the formal mentoring programs should be rooted in a positive and open organisational culture. Rick, the supervisor who introduced his company's formal mentor program above, emphasised that the success of the mentor program was supported by an organisational culture of openness. He also explained that despite his company's large size, it had a family-like work culture that encouraged apprentices to recognise their role in safety, work as a team, and open up to others:

"Yeah, the-the thing is that [company name] does have a-a fairly open culture and it does encourage apprentices and-and generally workers to see that and-and open up. I've seen that. Um. So, um, yeah, I think-I think that's a positive that just naturally comes out of-of their culture of this company. And is that through things like having that-that, um, daily talk, you know, 6:50 in the morning and stressing to everyone that it's – that's it's their responsibility to-to keep an eye out for safety and to share things or, you know... Well, I-I-I think, um, that the daily talk is a product of the culture –and the culture is a product of what is originally a family-owned company, albeit one sort of thing that is written and divvied up, but it's still a family company, and um, if you did speak to [company owner] which she-she would take great pride in telling you that it's a family, even though it's not. You know that, close to a billion dollars, um, so... Yeah, I-I think the culture in the company actually, um, does a lot more than what it's giving credit. [A culture of] openness, fairness. Yeah, and that encourages people to, um, you know, work-work as a team, I guess – that's all sounding very, um, corny but true" (Rick, male site manager, 58)

Part 7: Discussion

7.1 Factors impacting communication about safety

Intrapersonal factors – apprentice and supervisor characteristics and skills

Apprentices and supervisors identified a constellation of intrapersonal characteristics that have an impact on communication about safety.

Confidence and assertiveness of apprentices

Apprentices in this study show a high level of confidence in engaging in safety 'voice' behaviours, i.e. speaking up about safety concerns. Apprentices indicated that they were not hesitant to remind others about hazardous conditions, stop others' unsafe behaviours or report safety issues to their supervisor when they noticed something unsafe. The result, however, is different from previous research on young workers' safety behaviours by Tucker and Turner (2013), who reported that a "wait-and-see" approach was the most common first response of young workers to an unsafe work situation. Only when young workers perceived that a hazard was so serious that it might result in an injury requiring medical attention or hospitalisation, they tended to move towards 'voice' behaviour (Tucker & Turner, 2013). It is worthwhile to point out that participants in the study of Tucker and Turner (2013) were teen workers (aged 15-18 years), worked on various unskilled temporary jobs and had a short average job tenure (i.e. seven months). Their "wait-and-see" response was primarily driven by the fear of job loss, status as inexperienced newcomers, and feeling of powerless. Apprentices in this study had a median age range of 20-24 years, with some of them were in mature ages and had prior work experiences in other industries before joining the construction industry. The confidence and assertiveness demonstrated by apprentices in this study are likely to be associated with their age and past experiences.

Age and experiences of apprentices

Indeed, this study identified mature age and life experiences as characteristics of apprentices that had contributed to their confidence and fostered effective safety interactions with supervisors. Some of the mature aged apprentices reported that they had previous work experience in an environment where safety was emphasised, and that they recognised the value of not taking risks through past life experiences. They also mentioned that they had developed the communication skills regarding how to bring issues to supervisors from prior working experiences. However, apprentices also commented that not having confidence to speak up is a common challenge faced by younger apprentices, who are in a young age and have newly commenced their apprenticeship. Apprentices described a sense of vulnerability and insecurity by reflecting on their experience of first-year apprenticeship, when they were not familiar with the work environment and had not acquired work knowledge and skills to be confident. Supervisors' responses in relation to apprentices' confidence echoed apprentices' comments.

The finding suggests that confidence is a developmental phenomenon that is likely to increase with personal growth in age and experience. This finding is somewhat consistent with Turner et al. (2015), who identified variances in safety behaviours between age related subgroups within young workers. They report that older workers (19-25 years) demonstrated more safety voice, more safety compliance and less safety neglect than younger workers (15-18 years). Young workers aged 15-18 are a particularly vulnerable group, who are relatively new to workplace and feel less confidence associated with a lack of experience. A mature apprentice in this study did describe that "I don't think most 17-year-old apprentices would. I've never seen one of the younger blokes do it (raise safety concerns)". The result suggests that supervisors may need to pay close attention to this group of young workers, initiate conversations with them, and make sure they feel included in the workplace.

Safety competencies of apprentices

The study also shows that apprentices' confidence in performing 'voice' behaviours is linked to their safety competencies, reflected in their safety related awareness, knowledge and skills. Apprentices in this study indicated that they were able to identify hazards and had developed a good understanding of safety procedures and reporting process. Apprentices also demonstrated their competency in risk assessment and judgment, i.e. being able to identify what hazardous conditions can be mitigated by themselves and what hazardous conditions need to be escalated to their supervisors. The safety competencies described by apprentices in this study are aligned with the framework of core work health and safety competencies for young workers described by Okun et al. (2016). The framework was developed based on the Health Belief Model (HBM) and aimed to prepare young workers to be cognisant of workplace risks and controls and to equip them to participate in promoting health and safe workplaces (Okun et al., 2016). One key attribute associated with the framework is to address young workers' self-efficacy by providing the knowledge and skills needed to increase their ability to feel confident about performing safety and health practices in the workplace, such as recognizing and understanding the best ways to control workplace hazards and communicating with others (including people in authority roles) to ask questions or report issues. It is recommended that the framework is embedded in training programs provided to construction apprentices. Apprentices in this study did recognise the value of training in building their confidence in communicating safety issues with their supervisors, which will be discussed later. However, it is important to recognise that the ability for young apprentices to enact safety competencies is largely contingent on the work environment and can be enhanced or hindered by workplace social and structural factors (Okun et al., 2016).

Supervisors being approachable and receptive

Apprentices in this study recognised that one key quality of their supervisors that had made them feel confident and comfortable to raise safety issues is being approachable and receptive. The same quality has also been emphasised by supervisors interviewed in this study as an enabler for apprentices to speak up. This result is consistent with Zierold (2016; 2017), who found that that young workers are more likely to demonstrate positive safety behaviours if they perceive their supervisors to be approachable, easy to talk to, and good listeners. Indeed, research on supervisory safety communication has consistently identified the importance that workers feel they can talk openly, freely and comfortably to their supervisors about safety. Hofmann and Morgeson (1999) in the manufacturing sector showed that, when subordinates feel free to raise

safety issues and discuss safety problems with their supervisors, they develop a strong commitment and responsibility to maintain good safety performance, which subsequently reduces the number of accidents in their working units. Dejoy et al. (2010) argue that safety communication can be understood in the context of social exchange process. Social exchange engenders individuals' feelings of personal obligation, gratitude, and trust and is characterised by a norm of reciprocity (Blau, 1964). Based on the principle of social exchange, one party's favour would lead to another party's obligation to return with positive actions. In light of social exchange theory, positive safety information exchange between supervisors and workers may signal that supervisors care about the safety and wellbeing of workers (Michael et al., 2006), which in turn generates a tendency among workers to reciprocate with greater safety effort that even goes beyond a mere compliance with safety rules and procedures. For example, Kath et al. (2010) revealed that upward safety communication (i.e., subordinates feel comfortable in bringing safety-related information to their supervisors) generates subordinates' feeling of organisational trust, which then enhances subordinates' motivation to maintain a safe work environment.

Supervisors being open and responsive to safety voice

Apprentices identified that supervisors being open to safety voice and being responsive when issues are raised are important facilitators to effective safety communication between supervisors and young workers. Supervisors also described themselves as responsive by taking immediate action. Supervisors are in a position of authority to decide how employees' voice is treated and have the power to make changes in the workplace, therefore employees are likely to pay close attention to how supervisors respond to their concerns, opinions and suggestions (Detert & Burris, 2007). Supervisors' responses also have an impact on employees' subsequent voice behaviours. For example, Mullen (2005) reports that employees are more likely to speak out about safety issues when they perceive that their supervisors are receptive to suggestions and willing to take actions to resolve the issues.

Previous research also shows that supervisory responsiveness to employee voice has a significant impact on employees' self-perceived status (Janssen & Gao, 2015). Supervisory responsiveness refers to "the extent to which employees perceive their supervisors as fair, prompt, unbiased, willing to take action, and effective in dealing with their voice" (Janssen & Gao, 2015; p. 1857). Using survey data collected from frontline workers and supervisors in manufacturing organisations, Janssen and Gao (2015) report that supervisory responsiveness positively influences employees' perceptions of how they are valued and respected as a group member (i.e. self-perceived status), which in turn influence employees' subsequent voice behaviours. The same applies to young apprentices who are often placed in relatively low hierarchical positions at the workplace and are likely to be sensitive to supervisory responses. Apprentices are likely to feel that they are cared and valued when their work-related issues are appropriately responded by their supervisors. The positive exchange between apprentices and supervisors then may generate apprentices' sense of confidence and increased motivation to engage in voice behaviours.

In contrast, research shows that experiencing a supervisor who is not open to listening to safety concerns or not responsive can have a detrimental effect on young workers' health and safety experiences. Tucker and Turner (2015) report that supervisor openness to safety voice

moderates the relationship between young workers' safety voice and their experience of future workplace injuries. Even if young workers have high safety voice, they are likely to experience frequent injuries if their supervisors demonstrate low openness to safety concerns. Breslin et al. (2007b) shows that when young workers' concerns about work are silenced by their supervisors, the imbalanced workplace power relations lead them to feel a lack of control to improve the work conditions. Young workers are subsequently socialised to accept risks and injuries as part of their work and suppress their concerns about working conditions.

Interpersonal factors – apprentice and supervisor interactions and communication

Supervisors sending repeated messages about the importance of safety

The research results indicate that apprentices are motivated to comply with safety procedures, raise safety concerns, and ask questions if they perceive that their supervisors place a strong emphasis on safety through sending repeated messages about the importance of safety to them. This finding is aligned with previous safety climate studies, which show that when supervisors increase the frequency of safety-related topics or increase their verbal emphasis on safety relative to other objectives (e.g., productivity) in supervisor-member communication process, significant improvements in workers' safety climate perceptions and resultant safety behaviours are observed (Zohar & Luria 2003; Zohar & Polacheck 2014; Kines et al., 2010). It is through communication that workers make sense of and clarify supervisors' safety expectations.

However, supervisors' safety messages can be compromised if they are not sent consistently. One apprentice in this study described a scenario where she was asked to quickly grind some materials and she ran to her tool bag to get her safety glasses in order to work safely. However, her supervisor commented that "Oh, it's only one cut. You'll be alright". Repeating unambiguous safety messages across different conditions is particularly important, because workers observe the pattern in safety messages communicated by supervisors under different circumstances (especially when under production pressure) and ascertain the true priority that supervisors place on safety (Zohar & Luria, 2003).

Supervisors repeatedly communicating the importance of safety also demonstrates a strong and clear supervisor commitment to safety, which has been identified as an important determinant of young workers' safety voice intention (Turner et al., 2020). Using experimental scenarios, Turner et al. (2020) found that contrary to the conventionally held belief that young workers (15-24 years) are less likely to speak up about workplace safety concerns than older workers (24+ years), young workers actually demonstrate the similar level of safety voice intentions as older workers when a supervisor exhibits a clear safety commitment (i.e. it is clear the supervisor cares about safety and is open to hearing safety concerns). The result reinforces the significance of supervisors constantly and consistently emphasising safety in the verbal exchanges with young workers, which may increase young workers' intention to engage in proactive safety behaviours such as raising safety issues.

Supervisors being supportive and non-judgmental

This study has also identified that a key characteristic of effective safety communication between apprentices and supervisor is supervisor being supportive rather than being judgmental. This

finding resonates with Rhodes (2004), who maintains that a positive mentoring or supervision relationship entails a trustworthy personal connection that helps to create a non-judgmental and nonthreatening context where young people feel safe to express their thoughts and ideas. The importance of psychological safety in encouraging young people to speak up about safety issues has been demonstrated in a study by Tucker and Turner (2014). Through experimental designs, Tucker and Turner (2014) show that having experienced an injury or facing hazardous work conditions does not have direct effects on young workers' safety voice intentions. Instead, psychosocial safety (i.e. the belief that speaking up about safety concerns will be received by supervisors without hostility) is positively and significantly associated with young workers' safety voice intentions. Psychological safety also moderates the relationship between injury experience and young workers' safety voice intentions such that psychological safety drives high safety voice intentions in a low industry environment. The research evidence clearly points to the critical role of supervisors in creating a psychologically safe environment for young workers to comfortably raise safety concerns or ask questions.

This study also found that how supervisors respond to the mistakes made by apprentices is likely to impact the quality of safety communication between supervisors and apprentices. One apprentice described that his supervisor did not get angry or yell when he made a mistake. Instead, the supervisor would explain what the apprentice had done wrong and how to improve. This clearly shows that apprentices expect their supervisors to respond to their mistakes in a non-aggressive, non-judgmental and constructive way. Young workers are still in the stage of developing their work-related skills and experience, thus making mistakes tends to be inevitable during this developmental process (Cigularov et al., 2009). Mistakes can be important learning opportunities for young workers to acquire skills to work safely. Indeed, open communication about mistakes between young workers and supervisors has been highlighted as an important aspect of workplace accident and injury prevention strategies (Cigularov et al., 2009). Research also shows that promoting open communication about mistakes requires a positive workplace safety climate (Cigularov et al., 2009), which is characterised by supervisors' positive interactions with subordinates (Zohar & Luria, 2003) and their committed, constructive, and learning oriented approach to dealing with mistakes (Hofmann & Mark, 2006).

Engaging young workers through participative leadership behaviours

Apprentices in this study appreciated the participative leadership behaviours demonstrated by their supervisors. Participative supervisors engaged apprentices through consultation rather than direction. Apprentices felt that they were respected and included when they were engaged in work-related discussions and decision makings by their supervisors. Supervisory participative leadership behaviours can impact on subordinates' work performance through exchanged-based and motivational mechanisms (Huang et al., 2010). The exchange-based mechanism places an emphasis on the quality of relationship between supervisors and subordinates. In keeping with the exchange-based mechanism, a supervisor's participative leadership behaviour signals that they care about and respect apprentices, who then are likely to develop emotional bonds with the supervisor and reciprocate with trust. Apprentices' trust in supervisors encourages them to contribute to the problem solving and decision-making process. The motivational mechanism suggests that apprentices are likely to feel psychologically empowered when they are provided with opportunities to participate in decision making. Tucker and Turner (2013) identified the barriers for young workers to speak up about safety concerns as their feeling of powerlessness

in bringing about changes in the workplace and their supervisors being indifferent. Supervisory participative leadership behaviours are therefore expected to help remove the barriers for young workers to engage in positive safety communication with supervisors. Supervisors' participative leadership behaviours are also likely to develop apprentices' intrinsic motivations such as a sense of self-efficacy and self-worth (Huang et al., 2010), which may increase apprentices' confidence in positively interacting with their supervisors.

Organisational factors

Formal systems vs informal support for safety

Apprentices in this study described different approaches adopted in large and small organisations that have facilitated effective safety communication. Holte and Kjestiveit (2012) found that large organisations in Norway often have formalised systems (e.g. training and mentorship programs) for apprentices and new workers. The same has been found in this study, where apprentices from large organisations indicated that their organisations had safety management systems with formal procedures to engage them in safety communication. For example, they were offered formal safety training and inductions to learn safe practices, involved in reviewing and revising Safe Work Method Statement (SWMS), and provided the opportunities to take regular safety walks with supervisors. Apprentices also mentioned that large organisations had formal reporting processes in place and had designated safety personal (e.g. safety officers, safety representatives and safety committee) to manage safety issues that were reported. One apprentice also mentioned that their organisation initiated a safety program named "Zero Fatalities" to promote safe practices among workers. This type of safety initiative provides additional opportunities for apprentices to engage in safety communication and learning.

Apprentices from small organisations described informal personal-based approach to engage them in safety communication and learning. Within small organisations, safety is often directly managed by managers or owners. An apprentice in this study indicated that his supervisor was the owner of a small company. The supervisor worked side-by-side with the apprentice and provided close supervision and coaching to the apprentice to ensure that the apprentice always worked in a safe way. Apprentices can instantly get informal safety support from their supervisors when such needs arise. Within small organisations, with the absence of formal management systems, personal connection plays a critical role in ensuring that apprentices are adequately supported in terms of safety.

Time pressure

Apprentices in this study reported that time pressure sometimes prevented them from learning and being safe. They were likely to cut corners under time pressure to get the job done. One apprentice described a scenario where they installed roof trusses onto a two-storey house without any fall protection in order to work fast. It appears that the apprentice's supervisor did not stop the risky behaviours, which indicates that the cut-corner behaviours were acceptable to the supervisors. In fact, the apprentice did comment that although the supervisor did not verbally express that they had to work fast and get the job done (even in a dangerous way), he knew that the supervisor would "be pissed off if it wasn't done". The apprentice seemed to have accepted

the supervisor's expectation and agreed that "time is money". Previous research similarly found that when young workers talk about dangerous situations, working fast is often a part of the story, as well as a way to show their mastery of work conditions and to meet the expectations held by supervisors and co-workers (Neilson, 2012).

Young workers make sense of "the way we do thing here" and generally try to comply with established norms in the work environment (Neilson, 2012). Ultimately these norms are "internalised" and become the way young workers behave at work. In this way, young workers contribute to the process of reproducing the risk culture in the workplace as well as the process of ongoing construction of the notion of "acceptable risk" (Neilson, 2012).

It is acknowledged that time pressure is an inherent demanding character of the construction industry (Lingard & Wakefield, 2019). Addressing time pressure requires a systemic approach involving the whole supply chain and a fundamental cultural change in the construction industry. Despite of this, previous research indicates that supervisors can act as "gate keepers" of their local workgroups, i.e. in circumstances where organisational management indicates higher priority of production than safety, supervisors who demonstrate strong and effective leadership can still maintain high safety priority in their workgroups (Zohar & Luria, 2010).

Workplace hierarchy

Apprentices in this study expressed that their perceptions of workplace hierarchy exhibited their ability to communicate safety issues. A hierarchy is often designed around the levels of skill, experience and power (Einboden et al., 2021). Young workers, especially who are newcomers, usually position themselves at the bottom of workplace hierarchy and possess the least formal power for influence changes (Nielson, 2012). Young workers are likely to feel "otherness" and exclusion in a hierarchical environment, as one of the apprentices expressed that he did not want to intervene when he noticed something unsafe because "it's not our place". Similarly, Tucker and Turner (2013) reported that that the newcomer status and the sense of inexperience leads apprentices to develop feelings of powerlessness in raising safety concerns.

Apprentices' sense of exclusion resulting from workplace hierarchies reinforces the importance of participative leadership behaviours used to engage young workers and help them develop a sense of belonging and to feel valued and included in the workplace. Bakkevig Dagsland et al. (2015) suggest that workplace engagement is an important factor for apprentices to successfully socialise into their occupations and professions. Supervisors are able to influence the workplace norm and culture. It is important for supervisors to nurture a "caring" workplace environment, where experienced co-workers are encouraged to show support and concern to apprentices and facilitate apprentices to develop a sense of connectedness.

Workplace safety training

Apprentices in this study indicated that workplace safety trainings that they received equipped them to engage in safety communication with their supervisors. Supervisors also shared successful stories of safety training in developing apprentices' knowledge and skills. This highlights the importance that construction organisations provide effective and sufficient trainings for their apprentices to develop safety competencies. However, Laberge (2014) observes that

safety training for young workers is often developed on the assumption that young workers' attitudes and behaviours are the main cause of their injuries. These training programs often focus on one-way knowledge delivery, i.e. from a trainer to a trainee. It is acknowledged that providing young workers with safety-related information may be insufficient because, as newcomers to a workplace, young workers may lack the self-confidence or ability to transfer information gained during training into practice in the workplace (Nykänen et al., 2018). Many safety training interventions for young workers are predicated on the assumption that, once they are equipped to recognise health and safety risks in their workplaces, young workers will assert their rights and act to reduce their personal exposure to health and safety risks (Breslin et al, 2007b). Thus, young workers are expected to take on an 'internal responsibility' for their own health and safety that may be unrealistic, given their 'newcomer' status (Nyakänen et al., 2018). Although well-intentioned, Breslin et al. (2007b) suggest this approach is limited by young workers' self-confidence and practical ability to influence change in their workplaces.

There is an international trend towards training for young workers to go beyond the provision of information about health and safety risks or health and safety policies/procedures, and address issues such as self-advocacy and self-determination (Chin et al., 2010). For example, Chin et al. (2010) argue that "to reframe workers' expectations about injury on the job, youth need to be engaged in safety learning that questions their beliefs, rights and knowledge of self, and teaches them how to communicate with colleagues, employers, unions, and compensation agencies, as well as their family and friends" (p. 572).

A socio-ecological model to developing health and safety capability in apprentices has also been recommended. This acknowledges that, in order to support apprentices in learning work skills, appropriate resources and support in the work environment need to be factored into the design of apprentices' development experiences (Laberge et al., 2014). Laberge et al. (2014) also argue that it is difficult to distinguish health and safety skills from general job skills and therefore teaching young workers about health and safety does not constitute young workers' learning about how to work safely. More integrated approaches in which health and safety is deeply embedded in vocational training (rather than treated as a stand-alone module) are recommended.

7.2 Factors impacting communication about mental health and wellbeing

Intrapersonal factors - apprentice and supervisor characteristics and capabilities

Apprentices described a variety of experiences relating to communication about mental health and wellbeing in the workplace. Unlike physical safety, which apprentices perceive to be a legitimate and accepted topic of conversation in the workplace, there was considerable uncertainty in relation how and when and whether it is appropriate to talk about mental health and wellbeing with people at work.

The apprentices' willingness to initiate conversations about things that could potentially impact their mental health and wellbeing was heavily influenced by their own personal characteristics and those of their supervisors.

Apprentices' confidence and help-seeking

Both supervisors and apprentices described how new apprentices are often lacking in confidence and reluctant to ask questions in case they are made to feel silly. Supervisors and apprentices observed that this confidence is important to help apprentices to feel comfortable in their interactions with supervisors and other co-workers, but this can take time to develop. Apprentices observed that strategies to help them develop confidence more rapidly in the early stages of their apprenticeship would support them to ask questions and have an improved apprenticeship experience. In relation to this, one apprentice participant acknowledged that apprentices can get 'bad bosses' and, if this happens rather than accepting high levels of stress, apprentices need to have the self-confidence to take steps to change their situation, for example by seeking a new training employer organisation. Another apprentice suggested that supervisors talked to workgroup members before a new apprentice started and reminded them to be supportive and not to target the new apprentices in on-site humour. This is because humour could potentially damage the apprentice's confidence and be harmful to their mental health and wellbeing when the apprentice had not been exposed to the humour culture before.

Some apprentices described situations in which they had actively approached their supervisors to raise concerns about work-related issues that were causing them stress/distress. These apprentices were able to recognise their need for help and made a conscious decision to ask for this help. In qualitative research by Pagnoccolo and Bertone (2021), Australian apprentices noted that being aware of their own emotions, as well as those of other people, helped them to decide upon behaviours that were appropriate for a given situation. The apprentices also described using particular strategies to cope with frustration and resolve problems they encountered in the workplace. One such strategy involved making the conscious decision to speak up about issues of concern.

Previous research also shows that construction industry apprentices can better cope with school-to-work transition challenges if they have supportive mentoring relationships with "significant others" in their work and life domains (Corney & Du Plessis, 2010; Du Plessis et al., 2011). Workplace supervisors play a very significant role in apprentices' transition from school-to-work, as well as their development and learning. Being able to talk to and seek support from one's supervisor were considered to be very important by the apprentices we interviewed.

However, talking about issues that could impact mental health and wellbeing was also very dependent upon the perceived 'approachability' of a supervisor, as well as the extent to which the apprentices had confidence that their personal information would not be shared with others. One supervisor described the experience of how he encouraged his apprentices, who were having gambling, alcohol and drug issues, to seek professional help and told them that seeking help shows bravery instead of weakness. The 'approachability' of supervisors was a recurrent theme for apprentices when discussing their willingness to initiate conversations about issues that may have an impact on their mental health and wellbeing.

Supervisors' approachability

Supervisor characteristics that increased apprentices' perceptions of their 'approachability' included their general level of friendliness, and the extent to which they demonstrate empathy

and understanding of the apprentices' experiences. This empathy was often based upon supervisors' reference to experiences they may have had earlier in their own work or family lives or in reference to the experiences of their own children, indicating they understand the context within which young people live and work.

The development of a personal connection characterised by mutual trust and the sense that one is understood, appreciated and respected is an important feature of effective mentoring (Rhodes, 2004) and, in this case, supervisors' personal characteristics help to foster a non-judgmental environment in which young people feel safe when talking about personal issues that may be impacting their mental health and wellbeing. However, apprentices noted that care and sensitivity need to be shown by supervisors with regard to when and where they talk to apprentices about things that may be impacting their mental health and wellbeing. Initiating such a conversation with other workgroup members present was identified as being embarrassing and unhelpful.

Emotional intelligence

It is noteworthy that not all apprentices were comfortable talking about personal issues at work because they considered this to be inappropriate and/or that they had other people in their lives from whom they could seek help with issues, indicating that they considered conversations about personal issue could impact their mental health and wellbeing. It is important to recognise these individual differences and preferences and the supervisors we interviewed were conscious of the need to be concerned and provide an opportunity for apprentices to talk about things that could be impacting their health and wellbeing without prying and intruding too far into their personal lives.

One apprentice also described a situation in which they perceived their supervisor over-stepped boundaries in sharing very personal - indeed intimate and detailed - information about their own life in the expectation that this would be reciprocated. This caused the apprentice to feel uncomfortable in their work environment.

This observation relating to drawing appropriate boundaries in conversations about work and life with apprentices, reflects the need for supervisors to demonstrate high levels of emotional intelligence to understand, when, where and how much to talk about potentially important personal issues and being aware of and responsive to the emotional impact of these conversations.

Emotional intelligence refers to "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 189). It is also understood to have four components:

- the ability to identify and differentiate emotions in the self and others
- the ability to harness emotions to facilitate cognitive activities such as reasoning, problem solving, and interpersonal communication
- the ability to comprehend the language and meaning of emotions and understand the antecedents of emotions, and

• the ability to reduce, enhance, or modify an emotional response in the self and others, and the ability to make decision about the appropriateness and usefulness of an emotion in a given context (Brackett et al., 2011, p. 91).

Interpersonal factors - apprentice and supervisor relationships and communication

Sense of community

Apprentices frequently referenced positive and supportive interpersonal relationships with their supervisors as being like family. It was because supervisors treated apprentices 'like family' that the apprentices explained they felt comfortable initiating conversations about personal issues to their supervisors. Apprentices also explained that feeling that they are part of a tight close-knit community resembling family is an important factor in them feeling comfortable and sufficiently safe to initiate conversations about issues that may be causing them stress/distress. Sense of community has previously been described as 'a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together' (McMillan & Chavis, 1986, p. 9). In a workplace, community can act as an important resource through which workers' needs for belonging, influence, and connection are fulfilled (Boyd & Nowell, 2014; 2017) and is positively related to experiencing higher levels of mental wellbeing (Peterson et al., 2008).

The interpersonal relationships that fostered apprentices' feelings of belonging and trust that their needs would be met should they raise personal concerns were strongly related to supervisors' individual characteristics (already discussed). However, the apprentices also described how supportive interpersonal relationships also were strengthened by participation in joint social events and activities outside work. In some instances, apprentices described eating meals, including sharing Christmas celebrations, and participating in 'mental health mornings' during which their supervisors organised for group members to go surfing together. Such events were perceived by the apprentices as creating important opportunities for relationship-building and talking about issues that may be concerning them, as well as being directly beneficial in relieving pressures emanating from their work and non-work lives.

Positive and negative impacts of humour

Humour was a frequently raised theme when apprentices discussed their interpersonal relationships at work. Romero and Cruthirds (2006) define humour as consisting of 'amusing communications that produce positive emotions and cognitions in the individual, group or organisation' (p. 59). However, consistent with the findings of previous research, the use of humour in interpersonal interactions emerged as a 'double-edged sword' in the analysis of social interactions in the workplace. That is, it can have both positive and negative outcomes depending upon how it is used.

Research suggests that when it is appropriately used, humour in the workplace can have psychological and social benefits. Workplace humour is believed to enhance group cohesiveness, communication and creativity, as well as reducing stress (Romero & Cruthirds, 2012). In many instances the apprentices we interviewed described humour as having a positive effect in building social cohesion, relieving pressure and increasing their enjoyment of work.

However, the apprentices also acknowledged that it is possible for one party to find an exchange of humour funny, while the other party does not and, in some instances, humour can be offensive to others. The apprentices acknowledged that people need to be sensitive to boundaries and, apologise if these are crossed.

The comments made by apprentices also suggest a hierarchical nature to the humour they experience on site. In some instances, they described how younger workers are teased by older tradespeople when they work slowly or make a mistake. In a work environment, where differences in power and authority underpin social interactions, the use of humour is sometimes used as a socially acceptable 'cover' through which individuals can be criticised (Holmes & Marra, 2002). Humour can be used to maintain/reinforce the status quo, for example, when it is used to 'test' new members and ensure they understand the normative expectations of the group, as well as to rebuke or tease members who violate these norms (Fine & Soucey, 2005).

The apprentices dismissed humour as 'just a bit of banter' and suggested that, even if it taken too far, it is not intended to make people feel bad and can be resolved by explaining it was 'just a joke.' However, research shows that, even when no harm is intended by mildly aggressive humour (which includes teasing), the victims of teasing can experience substantial negative mental health impacts (Hogh et al., 2005). Derogatory teasing of people low in power or social status, such as those relatively new to a role, inexperienced or still undergoing education or training, can be oppressive and humiliating and is experienced as psychologically stressful (Mortensen & Baarts, 2018). When the perpetrator of teasing is a boss, supervisor or someone in a senior hierarchical position, the negative psychological impacts are greater (Huo et al., 2012) and the supervisor-worker relationship can be substantially damaged (Pundt & Herrmann, 2015).

The gendered nature of workplace humour was also observed in the apprentices' comments. Some male apprentices whose companies have anti-discrimination policies observed they feel the need to be more careful about what they say on-site when female co-workers are present because they could be reprimanded by their managers if they 'say the wrong thing.' Another female apprentice described how she was 'triggered' by a male co-worker challenging her about being a feminist in a jokingly but aggressive way. Some of the female apprentices we interviewed indicated that they actively participate in sharing 'sexual' humour in the workplace with their male co-workers. This humour was deemed acceptable to these female apprentices because it was not 'personal', i.e. targeted towards them. They also indicated that if their (male) co-workers took the sexual humour too far, they could tell them to stop and they would.

In one case the perspective of a male and female apprentice from one employer could be directly compared. The male indicated that, despite being initially concerned about working with a female apprentice, the female apprentice had fitted well into the team and enjoyed the workplace banter. In contrast, the female apprentices enjoyed her work but felt resigned to accept sexual humour and being referred to in gender-based derogatory terms as being part and parcel of working in a male-dominated construction site environment. In other words, rather than enjoying this humour the female apprentice tolerated it to pursue the work that she enjoyed. Watts (2007) similarly observed that women can experience humour as a form of exclusion, with joking and teasing being a form of 'othering' female workers. Sometimes this humour can be excessive, inappropriate and damaging. Watts describes how women are resigned to

experiencing this humour, feeling that they can do little to change the situation. However, this acceptance which includes 'laughing along' with the exclusionary humour, makes it difficult to establish different standards of conduct in a workplace.

Leadership

The supervisors we interviewed commented that it is important to be a good listener and cited examples of when listening to apprentices in a non-judgmental way had helped the apprentices overcome personal difficulties. Listening is an everyday activity that is often absent in leadership research, that tends to treat leadership as a 'special' type of behaviour rather than the mundane behaviour of engaging workers in conversation and spending a large portion of that time listening. Yet the participants on our study described the importance of making time for informal chats with apprentices and having an 'open door' policy that enabled apprentices to access supervisors when they needed, to talk about things of importance to them, whether these be matters arising at work or outside of work. Sometimes these informal conversations were facilitated by taking the apprentices out of the work context, for example, going surfing together. In other situations, supervisors described making themselves available for impromptu and unscheduled conversations with apprentices in the workplace, for example, during drop-in meetings or at mealtimes. Alvesson & Sveningsson (2003) describe how chatting, listening and, to some extent, being cheerful are important, yet somewhat mundane, features of effective leadership, that can create feelings of belonging, confidence and being respected and heard. In particular, the significance of being listened to by a supervisor who occupies a position of authority and power in the workplace hierarchy gives the mundane act of listening particular significance to workers and this was appreciated by the apprentices we interviewed. The apprentices described their positive interactions with supervisors who were easy to talk to, made themselves available and who talked and listened to them respectfully like they were 'on the same level.'

A number of apprentices identified interactions with their supervisors that reflect elements of abusive leadership and explained that these behaviours act as barriers to effective communication about issues that could impact their mental health and wellbeing. One apprentice described a situation in which they were told by co-workers that an unpleasant job assignment was 'punishment' for taking time off following a family bereavement. The allocation of unpleasant work coupled with the supervisor telling the apprentices' co-workers about the 'punishment' was experienced by the apprentice as a betrayal of trust. This apprentice indicated they would be unlikely to approach their supervisor to ask for support with personal of family-related issues in the future. This supervisor's punitive responses reflect the following abusive leadership characteristics:

- · dealing dirty work as punishment
- blurring the lines between professional and personal
- talking behind workers' backs (Starratt & Grandey, 2010).

Not only is abusive leadership likely to act as an impediment to effective communication but abusive leadership behaviour has been directly linked to young workers' experience of anxiety both inside and outside of the workplace (Starratt & Grandey, 2010). This means that workers who experience leadership behaviour that is abusive, such as being given unpleasant work

assignments as punishment or being talked about behind one's back, may suffer adverse mental health experience but also feel themselves in a position where they cannot seek help from the workplace.

Respect, incivility and aggression

The presence or absence of respect in interactions with supervisors was a common theme emerging from the interviews with apprentices.

Respect in the workplace has demonstrated positive outcomes for the individual, the group, and the organisation. Bies and Moag (1986) define respect as being treated politely, while disrespect includes inconsiderate actions, use of abusive language, and coercion (Grover, 2013). In the workplace respectful treatment is often seen as a component of organisational justice, which refers to 'employees' perception of fairness in the organisational work systems and workplace relationships' (Pattnaik & Tripathy, 2019, p. 58). One important facet of organisational justice is interactional or interpersonal justice which is closely aligned with respect and is defined as the 'appropriateness of the treatment one receives from authority figures' and 'treating an employee with dignity, courtesy, and respect' (Cropanzano et al., 2007, p. 36).

All of the apprentices and supervisors we interviewed identified respectful interaction as an important element of supportive supervision. Some of the apprentices we interviewed described their supervisors as being very respectful in their interactions with apprentices and this was identified as an enabler of communication about things that could potentially have an impact on mental health and wellbeing. These apprentices described their supervisors as being patient and willing to spend time showing the apprentices how to perform a task if they did not master this first time. This coaching and supportive leadership style was appreciated by the apprentices. Respectful interactions between supervisors and apprentices is important because recent Australian research shows that disrespectful communication, criticism, ridicule and difficult relationships operate as barriers to workplace learning among apprentices (Einboden et al., 2021).

However, some of the apprentices we interviewed indicated that they had observed or directly experienced incivility and/or aggressive behaviour in the workplace. Consistent with the findings of Einboden et al. (2021) some apprentices we interviewed indicated they are yelled at by their supervisors, or by the supervisors of other employers engaged at a worksite. Often this was the result of supervisors becoming angry and venting this anger when workers made mistakes. This can be damaging to workers' health and wellbeing, particularly if apprentices are singled out as the target, while other workers in the workplace are not treated in this way (Huo et al., 2012). Incivility and aggression were also common themes in another recent study of Australian apprentices (Einboden et al., 2021). Einboden et al. (2021) report that apprentices are often subjected to overt and covert forms of abuse and psychological aggression which is linked to their mental ill-health and attrition. Previous research has shown that workplace aggression is significantly related to job satisfaction, affective commitment, intention to turnover, general health, emotional exhaustion (burnout), depression and physical wellbeing, interpersonal deviance, organisational deviance and performance (Hershcovis & Barling, 2010). However, the negative health and wellbeing impacts of workplace aggression are greater when the source of the aggression is a supervisor. Hershcovis and Barling (2010) suggest that aggression from

one's supervisor induces high levels of fear and anxiety because their position of formal power enables them to control important resources, including work assignments, pay, job security and career development. For apprentices who already perceive themselves to be situated at the bottom of a rigid workplace hierarchy that is based on skill, experience and power, the harmful impacts of workplace aggression are likely to be substantial (Einboden et al., 2021).

Within some construction workplaces, our interview results suggest incivility and aggressive interactions are normalised. For example, one apprentice described the situation at his worksite as being one in which workers were routinely yelled at. However, the apprentice perceived that, unlike his co-workers, he was treated respectfully by his supervisor because he had not been yelled at in the 18-month period during which he had worked at the training employer organisation. He believed this was because he was still an apprentice and, therefore, his supervisor was more patient with him than he was with other more experienced workers. The 'fine line' between what is considered to be aggression and what is considered to be humour was also evident, aggressive behaviour was described by one apprentice as being 'all in good fun.'

A supervisor in a relatively small organisation explained that he could not talk to apprentices (or other workers) about personal issues because in the work environment in his role as the 'boss' he needed to yell at them. The perceived need to use an aggressive communication style in the workplace was seen by this supervisor as a critical barrier to being able to talk with apprentices about personal matters that could impact their mental health and wellbeing.

Organisational factors

Formal versus informal mental health programs

While protocols and mechanisms to engage in communication relating to physical safety on site were often established in employer organisations' work health and safety management systems, apprentices described less formality in relation to the way that organisations encourage or manage communication relating to mental health. This is an important consideration because previous research shows that young workers, particularly in the construction industry, are a high-risk group for poor mental health (Milner et al., 2017; Pidd et al., 2017). Despite this, apprentices and supervisors indicated that few training employers provided formal mental health programs and many of the supports available were informal and driven by individual supervisors' relationships with their apprentices.

However, in some organisations more formal programs were in place and appear to be very effective in encouraging and enabling apprentices to manage work and personal life issues that have the potential to harm their mental health. These programs included providing a formal mentoring programs, providing access to counselling services and providing employees with training, such as mental first aid training provided by organisations such as Mend Services and suicide prevention training provided by Mates in Construction. The supervisors we interviewed described how this training had given them greater confidence in being able to initiate conversations with apprentices, and other workers, if they believed they were experiencing personal difficulties or emotional distress. This confidence was increased by the knowledge that they could ask whether someone is okay without taking on the role of a counsellor themselves.

Understanding the limitations of their role and the importance of connecting young workers with appropriate professional services was a crucial component of supervisors' feeling prepared and able to initiate a conversation with a worker in relation to their mental health.

The introduction of formal programs is important because evaluation research shows that that training/peer support programs, such as Mates in Construction, are effectively changing attitudes towards mental health and help-seeking behaviour (Ross et al., 2020). Furthermore, in a comparison of the effectiveness of the Mates in Construction program by age, young male construction workers engaged in manual construction roles had poorer suicide prevention literacy before engaging with the Mates in Construction program compared to older workers or workers in professional/managerial roles. However, following their participation in the Mates in Construction program, these young male workers reported higher levels of improvement in suicide prevention literacy compared to older workers or those in professional/managerial roles (King et al., 2019). The younger workers were also more likely to consider mental health to be a workplace health and safety issue than older workers (King et al., 2019). Taken together, these findings suggest that the delivery of formal interventions delivered in a workplace setting present an opportunity to better protect mental health among young construction workers.

The findings reveal a difference between the types of support available for apprentices in larger compared to smaller construction firms. As with management processes related to physical safety, organisational programs focused on mental health and wellbeing tended to be more formalised and linked to human resource management policies in larger construction organisations. In smaller organisations the supports were more based upon informal supports provided at the worksite, typically at the discretion of the business owner/manager. These informal work-life supports that were provided on an "as needs" basis often in response to personal or family issues experienced by the apprentices. However, it is important to note that apprentices' willingness to approach their supervisors to request time off to deal with personal issues is very much dependent on the extent to which the supervisor is perceived to be supportive and the nature and quality of interpersonal relationships and communication between the supervisor and the apprentice.

Time pressure and long work hours

The apprentices observed that time pressures inherent in project-based construction work impact the extent that they observe safe working practices. However, time pressures were also apparent in apprentices' observations about being able to talk to their supervisors about issues with the potential to impact their mental health and wellbeing. When describing a positive supervisor experience, apprentices repeatedly referred to the approachability of their supervisors and their willingness to make time for one-on-one conversation with the apprentice. Similarly, the supervisors we interviewed identified being a good listener and creating opportunities for apprentices to talk with their supervisors as being important in helping apprentices to manage issues that could impact their mental health and wellbeing. However, one apprentice we interviewed believed that, if they tried to talk to their supervisor about personal issues, their supervisor would be dismissive and not engage in conversation due to time pressures and workload. This apprentice described having a series of personal difficulties that he needed to resolve but indicated that his supervisor was reluctant to let him take time off without pay to

manage these things. This reluctance was due to project time pressures and the need for the apprentice to keep working.

Work hours in project-based construction work are long and weekend work is often standard practice. Soderlund (2005) acknowledges that the work of project managers involves putting pressure on project participants to ensure timelines are met, which can create the feeling that project-based work is "constantly under time pressure" (p. 384). Furthermore, when unexpected project events threaten time-related goal attainment, workers experience this as stressful (Gällstedt, 2003). Limited time resources impact project workers' wellbeing (Nordqvist et al., 2004) and create psychological distress (Zika-Viktorsson et al., 2006). Unexpected delays can also contribute to an intensification of work, increase required work pace and can have a damaging impact on workers' health (Tüchsen et al., 2005). Long work hours have been reported to impact the health and wellbeing of Australian apprentices, with many apprentices working 12 hours per day, six days a week and sometimes commuting long distances. These long hours negatively impacted their ability to engage in non-work activities, such as sport or leisure and contributed to poor diet and sleep patterns (Einboden et al., 2021). The work hours required of apprentices was identified by one supervisor as a critical factor that can potentially impact their self-care. This supervisor commented that apprentices work 'pretty big hours' and, if they have personal issues to deal with, it is preferable for them to take time off to deal with these issues, rest and recover so that they can return to work in the right 'headspace' to work safely.

Workplace culture

The findings suggest strongly entrenched aspects of workplace, organisation and even industry cultures shape, and in some cases perpetuate unhelpful patterns of communication, particularly in relation to aggressive interactions and the prevalence of sexual and/or teasing-based humour.

The hyper-masculine culture of the construction industry has previously been reported to discourage young workers from seeking help, which is potentially very harmful at a time when these workers are transitioning into adulthood and reducing their emotional and financial dependence on family (lacuone, 2005). Einboden et al. (2021) also describe how Australian apprentices in male-dominated workplaces experience an inability to discuss feelings due to the need to comply with prevailing norms relating to masculinity.

7.3 A model of factors facilitating effective communication and support

Based on the interview findings and discussions, a model of factors facilitating effective communication and social support between apprentices and supervisors was proposed drawing on the social ecological perspective, which is shown in Figure 7.1.

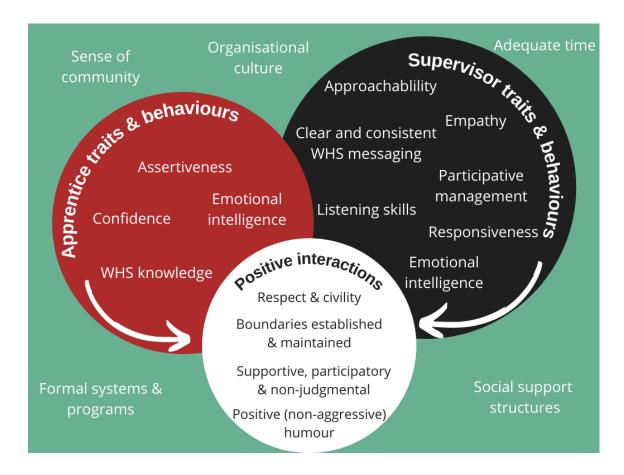


Figure 7.1: Model of factors facilitating effective communication and social support

Apprentice characteristics

Effective communication between apprentices and supervisors is dependent upon characteristics, traits and behaviours of individual apprentices and supervisors. Interview participants identified confidence as an important factor enabling apprentices to actively engage in conversations about life, health and safety, but acknowledged that apprentices sometimes lack confidence in the early stages of their apprenticeship. The development of confidence and willingness to raise work health and safety concerns, ask questions and/or talk about issues with the potential to impact mental health was identified as something that develops as an apprentice progresses through the stages of their apprenticeship. However, the development of this confidence is also likely to depend upon the extent to which the social context of work is supportive.

The knowledge of apprentices in relation to work health and safety was identified as an important factor facilitating their health and safety 'voice' behaviour, highlighting the importance of the integration of health and safety content into technical/skills training. However, it is important to acknowledge that the ability of apprentices in transferring work health and safety knowledge acquired from training is influenced by the social and structure factors in the work environment, for example support and resources.

The emotional intelligence of apprentices was identified as an individual characteristic that supports effective communication. Being aware of their emotions and the emotions of others enables apprentices to recognise when they might need to seek help, as well as to understand and identify strategies to deal with difficult social situations, for example when faced with challenging interpersonal behaviour. Being emotionally intelligent also helps to identify the appropriate time and place to initiate a conversation and understand how to draw a line and manage boundaries between work and personal matters in communication.

Supervisor characteristics

Supervisor characteristics that enable effective communication between apprentices and supervisors include being approachable. An approachable supervisor is perceived to be receptive, friendly and 'easy to talk to'. Apprentices indicated they were more likely to talk to their supervisors about personal issues with the potential to impact their mental health and wellbeing when they believed their supervisors understood them. The supervisors we interviewed indicated that they deliberately sought to demonstrate empathy towards their apprentices and did this by talking about their own experiences, either in parenting young people or in their own early stages of career development.

Supervisors' ability and willingness to actively listen to apprentices' concerns was identified as being important to enabling effective communication. Active listening involves making time, paying careful attention to what is being said and withholding judgment.

Apprentices indicated they would be more likely to raise work health and safety concerns or ask questions if the supervisor clearly and consistently talked about the importance of workplace health and safety. This clear and consistent work health and safety messaging conveys a supervisors' commitment to maintaining healthy and safe ways of working and gives apprentices confidence that, if they raise a workplace health or safety issue, this would be met with a positive response from their supervisor.

A participative management approach was favoured by the apprentices we interviewed, who felt valued and respected when their input into workplace decision-making was sought by supervisors. In some instances, supervisors described how they deliberately use workplace events as learning opportunities. For example, when a safe work method statement needs to be reviewed in the context of a changed work environment, one supervisor described how he asks his apprentices what changes should be made, using this as a way to develop their problem-solving skills and to impart knowledge and advice about how he would tackle the situation. Asking for input and encouraging suggestions from apprentices not only facilitates effective communication but also is a key component in promoting their learning.

As with apprentices, emotional intelligence was identified as an important attribute for supervisors. Emotionally intelligent supervisors would be able to identify if and when workers may not be their usual selves and be able to identify an appropriate time and way to initiate a conversation and offer support. Emotional intelligence is also important in understanding boundaries in conversations between personal and work life and, in particular, respond to different workers' levels of comfort in relation to where this boundary should be drawn. For

example, some apprentices indicated they preferred not to talk about their non-work life with their supervisors.

Characteristics of effective and supportive interpersonal interaction

The extent to which communication is respectful, civil and not aggressive in nature was identified as being important. Some of the apprentices we interviewed described their supervisors as always respectful in their communication, while others described situations in which they or other workers were yelled at for making mistakes. Disrespectful or aggressive communication in the workplace is linked to facets of psychological distress but it is also likely to act as an impediment to apprentices feeling sufficiently comfortable to open up and seek help from others.

Effective communication is also dependent upon both parties being able to understand, respect and maintain one another's boundaries relating to conversation content (i.e. work and personal life). Supervisors described how, if they observed an apprentice was 'not right' they would ask if they were okay. However, the supervisors also described being able to judge when to stop a conversation if the apprentice clearly did not want to talk. Understanding the difference between demonstrating concern and asking about an apprentice's wellbeing and prying into the apprentice's personal life was identified by the supervisors as an important communication skill. Also, being able to recognise and avoid topics that are deeply personal and 'off limits' was important for both apprentices and supervisors. It is important to note that supervisors and apprentices varied in their levels of comfort in talking about non-work life. For some supervisors, sharing experiences of their own personal difficulties was seen as being a helpful way to initiate a supportive conversation with an apprentice. However, other supervisors believed that showing apprentices their own vulnerabilities would potentially undermine their status as 'the boss'.

Boundaries were also described in relation to the use of humour in supervisor-apprentice interactions (as well as interactions with other workers on-site). The apprentices all described how banter and joking was a common feature of their work environments. This humour was generally regarded as a positive element of workplace interaction. However, some apprentices described humour as sometimes 'crossing the line', for example in relation to sexual inuendo. Humour could also involve teasing or ridiculing workers when they made mistakes. This is potentially damaging to mental health and wellbeing, even if the humour is well intended. Engaging in joking activity that is positive and affiliative and not offensive or aggressive, was identified as being important to effective and supportive interaction between apprentices and others in the workplace.

Lastly, apprentices were more likely to open up with their supervisors if they raise health and wellbeing needs and the needs are supported by supervisors. Apprentices identified various forms of support received from their supervisors, including providing leaves and allowing flexible work time to accommodate apprentices' family need. However, one apprentice also described that his supervisors responded negatively when he spoke about his health and wellbeing needs, which eroded this apprentice's trust in his supervisor's ability to respond to his needs. Being non-judgmental helps to create a psychologically safe environment for apprentices to seek help or ask questions about how to perform a work task safely. In addition, some apprentices described their supervisors as participatory in that they engaged them in workplace problem solving and decision making, which also facilitated an expansive apprenticeship experience. Expansive

learning opportunities enable apprentices to not only feel included and professionally respected but also achieve better learning outcomes.

Organisational or work-context factors

This sense of community perceived by apprentices was identified as enabling effective communication between apprentices and supervisors. Many of the apprentices we interviewed described their relationships at work, including with their supervisors as being 'like family.' In this context, their supervisors were seen and also encouraged other workers to care about and look out for apprentices as would an older sibling or parent. Some supervisors described how this is fostered by participating in social activities outside work, sharing meals and going surfing together. The shared activities outside work provide opportunities for non-work-related conversations to occur, and also help to relieve work-related stress and build social cohesion.

Apprentices and supervisors also described the importance of formal systems and programs in facilitating communication and support for apprentices in managing life, health and safety. In relation to workplace safety, apprentices were clear about workplace policies and procedures for how to work safely and how to raise concerns should they arise. However, policies and procedures were less well established in relation to dealing with issues relating to managing issues that could potentially impact mental health and wellbeing. A number of employer organisations, particularly larger firms, had formal mentoring programs or had implemented training programs relating to mental health and/or suicide prevention. The supervisors we interviewed explained that participating in these programs had provided them with confidence about how to initiate a conversation with a worker and how to best support them by suggesting or providing access to professional support services. Formal programs were less common in smaller organisations but in these smaller organisations, closer interpersonal relationships and informal supports were identified as being critical in supporting apprentices.

Time constraints associated with productivity pressures were identified as being an impediment to effective and supportive conversations between apprentices and their supervisors. Some apprentices described their supervisors as being constantly under time pressure and not having time to engage in conversation. However, other apprentices described patient supervisors willing to spend time with the apprentice and listen to them if they initiated a conversation. Supervisors described the need to make time to enable apprentices to talk to them, deliberately finding times during rest/meal breaks to catch up with apprentices and create opportunities for conversation to take place.

The availability of a positive culture and broader social support structures within an organisational environment was identified as being important to apprentices' general wellbeing and satisfaction with the apprenticeship experience. An organisational culture that promotes openness and nurtures a 'caring' attitude is conducive to effective communication and support at the workplace. The social support structures in an organisation extend beyond the relationship with the individual supervisor and can include accessing advice from experienced tradespeople or mentors (other than one's immediate supervisor). Importantly, characteristics of the workplace setting are also very important to apprentices' sense of self-efficacy and achievement. Apprentices are more likely to feel supported and valued in workplace settings in which learning is nurtured and training employers respect apprentices' primary reason for being at the

workplace, i.e. to develop a broad range of transferable competencies. A number of the supervisors we interviewed described how they deliberately try to provide an expansive learning experience for apprentices, in which apprentices are asked to contribute to problem-solving. This made apprentices to feel that their broader personal learning goals were being supported by their supervisors, which contributed to a positive working relationship and high levels of apprentice satisfaction. However, some apprentices we interviewed felt that they were not given a sufficiently broad range of activities to develop the skills they would need in their future careers, and they were frustrated by this. The extent to which the apprenticeship experience is nurturing, supportive and expansive is also likely to be linked to the training employers' broader positioning and motivation for taking on apprentices. In construction organisations with a strong commitment to vocational development and social sustainability, support structures for apprentices are known to be stronger than in companies with a narrow focus on meeting immediate operational needs (Buchanan et al., 2016).

The interactive relationships between the three levels of factors

Factors operating at each of these three 'levels' are not independent of one another but are inter-related in many ways. For example, being able to understand and maintain appropriate boundaries in communication (an interpersonal interaction factor) was highly related to the emotional intelligence of both supervisors and apprentices (an individual characteristic). It is also important to note that positive and supportive interpersonal interactions between supervisors and apprentices are embedded within the broader support structures within an organisational context. The workplace contextual factor of a sense of community in which people feel valued and supported, is likely to shape the tenor and nature of social interactions. Further, time pressures inherent in project-based construction work can also act as an impediment to effective and supportive social interaction between supervisors and apprentices. There is a need to develop strategies at an organisational level to create the context in which effective and supportive communication can occur, as well as developing the skills and abilities of apprentices and supervisors to understand and engage in social interactions that help to protect apprentices' health, safety and wellbeing at work and in their non-work lives.

Part 8: Conclusions and next steps

The Stage 1 qualitative research collected data from 30 apprentices engaged in the Master Builders (NSW) apprenticeship scheme, as well as 11 supervisors of construction apprentices. The data was systematically analysed to address the following three objectives:

- 1. to understand the way that supervisors and apprentices talk about life, health and safety,
- 2. to identify the characteristics of supportive interaction and supervision of apprentices, and
- 3. to identify organisational or context-related drivers of conversation failure (e.g. time pressure, lack of support etc).

A social ecological approach was used to identify factors influencing the nature and quality of communication between apprentices and supervisors. Proponents of a social ecological perspective argue that some individual or environmental conditions have a disproportionately high level of influence on individuals' health and wellbeing (Grzywacz & Fuqua, 2000). This means that health promotion interventions should be designed to address the most effective leverage points within these interacting systems that make up an individual's social environment (Kok et al., 2008).

McLeroy et al. (1988) suggested that intervention strategies for health promotion can be developed at each of the levels in the social ecological model. Furthermore, the level of the model best suited for the intervention will depend upon the individual and/or environmental change the intervention is designed to bring about. Golden and Earp (2012) suggest that interventions at the intrapersonal level aim to change individuals' knowledge, beliefs and skills. Interpersonal and institutional level interventions focus on changing social relationships and the organisational environment.

The findings of Stage 1 revealed that the quality and supportiveness of communication between apprentices and their supervisors is influenced by a number of intrapersonal traits and behaviours (of both apprentices and supervisors), as well as characteristics of the interpersonal interactions that occur between apprentices and supervisors.

Intrapersonal traits and behaviours identified as being important for apprentices include being assertive, having self-confidence, possession of work health and safety knowledge and having emotional intelligence.

Intrapersonal traits and behaviours identified as being important for supervisors include approachability, empathy, demonstrating clear and consistent messaging in relation to work health and safety, being a good listener, being responsive, using a participative management style and having emotional intelligence.

Characteristics of effective and supportive interpersonal interactions between apprentices and supervisors identified in the Stage 1 qualitative study include engaging in civil

and respectful communication, using positive (non-aggressive) humour, understanding and maintaining appropriate boundaries when communicating about work and personal life, and engaging in communication in a supportive, participatory and non-judgmental way.

The finding of Stage 1 will be used to inform the design and development of an intervention focused on these intrapersonal traits and behaviours and the nature of interpersonal interactions. The aim of intervention is to improve the quality of communication between construction apprentices and their supervisors in the construction industry of New South Wales in ways that better protect apprentices' health and safety at work and in life outside work.

Drawing on the social ecological framing of our Stage 1 findings, this intervention will specifically seek to improve the intrapersonal communication-related traits and behaviours of both apprentices and supervisors, as well as the interpersonal communication that occurs between supervisors and apprentices. That is, the intervention will specifically focus on the first two levels of the social ecological model shown in Figure 4.1., i.e. intrapersonal factors and interpersonal processes.

However, the findings of the Stage 1 analysis also reveal important workplace/organisational factors that act as environmental barriers to effective apprentice-supervisor communication (i.e. factors operating at the third level of the social ecological model).

While these will not be the target of the intervention to be developed in Stage 2 of the project, they are identified in the Stage 1 analysis as areas for organisational intervention that would create a workplace/organisational context that would enable more effective communication between apprentices and supervisors.

These will be written up into a research to practice guidance document for dissemination to employing organisations considering taking apprentices into their businesses.

In Stage 2 of the research, the communication intervention will be developed and implemented in the Master Builders Association (NSW) cohort of apprentices. A randomised controlled trial research design will be used to rigorously evaluate the impact of the intervention in improving communication about life, health and safety between apprentices and their supervisors.

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Appendix A: Apprentice Interview Protocol

Demographic and Intro/Icebreakers

- 1. To get started, I was wondering if you could tell me some basic info about yourself:
 - (i) How old are you?
 - (ii) Which gender do you identify yourself as?
 - (iii) Are you of Aboriginal or Torres Strait Islander Heritage?
 - (iv) What language do you speak at home? (probe: what's your ethnic background)
- 2. And now can you tell me a little more about what you do for your apprenticeship:
 - (i) What's your job role on this site?
 - (ii) What main tasks do you do on this site?
 - (iii) Is your host employer building or civil? If building, private or commercial?
 - (iv) How long have you been working there/here?
 - (v) What stage are you at in your apprenticeship?
- 3. What's it like working there/here? (Probes: Do you enjoy working there? Why/why not?)

Workplace Health and Safety

Transition script: now I am going to ask some questions about your workplace experiences.

Physical dimensions

- 4. If you see something unsafe on site, what usually happens? Probes: can you give me an example? Did you do anything about it? (Yes what did you do? No why not? Why didn't you say anything?)
- 5. Have you had any close shaves/encounters on site? What happened?
- 6. Who gives you training and guidance about how to work safely? Do you think it keeps you safe?
- 7. What about your supervisor? (Probes: Does your supervisor show you how to do things safely? Do they check how you're going?)

Mental/psychosocial dimensions

- 8. What's the banter like on site? What do you think about that? How does it make you feel/Has that impacted you mentally/Did that upset you/Has that kept you awake at night?
- 9. Do people ever get aggressive on site? Probe: Does anyone get yelled at? What's that like? Has that impacted you mentally/Did that upset you/Has that kept you awake at night?
- 10. Have you experienced anything else stressful on site? If that happens, what do you usually do? (Other potential probes: Have you talked to anyone about it? Did you talk to your supervisor? How can you be supported? Has that impacted you mentally/Did that upset you/Has that kept you awake at night?)
- 11. Do you feel respected at work? Do you feel included? Why's that?
- 12. What's it like for women on site? What do you think about that? How does it make you feel? (Probes: how are women talked to? Are they called "cupcake" or "Sheila"?)
- 13. If things aren't going well for you, who would you be most comfortable talking to? Why's that?

Relationship with Supervisor

Transition script: now I'd like to ask you a bit about your supervisor and communication with them.

14. How would you describe your relationship with your supervisor? Why do you say that? How long have you worked with your supervisor?

Communication with Supervisor

- 15. What do you normally talk about with your supervisor? Have you ever talked about personal issues with your supervisor? What/Why not? (Probe re: distinction between what can talk to friends, family, co-workers about versus supervisors)
- 16. Has your supervisor ever approached you to see if everything's going okay?

Challenges and support

- 17. Is there anything stressful going on in your life right now? (If no, has there ever been anything stressful that you've had to deal with?) What helps you feel supported when this type of thing happens?
- 18. What challenges do young apprentices face? What can be done to help?

Closing

Transition script: We've just about finished the questions. Before closing, can you tell me:

- 19. Why did you decided to do the interview?
- 20. Is there anything else you'd like to share with me about what we've discussed (Probe: either thoughts on workplace health and safety, your relationship with your supervisor, or challenges you're facing?)

Appendix B: Supervisor Interview Protocol

Reiterate thanks for making time to do the interview; be sensitive to time constraints, possible interruptions while interview underway.

Intro/Icebreakers

- 1. To get started, I was wondering if you could tell me a bit about what you do here. Probe: What is your job role on the site? What does that entail? How long have you been working here/at this site?
- 2. How long have you been in the industry?
- 3. How many people do you supervise here? How many of them are apprentices? [If this information is not available beforehand via MBA]

Workplace Health and Safety

Transition: So, as you know, one thing we're interested in talking to you about is your experience of workplace health and safety.

- 4. I was wondering if you could think of an example when something unsafe happened on site. How did you deal with it? (Probe: who did you talk? How did they react?)
- 5. What do you do if an apprentice comes to you about something unsafe on the site? What usually happens?
- 6. Do you think you have everything you need to help your staff work safely here? (Probe: equipment, training, knowledge, time? Probe: does anything put pressure on the ability to work safely here?)

Relationship with apprentices/Health, wellbeing, and communication

Transition: Alright, we just have a few more questions before we're finished. These ones are about you and your apprentices.

- 7. How long have you been supervising the apprentices here? Apprentices in general?
- 8. How is going with your apprentices?
- 9. What do you think are the big work, life, and wellbeing issues for apprentices like yours?

- 10. What sort of things do you talk about with them?
- 11. Are there things that are easy to talk about? Are there things that are hard to talk about?
- 12. Is there anything that you think is off limits (probe: mental health?)?

Closing

13. Before we close, is there anything else you'd like to add about what we've discussed?

Thank participant for his/her time and willingness to share his/her experiences.