

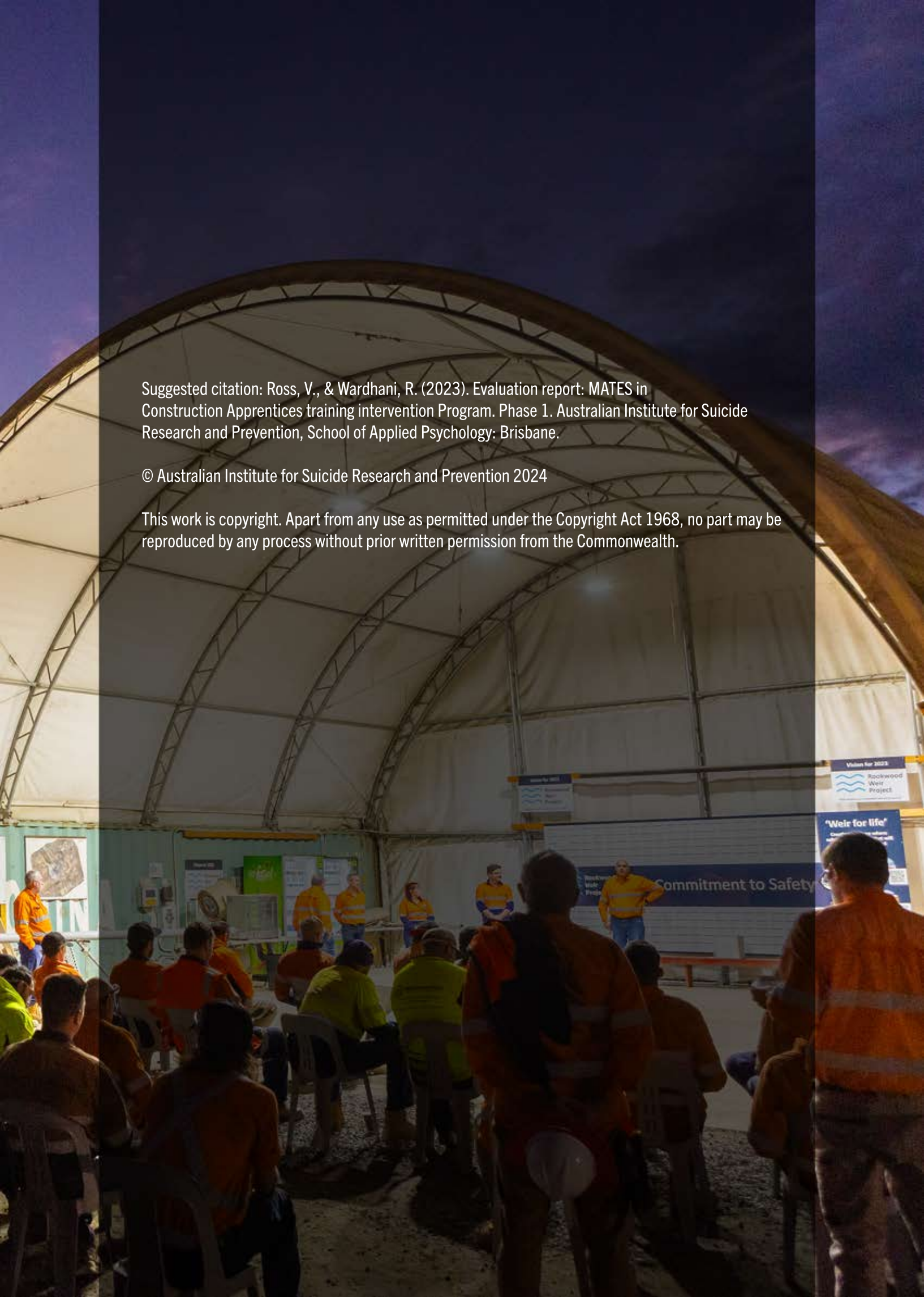


EVALUATION REPORT: MATES IN CONSTRUCTION APPRENTICES' TRAINING INTERVENTION PROGRAM PHASE 2

REPORT BY THE AUSTRALIAN
INSTITUTE FOR SUICIDE RESEARCH
AND PREVENTION (AISRAP),
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IN CONSTRUCTION

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A nighttime photograph of a city skyline reflected in water. A prominent bridge with red lights spans the water, and several buildings, including a tall skyscraper, are illuminated. The water shows a purple and blue light reflection.

EXECUTIVE SUMMARY

This research reports on the results of the Phase 2 evaluation of the MATES in Construction Apprentices' Training Intervention Program. To address industry concerns about bullying and poor mental health in construction industry apprentices, MATES developed a threefold intervention program for apprentices and the wider industry. The program is comprised of Toolbox, Supervisor, and Apprentices' resilience training. The Australian Institute for Suicide Research and Prevention (AISRAP), in close collaboration with MATES developed a two-Phase evaluation strategy for the training.

The Phase 2 evaluation builds on the positive research findings from Phase 1 by refining the evaluation survey measures to ensure a robust evaluation strategy for the MATES Apprentices' training programs. The inclusion of new validated measures such as Transformational Leadership for the Supervisor training, and Psychological Capital and Affective Organisational Commitment for the Apprentices' Resilience training evaluation surveys allowed for the capture of further valuable data relevant to the training sessions. This data is not only important for assessing the effectiveness of specific aspects of the training programs, but also provides a baseline measure against which to compare cohorts of trainees in the future.

As with Phase 1, the results of Phase 2 provide strong evidence for the effectiveness of all three training programs in improving construction workers' awareness, knowledge and attitudes relating to bullying, mental health, and suicide in the workplace. Statistically significant improvements were seen from pre- to post-training on all the survey questions for both the Toolbox and Supervisor training evaluation, and for the majority of questions for the Apprentices' Resilience training evaluation.

Given the well-established issue of poor mental health and suicidality within the construction industry (Andersen et al., 2010; Milner, Niven & La Montagne, 2014; Ross et al., 2021), it will be imperative to ensure this training continues to be delivered and rolled out as widely as possible. It will also be critical to continue to monitor, evaluate and fine-tune the overall training program to ensure it consistently meets the needs of target audiences.

INTRODUCTION

Background

In 2020, MATES in Construction (MATES) commissioned a study on *The impact of workplace bullying on mental health and suicidality in Queensland construction industry apprentices* from the Australian Institute for Suicide Research and Prevention (AISRAP) (Ross, Wardhani & Kolves, 2020). The report revealed a large proportion (27.3%) of Queensland construction apprentices had experienced bullying (with 20% experiencing severe bullying) and 30% of apprentices had experienced some thoughts about suicide in the past 12 months. In addition, the study identified that 13% of apprentices had high levels of psychological distress and nearly 30% had poor quality of life that may indicate depression. A broad consultation was undertaken with government and industry representatives to gain their perspectives on these findings and to inform a set of recommendations arising from the report.

MATES training intervention programs

In response to the industry recommendations MATES have developed a threefold intervention program for apprentices and the wider industry. The training addresses the two recommendations regarding training. These were Recommendation 1, (*Development and evaluation of an industry-wide onsite intervention program focussing on supervisors, trade workers and apprentices to raise awareness of bullying as an issue and highlight the negative consequences of bullying in the industry*) and Recommendation 3, (*Inclusion of resilience training for apprentices with specific focus on financial management, alcohol and other drugs awareness, suicide and mental health literacy, and workplace rights*). The MATES training intervention program is comprised of:

The Apprentice Awareness Toolbox: This training engages the overall workforce to be proactive in intervening when they see an apprentice being bullied or harassed. There is a focus on collective activism as expressed in the GAT and MAT training. Simple strategies and phrases are provided, with the emphasis on “don’t be a bystander”. (Stand up 15-minute small group toolbox presentation).

Awareness training for supervisors/mentors: The training ensures that supervisors/mentors are aware of their legal responsibilities around supervising apprentices especially when it comes to bullying and harassment, and to provide them with effective strategies and resources to help them supervise their apprentices. (4-hour training).

Resilience skills for apprentices: This training course is specifically for apprentices. The scope of the program's development was guided by Recommendation 3, and covers bullying, suicide and mental health literacy, financial management, gambling, alcohol and other drugs awareness, and workplace rights and responsibilities. (Half-day training session).

Training evaluation

In close consultation with MATES, AISRAP has developed an evaluation strategy for the intervention training in accordance with the MATES mission to apply research to drive best practice in workplace mental health. The aims of the evaluation are to ensure that A), the interventions will do no harm; and B), the interventions are effective in terms of desired outcomes so the program can be replicated across the industry. The evaluation strategy is comprised of two Phases:

PHASE 1: Pilot study. The pilot study data collection for each of the three training programs was conducted between 2022 and 2023, and reported on in the *Evaluation report: MATES in Construction Apprentices' training intervention Program Phase 1* (Ross & Wardhani, 2023). The report found that the three training programs were highly effective in improving construction workers' attitudes and knowledge in relation to issues around bullying and other related issues presented in the sessions. Statistically significant improvements were seen on all the survey questions for the Toolbox and Supervisor training evaluation, and for the majority of questions for the Apprentices' resilience training evaluation.

PHASE 2: Optimised study. The current report provides the results of this second phase of research. The results from Phase 1 were reviewed and insights arising were applied to refine and further develop the evaluation surveys in consultation with MATES. The updated survey materials and methodology applied are described in detail in the following sections.

This study reports on the results from Phase 2. The study was approved by the Griffith University Human Research Ethics Committee (2022/493).

METHOD

Study design

A before and after design was applied to measure the effectiveness of the three training programs. Data was collected from construction workers who undertook the MATES Toolbox, Supervisors' and Apprentices' resilience training between July 2023 and February 2024 in Queensland (Queensland and NT for Toolbox training). They were asked by their respective trainers to complete a short survey before (i.e., on arrival at the training session) and after the training session.

Survey materials and data collection

Evaluation surveys were specifically designed to measure the effectiveness of each of the three types of training sessions. The surveys were comprised of validated scales, some specifically developed fit-for-purpose items, and measures of basic demographic data such as gender, age, job/role title, and years of experience in the construction industry.

Toolbox survey. The evaluation data for the Toolbox training has traditionally been collected via a paper-based survey, and after consultation with MATES it was decided this would be continued as it is considered the most practical and acceptable format for this training. There was no identified need to modify the toolbox evaluation survey from the Phase 1, so the same brief evaluation survey was applied. This consisted of only five questions presented before and after the training: *Bullying is a normal part of working life for apprentices and helps toughen them up. Bullying and banter are both the same thing – just a bit of harmless fun. If I knew someone was being bullied, I would know how to connect them to help. If I knew someone was being bullied, I would be willing to offer to connect them to help. I have personally experienced bullying and/or witnessed others being bullied on site.* Each item had a five-point response scale from 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. The demographic data of gender, age, occupation and years of experience in the construction industry was also collected. All items in the survey were the same (See Appendix A).

Supervisors' survey. The Supervisors' training contained two items with yes/no/I don't know response options. *I have personally experienced bullying in the workplace. I have witnessed others being bullied or harassed in the workplace.* The following set of items measuring knowledge of bullying (and optimism about the industry) were slightly modified from Phase 1 in order to more accurately measure understanding of the concept of workplace bullying. These were: *I understand what the law says in relation to bullying in the workplace. Bullying can lead to poor mental health and suicidality. I am confident that I understand my legal obligations regarding bullying. If I witnessed bullying at work, I would know how to respond appropriately. If I witnessed bullying at work, I would feel empowered to intervene. I feel positive about the future of the construction industry.* All items had a five-item response scale from 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

Consultation with MATES indicated that it would be valuable to include a measure of leadership to assess the transformational leadership component of the Supervisor training. Therefore five items were adapted from the *Transformational Leadership Styles* scale from the Multifactor Leadership Questionnaire (MLQ) Form 5X-Short (Avolio & Bass, 2004) and included in the survey. These were: *I go beyond self-interest for the good of my workgroup. I consider the moral and ethical consequences of my decisions. I talk optimistically about the future. I reexamine assumptions to question whether they are appropriate. I help others to develop their strengths.* The items had a five-item response scale from 0 = not at all, 1 = once in a while, 2 = sometimes, 3 = fairly often, 4 = frequently, if not always.

There was also one item measuring current emotional well-being, *So far the best way to describe how I'm feeling emotionally/mentally is...* with a response scale from 1 = very poor, 2 = poor, 3 = OK, 4 = good, 5 = very good. The Before survey collected demographic data such as age, gender, and job/role title. Finally, on the After survey, there were two items (slightly revised from Phase 1) specifically assessing the training sessions: *The supervisor training presentation was well presented and informative. The supervisor training was relevant to my role and responsibilities.* (Response scale: response scale from 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree). (See Appendix B).

The evaluation data from the Supervisors' training for Phase 1 was obtained via pen and paper surveys; however, it was decided to move to an online format for Phase 2 for a more streamlined method of data collection. The paper survey format was made available for those who preferred this option.

Apprentices' resilience training survey. In collaboration with MATES the evaluation survey from Phase 1 was further refined to measure key concepts more accurately and to include other relevant measures. The length of the survey reflected the longer (half-day) format. There were four items specifically designed in collaboration with MATES which asked participants to rate their confidence in their ability to identify or have an awareness of particular issues. These were: *To identify bullying in the workplace? To know what problem gambling looks like? To understand basic financial management such as budgeting, debt, savings and future planning? To have an awareness of risk control for alcohol and drugs?* The response scale for these items was 1 = not at all confident, 2 = somewhat confident, 3 = neutral, 4 = very confident, 5 = extremely confident. These were followed by nine items measuring knowledge and attitudes towards mental health, bullying, accessing help, workplace rights and responsibilities, and understanding suicidality and connecting to help. The response scale was 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. (See Appendix C for all items).

The construct of Psychological Capital (comprised of self-efficacy, resilience, optimism and hope) has been shown to be associated with multiple workplace performance outcomes such as lower employee absenteeism, less employee cynicism and intentions to quit, and higher job satisfaction, commitment, and organizational citizenship behaviours (Luthans, Avolio, Avey & Norman, 2007). To obtain a general baseline and pre/post training measures of this important construct, 24 items from the Psychological Capital (PCQ-24) questionnaire (Luthans et al., 2007) were included in the survey. All items from the PCQ-24

had a 6-point response scale. 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree.

In addition, six items from the *Affective Organisational Commitment* component of the Workplace Belongingness Scale (Eisenberger, 2011) were adapted and included to measure participants' sense of belonging in the construction industry. The items were: *Working in the construction industry has a lot of personal meaning to me. I feel a strong sense of belonging to the construction industry. I am proud to tell others I work in the construction industry. I feel emotionally attached to the construction industry. I would be happy to work in the construction industry until I retire. I enjoy discussing the construction industry with people who do not work there.* A further four specifically designed items were developed in collaboration with MATES: *I am confident that I will complete my apprenticeship. I may need to change my employer to complete my apprenticeship. I have access to a broad system of support to complete my apprenticeship. I am confident that the support I receive will help me to complete my trade.* The response scale for all items was 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

The Before survey collected the demographic information of age, gender, and job/role title. The 'after' section concluded with four session feedback questions. *The session was informative and enjoyable. The content was relevant. My facilitator was real and relatable. I will follow up on things I learned today.* 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. (See Appendix C).

The Phase 2 surveys were provided to apprentices in an online format, but due to several practical issues (e.g., the ability to protect the anonymity of a participant's data responses if they request a follow-up call from a field officer), the format was reverted to the paper and pen format applied in Phase 1.

Data Analyses

A series of data cleaning and preliminary analyses were performed prior to and during the analyses of each of the training outcomes. Repeated-measures t-tests were performed for items or measures that were normally distributed, while the non-parametric Wilcoxon signed-ranked tests and Mann-Whitney U tests were performed for items or measures that were significantly skewed. A small amount of missing data was found in each survey where pairwise deletion was employed to address this issue. An exception was for psychological capital variable in Apprentices Resilience Training, where only 20 responses were recorded as valid responses for statistical analysis. All analyses were performed using IBM SPSS statistical package version 29.

RESULTS

Toolbox Training

Participant Characteristics

A total of 743 participants participated in Toolbox training, with 716 participants attending sessions in QLD and 27 in NT. Table 1 presents the general characteristics of participants in Toolbox Training. As seen in the table, participants were predominantly males and in their mid-30s (M age = 36.01, SD age = 13.29). There were no significant differences in gender distribution or age between participants from the two states.

Most participants have had less than 10 years of experience in the industry. The most common occupations self-reported by participants were electricians, followed by apprentices, carpenters and joiners, labourers, and structural steel construction workers.

Table 1. Demographic and occupation information of Toolbox Training participants.

Participant Characteristics	All (N = 743)		QLD (N = 716)		NT (N = 27)	
	n (or Mean)	% (or SD)	n (or Mean)	% (or SD)	n (or Mean)	% (or SD)
Age	36.01	13.29	36.09	13.21	33.96	15.1
Gender						
Male	653	87.9	630	88	23	85.2
Female	62	8.3	58	8.1	4	14.8
Non-Binary or Other	3	0.4	3	0.4	0	0
<i>Did not answer</i>	25	3.4	25	3.5	0	0
Average Years of Experience	14.03	11.9	14.18	11.8	10.6	13.0
Length of Experience						
Less than 1 year	15	2.0	15	2.1	0	0
1-5 years	190	25.6	176	24.6	14	51.9
6-10 years	103	13.9	99	13.8	4	14.8
11-15 years	85	11.4	83	11.6	2	7.4
16-20 years	82	11.0	81	11.3	1	3.7
21-25 years	46	6.2	46	6.4	0	0
26-30 years	37	5.0	36	5.0	1	3.7
More than 30 years	65	8.7	62	8.7	3	11.1
<i>Did not answer</i>	120	16.2	118	16.5	2	7.4
Occupation						
Apprentice	76	10.2	71	9.9	5	18.5
Airconditioning and Refrigeration Mechanics	4	0.5	0	0	4	14.8
Architectural, Building and Surveying Technicians	1	0.1	1	0.1	0	0
Bricklayers and Stonemasons	6	0.8	6	0.8	0	0
Building and Plumbing Labourers	5	0.7	5	0.7	0	0

Carpenters and Joiners	68	9.2	68	9.5	0	0
Civil Engineering Draftspersons and Technicians	2	0.3	2	0.3	0	0
Civil Engineering Professionals	6	0.8	6	0.8	0	0
Concreters	15	2.0	15	2.1	0	0
Construction Managers	10	1.3	10	1.4	0	0
Contract, Program and Project Administrators	9	1.2	8	1.1	1	3.7
Crane, Hoist and Lift Operators	6	0.8	6	0.8	0	0
Electrical Engineers	1	0.1	1	0.1	0	0
Electricians	111	14.9	103	14.4	8	29.6
Forklift Drivers	4	0.5	4	0.6	0	0
Glaziers	7	0.9	7	1.0	0	0
Human Resource Professionals	4	0.5	3	0.4	1	3.7
Importers, Exporters and Wholesalers	1	0.1	1	0.1	0	0
Insulation and Home Improvement Installers	1	0.1	1	0.1	0	0
Labourer	54	7.3	52	7.3	2	7.4
Management	8	1.1	8	1.1	0	0
Metal Casting, Forging and Finishing Trades Workers	6	0.8	6	0.8	0	0
Metal Fitters and Machinists	2	0.3	2	0.3	0	0
Occupational and Environmental Health Professionals	15	2.0	14	2.0	1	3.7
Office Managers	1	0.1	1	0.1	0	0
Operator	9	1.2	9	1.3	0	0
Other Building and Engineering Technicians	1	0.1	1	0.1	0	0
Other Construction and Mining Labourers	10	1.3	10	1.4	0	0
Other Engineering Professionals	6	0.8	6	0.8	0	0
Other Mobile Plant Operators	5	0.7	5	0.7	0	0
Other Specialist Managers	21	2.8	21	2.9	0	0
Other Stationary Plant Operators	1	0.1	1	0.1	0	0
Painting Trades Workers	14	1.9	14	2	0	0

Plasterers	13	1.7	13	1.8	0	0
Plumbers	19	2.6	19	2.7	0	0
Plumbing Trades	3	0.4	3	0.4	0	0
Production Managers	3	0.4	3	0.4	0	0
Receptionists	1	0.1	1	0.1	0	0
Roof Tilers	3	0.4	3	0.4	0	0
Safety Inspectors	3	0.4	3	0.4	0	0
Sheetmetal Trades Workers	6	0.8	3	0.4	3	11.1
Structural Steel and Welding Trades Workers	11	1.5	10	1.4	1	3.7
Structural Steel Construction Workers	45	6.1	45	6.3	0	0
Supply, Distribution and Procurement Managers	4	0.5	4	0.6	0	0
Surveyors and Spatial Scientists	1	0.1	1	0.1	0	0
Telecommunications Trades Workers	3	0.4	3	0.4	0	0
Wall and Floor Tilers	9	1.2	9	1.3	0	0
Other (Unspecified)	1	0.1	1	0.1	0	0
Unknown	1	0.1	1	0.1	0	0
<i>Did not answer</i>	127	17.1	126	17.6	1	3.7

Score Comparisons between State and Gender

A series of Mann-Whitney U tests were performed to examine whether there were significant differences in the self-reported scores on each item, at each time point between participants in QLD and NT, and between males and females. The results are presented in Tables 2 and 3. Before the session, participants in QLD reported significantly higher agreement to the statement If I knew someone was being bullied, I would know how to connect them to help ($M = 3.88$, $SD = 0.97$) than those in NT ($M = 3.32$, $SD = 1.25$). However, these scores were no longer significantly different between states after the session. Participants in QLD also reported significantly higher agreement to the statement I have personally experienced bullying and/or witnessed others being bullied on site ($M = 3.30$, $SD = 1.30$) than their NT counterparts ($M = 2.42$, $SD = 1.27$). Their scores remained significantly different after the session survey, with QLD participants still reporting higher agreement (QLD $M = 3.46$, $SD = 1.32$ vs NT $M = 2.21$, $SD = 1.03$). In addition, after the session QLD participants reported higher agreement to the statement If someone was being bullied, I would be willing to offer to connect them to help ($M = 4.28$, $SD = 1.00$) than their NT counterparts ($M = 2.21$, $SD = 1.03$).

As seen in Table 3, male participants reported significantly higher agreement to the statements Bullying is a normal part of working life for apprentices and helps toughen them up and Bullying and banter are both the same thing - just a bit of harmless fun ($M = 1.69$, $SD = 0.97$ and $M = 1.76$, $SD = 0.99$), than females ($M = 1.48$, $SD = 0.99$ and $M = 1.48$, $SD = 0.99$). These differences remained significant after the session.

Additional gender differences were also observed only after the session. Those were, females reported higher agreement to the statement If someone was being bullied, I would be willing to offer to connect them to help ($M = 4.41$, $SD = 1.09$) than males ($M = 4.24$, $SD = 1.03$). Meanwhile, males reported significantly higher agreement to the statement I have personally experienced bullying and/or witnessed others being bullied on site ($M = 3.46$, $SD = 1.30$) than females ($M = 2.98$, $SD = 1.54$).

Table 2. Mann-Whitney U tests comparing self-reported scores between QLD and NT participants.

Item	N	Mean	QLD				N	Mean	NT				Z	p	
			Median	Mode	Range	SD			Median	Mode	Range	SD			
Before Session															
Bullying is a normal part of working life for apprentices and helps toughen them up	698	1.67	1	1	1 - 5	0.97	26	1.65	1	1	1 - 4	0.94	-0.10	.922	
Bullying and banter are both the same thing - just a bit of harmless fun	695	1.72	1	1	1 - 5	0.99	26	1.81	1.5	1	1 - 5	1.06	-0.43	.671	
If I knew someone was being bullied, I would know how to connect them to help	688	3.88	4	4	1 - 5	0.97	25	3.32	4	4	1 - 5	1.25	-2.31	.021	
If someone was being bullied, I would be willing to offer to connect them to help	692	4.18	4	4	1 - 5	0.92	26	3.92	4	5	1 - 5	1.32	-0.51	.609	
I have personally experienced bullying and/or witnessed others being bullied on site	690	3.30	4	4	1 - 5	1.30	26	2.42	2.5	1	1 - 5	1.27	-3.27	.001	
After Session															
Bullying is a normal part of working life for apprentices and helps toughen them up	632	1.53	1	1	1 - 5	0.92	19	1.37	1	1	1 - 3	0.68	-0.66	.512	
Bullying and banter are both the same thing - just a bit of harmless fun	633	1.57	1	1	1 - 5	0.92	19	1.42	1	1	1 - 3	0.77	-0.77	.440	
If I knew someone was being bullied, I would know how to connect them to help	635	4.17	4	5	1 - 5	0.97	19	3.68	4	4	1 - 5	1.29	-1.73	.083	
If someone was being bullied, I would be willing to offer to connect them to help	635	4.28	5	5	1 - 5	1.00	19	3.42	4	5	1 - 5	1.54	-2.68	.007	
I have personally experienced bullying and/or witnessed others being bullied on site	625	3.46	4	4	1 - 5	1.32	19	2.21	2	2	1 - 4	1.03	-3.98	<.001	

Note: Results in bold denote significant difference. All responses range from 1 (Strongly Disagree) to 5 (Strongly Agree).

Table 3. Mann-Whitney U tests comparing self-reported scores between male and female participants.

Item	N	Mean	Male				SD	N	Mean	Female				SD	Z	p
			Median	Mode	Range	Median				Mode	Range					
Before Session																
Bullying is a normal part of working life for apprentices and helps toughen them up	638	1.69	1	1	1 - 5	0.97	61	1.48	1	1	1 - 5	0.99	-2.51	.012		
Bullying and banter are both the same thing - just a bit of harmless fun	634	1.76	1	1	1 - 5	0.99	61	1.48	1	1	1 - 5	0.99	-3.01	.003		
If I knew someone was being bullied, I would know how to connect them to help	627	3.88	4	4	1 - 5	0.98	60	3.68	4	4	1 - 5	1.08	-1.44	.150		
If someone was being bullied, I would be willing to offer to connect them to help	633	4.17	4	4	1 - 5	0.92	60	4.13	5	5	1 - 5	1.21	-0.87	.382		
I have personally experienced bullying and/or witnessed others being bullied on site	630	3.29	4	4	1 - 5	1.29	60	2.93	3	4	1 - 5	1.47	-1.74	.082		
After Session																
Bullying is a normal part of working life for apprentices and helps toughen them up	570	1.57	1	1	1 - 5	0.94	57	1.16	1	1	1 - 5	0.59	-3.86	<.001		
Bullying and banter are both the same thing - just a bit of harmless fun	569	1.60	1	1	1 - 5	0.94	59	1.22	1	1	1 - 5	0.62	-3.48	<.001		
If I knew someone was being bullied, I would know how to connect them to help	570	4.14	4	5	1 - 5	0.99	59	4.25	5	5	1 - 5	1.01	-1.08	.279		
If someone was being bullied, I would be willing to offer to connect them to help	570	4.24	5	5	1 - 5	1.03	59	4.41	5	5	1 - 5	1.09	-1.97	.049		
I have personally experienced bullying and/or witnessed others being bullied on site	561	3.46	4	4	1 - 5	1.30	58	2.98	3	4	1 - 5	1.54	-2.17	.030		

Note: Results in bold denote significant difference. All responses range from 1 (Strongly Disagree) to 5 (Strongly Agree). Participants who identified as neither male nor female were excluded from analyses due to very small number.

Training Outcomes

General outcomes. Table 4 shows the changes in scores before and after the session for overall participants based on a series of Wilcoxon signed-rank tests. The results indicate there were significant changes in participants' scores on all measures from the before to after training session. Overall, participants reported significantly lower agreement to the statements Bullying is a normal part of working life for apprentices and helps toughen them up and Bullying and banter are both the same thing - just a bit of harmless fun, after the session compared to before session, and significantly higher agreement to the statements If I knew someone was being bullied I would know how to connect them to help, If someone was being bullied I would be willing to offer to connect them to help, and I have personally experienced bullying and/or witnessed others being bullied on site, after the session than before.

Outcomes based on group. Separate analyses were also conducted to examine the changes of participants' scores before and after the training session based on state and gender. Table 5 presents the results separated by state while Table 6 presents the results separated by gender.

As seen in Table 5, the results found among QLD participants mirrored the overall results among all participants, such that agreement to the statements Bullying is a normal part of working life for apprentices and helps toughen them up and Bullying and banter are both the same thing - just a bit of harmless fun were significantly lower after the session. Meanwhile, agreement to the statements If I knew someone was being bullied, I would know how to connect them to help, If someone was being bullied I would be willing to offer to connect them to help, and I have personally experienced bullying and/or witnessed others being bullied on site were significantly higher after the session.

Among NT participants, only agreement to the statement Bullying is a normal part of working life for apprentices and helps toughen them up significantly changed from before to after (i.e., lower agreement after the session than before). Changes in self-reported agreement to statements Bullying and banter are both the same thing - just a bit of harmless fun and If I knew someone was being bullied I would know how to connect them to help were approaching significance ($p = .054$ and $p = .058$). The lack of significant changes observed among NT participants might be due to low sample size that could be insufficient to detect significance according to power analysis (Faul et al., 2007).

The results separated by gender (male and female) as presented in Table 6 were mostly consistent with that of the overall participants. The only exception was for the statement I have personally experienced bullying and/or witnessed others being bullied on site whereby no significant change was observed among female participants.

Table 4. Wilcoxon signed-ranked tests on general outcomes, before and after Toolbox Training session for all participants.

Item	N	Before Session					After Session					Z	p
		Mean	Median	Mode	Range	SD	Mean	Median	Mode	Range	SD		
All Participants													
Bullying is a normal part of working life for apprentices and helps toughen them up*	640	1.65	1	1	1 - 5	0.96	1.53	1	1	1 - 5	0.91	-4.60	<.001
Bullying and banter are both the same thing - just a bit of harmless fun*	636	1.72	1	1	1 - 5	0.98	1.57	1	1	1 - 5	0.92	-4.81	<.001
If I knew someone was being bullied, I would know how to connect them to help*	633	3.87	4	4	1 - 5	0.99	4.16	4	5	1 - 5	0.98	-7.98	<.001
If someone was being bullied, I would be willing to offer to connect them to help**	635	4.18	4	4	1 - 5	0.95	4.25	5	5	1 - 5	1.03	-2.66	.008
I have personally experienced bullying and/or witnessed others being bullied on site**	626	3.28	4	4	1 - 5	1.30	3.41	4	4	1 - 5	1.33	-3.83	<.001

Note: *Z-value is based on positive ranks. **Z-value is based on negative ranks. Results in bold denote significant change. 19 participants had missing data in Item 1 in Before Session survey and 92 had missing data in After Session; 22 participant had missing data in Item 2 in Before Session survey and 91 had missing data in After Session; 30 participants had missing data in Item 3 in Before Session survey and 89 had missing data in After Session; 25 participants had missing data in Item 4 in Before Session survey and 89 had missing data in After Session; 27 participants had missing data in Item 5 in Before Session survey and 99 had missing data in After Session. Analyses are based on complete data. All responses range from 1 (Strongly Disagree) to 5 (Strongly Agree).

Table 5. Wilcoxon signed-ranked tests comparing scores before and after Toolbox Training session, separated by state (QLD and NT).

Item	N	Before Session					After Session					Z	p
		Mean	Median	Mode	Range	SD	Mean	Median	Mode	Range	SD		
QLD													
Bullying is a normal part of working life for apprentices and helps toughen them up*	621	1.65	1	1	1 - 5	0.96	1.53	1	1	1 - 5	0.92	-4.29	<.001
Bullying and banter are both the same thing - just a bit of harmless fun*	617	1.71	1	1	1 - 5	0.98	1.58	1	1	1 - 5	0.92	-4.51	<.001
If I knew someone was being bullied, I would know how to connect them to help**	614	3.89	4	4	1 - 5	0.97	4.17	4	5	1 - 5	0.97	-7.77	<.001
If someone was being bullied, I would be willing to offer to connect them to help**	616	4.20	4	4	1 - 5	0.93	4.28	5	5	1 - 5	1.00	-2.86	.004
I have personally experienced bullying and/or witnessed others being bullied on site**	607	3.32	4	4	1 - 5	1.29	3.44	4	4	1 - 5	1.32	-3.84	<.001
NT													
Bullying is a normal part of working life for apprentices and helps toughen them up*	19	1.74	1	1	1 - 4	0.99	1.37	1	1	1 - 3	0.68	-2.07	.038
Bullying and banter are both the same thing - just a bit of harmless fun*	19	1.89	1.5	1	1 - 5	1.15	1.42	1	1	1 - 3	0.77	-1.93	.054
If I knew someone was being bullied, I would know how to connect them to help**	19	3.11	4	4	1 - 5	1.29	3.68	4	4	1 - 5	1.29	-1.90	.058
If someone was being bullied, I would be willing to offer to connect them to help*	19	3.58	4	5	1 - 5	1.39	3.42	4	5	1 - 5	1.54	-1.13	.257
I have personally experienced bullying and/or witnessed others being bullied on site	19	2.21	2.5	1	1 - 4	1.13	2.21	2	2	1 - 4	1.03	0.00	1.000

Note: *Z-value is based on positive ranks. **Z-value is based on negative ranks. Results in bold denote significant change. 18 participants in QLD and 1 in NT had missing data in Item 1 in Before Session survey, and 84 in QLD and 8 in NT had missing data in After Session survey; 21 participants in QLD and 26 in NT had missing data in Item 2 in Before Session survey, and 83 in QLD and 8 in NT had missing data in After Session survey; 28 participants in QLD and 2 in NT had missing data in Item 3 in Before Session survey, and 81 in QLD and 8 in NT had missing data in After Session survey; 24 participants in QLD and 1 in NT had missing data in Item 4 in Before Session survey, and 81 in QLD and 8 in NT had missing data in After Session survey; 26 participants in QLD and 1 in NT had missing data in Item 5 in Before Session survey, and 91 in QLD and 8 in NT had missing data in After Session survey. Analyses are based on complete data. All responses range from 1 (Strongly Disagree) to 5 (Strongly Agree).

Table 6. Wilcoxon signed-ranked tests comparing scores before and after Toolbox Training session, separated by gender (male and female).

Item	N	Before Session					After Session					Z	p
		Mean	Median	Mode	Range	SD	Mean	Median	Mode	Range	SD		
Male													
Bullying is a normal part of working life for apprentices and helps toughen them up*	561	1.67	1	1	1 - 5	0.97	1.57	1	1	1 - 5	0.94	-3.59	<.001
Bullying and banter are both the same thing - just a bit of harmless fun*	555	1.75	1	1	1 - 5	0.98	1.61	1	1	1 - 5	0.94	-4.19	<.001
If I knew someone was being bullied, I would know how to connect them to help**	552	3.90	4	4	1 - 5	0.98	4.15	4	5	1 - 5	0.98	-6.64	<.001
If someone was being bullied, I would be willing to offer to connect them to help**	555	4.19	4	4	1 - 5	0.93	4.23	5	5	1 - 5	1.03	-2.07	.038
I have personally experienced bullying and/or witnessed others being bullied on site**	546	3.32	4	4	1 - 5	1.28	3.45	4	4	1 - 5	1.30	-3.98	<.001
Female													
Bullying is a normal part of working life for apprentices and helps toughen them up*	57	1.51	1	1	1 - 5	1.02	1.16	1	1	1 - 5	0.59	-2.87	.004
Bullying and banter are both the same thing - just a bit of harmless fun*	58	1.50	1	1	1 - 5	1.01	1.22	1	1	1 - 5	0.62	-2.44	.015
If I knew someone was being bullied, I would know how to connect them to help**	57	3.68	4	4	1 - 5	1.11	4.25	5	5	1 - 5	1.02	-4.20	<.001
If someone was being bullied, I would be willing to offer to connect them to help**	57	4.12	5	5	1 - 5	1.24	4.4	5	5	1 - 5	1.10	-2.26	.024
I have personally experienced bullying and/or witnessed others being bullied on site	56	2.93	3	4	1 - 5	1.43	2.91	3	4	1 - 5	1.52	0.00	1.000

Note: *Z-value is based on positive ranks. **Z-value is based on negative ranks; Results in bold denote significant change. 15 Males and 1 Female had missing data in Item 1 in Before Session survey, and 83 Males and 5 Females had missing data in After Session survey; 19 Males and 1 Female had missing data in Item 2 in Before Session survey, and 84 Males and 3 Females had missing data in After Session survey; 26 Males and 2 Females had missing data in Item 3 in Before Session survey, and 83 Males and 3 Females had missing data in After Session survey; 20 Males and 2 Females had missing data in Item 4 in Before Session survey, and 83 Males and 3 Females had missing data in After Session survey; 23 Males and 2 Females had missing data in Item 5 in Before Session survey, and 92 Males and 4 Females had missing data in After Session survey. Analyses are based on complete data. Participants who identified as other than male or female were excluded from analyses due to very small number. All responses range from 1 (Strongly Disagree) to 5 (Strongly Agree).

Supervisor Training

Participant Characteristics

Data was collected for 89 participants who attended the Supervisors Training, predominantly males ($n = 72$, 80.9%) with a mean age of 42.42 ($SD = 9.7$). Of these, 85 participants completed the surveys online, while four completed paper surveys due to technical issues during sessions. Participants represented various occupations, with over 28% as managers. The list of participants' occupations can be seen in Table 7.

Table 7. Demographic and occupation information for Supervisor Training participants.

Participant Characteristics	<i>n</i>	%
Age	42.42	9.7
Gender		
Male	72	80.9
Female	16	18.0
<i>Did not answer</i>	1	1.1
Occupation		
Administration	4	4.5
Advisor, Consultant, or Mentor	5	5.6
Director	4	4.5
Field Officer	4	4.5
Foreman	8	9.0
Leader or Leading Hand	9	10.1
Manager	25	28.1
Supervisor	7	7.9
Other	21	23.6
<i>Did not answer</i>	2	2.2

Exposure to Bullying

Participants were asked if they have personally experienced workplace bullying and have witnessed others being bullied in the workplace before and after the training session. The results are presented in Table 8. Before the session, 51 participants (57.1%) reported personal experience of workplace bullying, and a much higher proportion ($n = 71$, 80.9%) reported they have witnessed workplace bullying. After the session, there was a slight increase in the number of participants who reported personal experience of being bullied in the workplace ($n = 54$, 60.7%), and witnessing workplace bullying ($n = 76$, 85.4%). Consistently, this trend was followed by a decrease in the number of participants who reported that they have not personally experienced workplace bullying nor have witnessed others being bullied in the workplace.

Table 7. Demographic and occupation information for Supervisor Training participants.

Item	Before Session		After Session	
	<i>n</i>	%	<i>n</i>	%
Have personally experienced workplace bullying				
Yes	51	57.3	54	60.7
No	33	37.1	32	36.0
I don't know	3	3.4	2	2.2
<i>Did not answer</i>	2	2.2	1	1.1
Have witnessed others being bullied in the workplace				
Yes	72	80.9	76	85.4
No	15	16.9	11	12.4
I don't know	0	0.0	1	1.1
<i>Did not answer</i>	2	2.2	1	1.1

Training Outcomes

Knowledge about bullying and mental health. Table 9 presents the changes in participants' responses to items measuring knowledge about bullying and mental health, analysed using a series of Wilcoxon signed-rank tests. There were significant increases post-training on all items regarding bullying and mental health. Specifically, participants reported higher understanding about the relevant laws in relation to workplace bullying and that bullying can lead to poor mental health and suicidality. Moreover, participants reported increased confidence in their understanding of the legal obligations regarding bullying, knowing how to appropriately respond if they witnessed bullying at work, and feeling empowered to intervene if they witnessed bullying. Participants also reported higher optimism about the future of the construction industry after the session.

Table 9. Wilcoxon signed-ranked tests comparing scores before and after session on knowledge about bullying and mental health.

Item	N	Before Session					After Session					Z*	p
		Mean	Median	Mode	Range	SD	Mean	Median	Mode	Range	SD		
I understand what the relevant laws say in relation to bullying in the workplace	86	3.76	4	4	1 - 5	1.01	4.28	4	4	1 - 5	0.73	-4.65	<.001
Bullying can lead to poor mental health and suicidality	86	4.31	5	5	1 - 5	1.18	4.74	5	5	1 - 5	0.58	-3.72	<.001
I am confident that I understand my legal obligations regarding bullying	86	3.62	4	4	1 - 5	0.87	4.36	4	4	1 - 5	0.65	-6.58	<.001
If I witnessed bullying at work, I would know how to respond appropriately	86	3.58	4	4	1 - 5	0.90	4.47	5	5	1 - 5	0.70	-6.62	<.001
If I witnessed bullying at work, I would feel empowered to intervene	86	3.85	4	4	1 - 5	0.85	4.48	5	5	1 - 5	0.65	-5.74	<.001
I feel optimistic about the culture and future of the construction industry	86	3.71	4	4	1 - 5	0.84	4.28	4	4	1 - 5	0.75	-5.69	<.001

Note: Z-value is based on negative ranks. Results in bold denote significant change. 3 participants had missing data in before and/or after session survey. All responses range from 1 (Strongly disagree) to 5 (Strongly agree).

Transformational leadership. A series of repeated-measures t-tests were performed to examine changes in participants' self-reported leadership styles as measured by five items from the MLQ (Avolio & Bass, 2004). The results are presented in Table 10. As seen in the table, participants' scores on all five items significantly increased after the training. Specifically, participants self-rated higher levels of their idealised attributes (I go beyond self-interest for the good of my workgroup), idealised behaviours (I consider the moral and ethical consequences of my decisions), inspirational motivation (I talk optimistically about the future), intellectual stimulation (I reexamine assumptions to question whether they are appropriate), and individual consideration (I help others to develop their strengths) in their leadership.

Table 10. Repeated-measures t-tests comparing scores before and after session on self-reported leadership style.

Item	N	Before Session		After Session		t	p
		Mean	SD	Mean	SD		
I go beyond self-interest for the good of my workgroup (Idealised attributes)	86	3.14	0.65	3.34	0.59	-2.91	.005
I consider the moral and ethical consequences of my decisions (Idealised behaviours)	86	3.23	0.71	3.44	0.64	-2.97	.004
I talk optimistically about the future (Inspirational motivation)	86	2.90	0.85	3.07	0.67	-2.02	.046
I reexamine assumptions to question whether they are appropriate (Intellectual stimulation)	86	2.70	0.83	3.05	0.59	-3.93	<.001
I help others to develop their strengths (Individual consideration)	86	3.08	0.67	3.31	0.64	-3.55	<.001

Note: Results in bold denote significant change. All responses range from 0 (Not at all) to 4 (Frequently, if not always)

General well-being. A repeated-measures t-test was performed to assess participants' self-reported general well-being based on a single item (i.e., So far, the best way to describe how I'm feeling emotionally/mentally is...). The results showed a significant increase in self-reported well-being from before ($M = 3.76$, $SD = 0.78$) to after the training session ($M = 4.14$, $SD = 0.80$, $t = -5.60$, $p < .001$).

Training feedback

Table 11 presents participants' feedback regarding the training session. As seen in the table, most participants strongly agreed or agreed that the training was well presented and informative, as well as relevant to participants' roles and responsibilities.

Table 11. Participants' feedback on Supervisor training sessions.

Item	<i>n</i>	%
The Supervisor training presentation was well presented and informative.		
Strongly Disagree	1	1.1
Disagree	0	0.0
Neither agree or disagree	0	0.0
Agree	11	12.4
Strongly Agree	76	85.4
<i>Did not answer</i>	1	1.1
The supervisor training was relevant to my role and responsibilities.		
Strongly Disagree	1	1.1
Disagree	0	0.0
Neither agree or disagree	1	1.1
Agree	20	22.5
Strongly Agree	66	74.2
<i>Did not answer</i>	1	1.1



Apprentice Resilience Training

Participant Characteristics

Data was obtained from 95 apprentices who participated in the Apprentices' Resilience Training. The majority were males ($n = 83$, 87.4%) and 11 were females (11.6%). One participant did not disclose gender information. The mean age of all participants was 21.51 years ($SD = 5.72$).

Twenty participants completed the surveys online during sessions from 26/10/2023 and 1/12/2023. After changing to pen and paper format, data from 75 participants was collected between 21/1/2024 to 2/02/2024.

Training Outcomes

Confidence in identifying problems. Results from a series of Wilcoxon signed-ranked tests showed that participants' self-reported confidence in their ability to identify problems (i.e., bullying in the workplace, problem gambling, understanding basic financial management, and having awareness of risk control for alcohol and drugs) significantly increased for each of the four items after the training session.

Awareness about bullying, mental health, and suicide. Participants' awareness and knowledge about bullying also significantly increased after the training. Specifically, after the session participants' self-reported knowledge significantly increased on how to access help if they were being bullied at work and connect others to appropriate help if they were being bullied. Participants' self-reported knowledge also significantly increased after the session regarding their rights and where to access help for workplace bullying, and where to obtain information regarding workplace rights. With respect to mental health and self-care, participants' agreement on both the importance of talking about mental health and strategies for self-care also increased after the session. Regarding suicide, after the session participants reported higher agreement that talking about suicide can prevent suicide. Self-reported knowledge on how to access or connect to appropriate help if participants or if their workmates experienced suicidal ideation also significantly increased after the session.

Table 12. Wilcoxon signed-ranked tests comparing scores before and after session on confidence in identifying problems and awareness about bullying, mental health, and suicide.

Item	N	Before Session					After Session					Z*	p
		Mean	Median	Mode	Range	SD	Mean	Median	Mode	Range	SD		
Confidence in identifying problems													
How confident are you in your ability to identify bullying in your workplace?**	91	3.84	4	4	1 - 5	0.91	4.43	5	5	1 - 5	0.72	-5.42	<.001
How confident are you in your ability to know problem gambling looks like?**	88	3.63	4	4	1 - 5	1.00	4.28	4	5	1 - 5	0.83	-5.56	<.001
How confident are you in your ability to understand basic financial management such as budgeting, debt, savings and future planning?**	91	3.55	4	3	1 - 5	1.01	4.32	4	4	2 - 5	0.68	-5.95	<.001
How confident are you in your ability to have an awareness of risk control for alcohol and drugs?**	88	4.05	4	4	1 - 5	0.88	4.48	5	5	1 - 5	0.73	-4.32	<.001
Awareness about bullying, mental health, and suicide													
If I was being bullied at work, I would know how to access help.***	83	4.12	4	4	1 - 5	0.83	4.46	5	5	1 - 5	0.72	-3.80	<.001
If I knew someone was being bullied at work, I would know how to connect them to help.***	90	3.97	4	4	1 - 5	0.87	4.57	5	5	2 - 5	0.64	-5.65	<.001
When it comes to bullying at work, I know my rights and I know where to access help.***	91	3.97	4	4	1 - 5	0.86	4.46	5	5	1 - 5	0.72	-4.80	<.001
I know where to get information and regarding workplace rights.***	90	3.92	4	4	1 - 5	0.81	4.39	5	5	2 - 5	0.75	-4.62	<.001
I believe it's important to talk about mental health.***	89	4.43	5	5	1 - 5	0.78	4.62	5	5	2 - 5	0.73	-2.05	.041
I have thought about strategies for self-care.***	90	3.87	4	4	2 - 5	0.86	4.43	5	5	2 - 5	0.67	-5.52	<.001
Talking about suicide can prevent suicide.***	90	4.16	4	4	1 - 5	0.89	4.46	5	5	1 - 5	0.80	-2.95	0.003
If I was going through a difficult time, feeling upset, or was thinking about suicide, I would know how to access help.***	91	4.09	4	4	1 - 5	0.87	4.56	5	5	2 - 5	0.65	-4.65	<.001
If my workmate was going through a difficult time, feeling upset, or thinking about suicide, I would know how to connect him/her to appropriate help.***	89	4.15	4	4	2 - 5	0.82	4.55	5	5	2 - 5	0.66	-4.10	<.001

Note: Results in bold denote significant change. *Z-value is based on negative ranks. **Responses range from 1 (Not at all confident) to 5 (Extremely confident). ***Responses range from 1 (Strongly disagree) to 5 (Strongly agree).

Psychological capital. Responses from 20 participants were recorded as valid responses on items assessing psychological capital, with five participants having missing responses in the After survey. Table 13 presents the results of a series of repeated-measures t-tests on psychological capital categorised into the four subscales: efficacy, hope, resilience, and optimism. Participants' reported levels of self-efficacy and hope significantly increased after the session. Meanwhile, there were no significant changes in self-reported levels of resilience and optimism.

Table 13. Repeated-measures t-tests comparing scores before and after session on self-reported psychological capital subscales.

Subscale	N	Before Session		After Session		t	p
		Mean	SD	Mean	SD		
Efficacy	15	17.93	3.65	20.33	3.66	-2.86	.013
Hope	15	28.20	5.35	30.93	5.64	-2.79	.014
Resilience	15	27.00	4.31	27.60	5.19	-0.57	.575
Optimism	15	24.40	4.64	25.87	4.82	-1.67	.117

Note: Results in bold denote significant change. 5 participants had missing data in after session survey. Scores in Efficacy subscale was based on 4 items (2 items were excluded due to lack of relevance for this population). All responses range from 1 (Strongly disagree) to 6 (Strongly agree).

Views about the construction industry. As seen in Table 14, participants' self-reported views about the construction industry showed mixed results. There was a significant increase post-training on the items measuring personal meaning, sense of belonging, emotional attachment, long-term commitment in the industry, and enjoyment in discussing the industry with others. However, participants also indicated higher agreement that they need to change their employer to complete their apprenticeship, and lower confidence in the support they receive to complete their apprenticeship. No significant changes were observed regarding participants' sense of pride in telling others they work in the construction industry, confidence in completing apprenticeship, or feeling they have access to broad support system to complete their apprenticeship.

Table 14. Wilcoxon signed-ranked tests comparing scores before and after session on views about the construction industry.

Item	N	Before Session					After Session					Z	p
		Mean	Median	Mode	Range	SD	Mean	Median	Mode	Range	SD		
Working in the construction industry has a lot of personal meaning to me.*	88	3.45	3	3	1 - 5	0.86	3.90	4	4	1 - 5	0.90	-4.66	<.001
I feel a strong sense of belonging to the construction industry.*	87	3.60	4	4	1 - 5	0.86	3.95	4	4	1 - 5	0.89	-3.82	<.001
I am proud to tell others I work in the construction industry.*	89	4.10	4	4	1 - 5	0.84	4.18	4	4	1 - 5	0.78	-8.69	.385
I feel emotionally attached to the construction industry.*	89	3.21	3	3	1 - 5	0.87	3.67	4	3	1 - 5	1.03	-3.95	<.001
I would be happy to work in the construction industry until I retire.*	88	3.56	4	4	1 - 5	0.98	3.99	4	4	1 - 5	0.98	-4.10	<.001
I enjoy discussing the construction industry with people who do not work there.*	89	3.72	4	4	1 - 5	0.85	4.00	4	4	1 - 5	0.87	-2.64	.008
I am confident that I will complete my apprenticeship.**	88	4.43	5	5	1 - 5	0.80	4.39	5	5	1 - 5	0.81	-0.73	.465
I may need to change my employer to complete my apprenticeship.*	87	2.21	2	1	1 - 5	1.15	2.97	3	2	1 - 5	1.45	-3.83	<.001
I have access to a broad system of support to complete my apprenticeship.*	89	4.09	4	4	1 - 5	0.91	4.11	4	5	1 - 5	1.10	-0.31	.754
I am confident that the support I receive will help me to complete my trade.**	87	4.21	4	4	2 - 5	0.75	3.91	4	4	2 - 5	0.58	-3.45	<.001

Note: Results in bold denote significant change. *Z-value is based on negative ranks. **Z-value is based on positive ranks. All responses range from 1 (Strongly disagree) to 5 (Strongly agree).

Training Feedback

Table 15 presents participants' feedback on the training session. Overall, the feedback was positive, with most participants strongly agreeing or agreeing that the session was informative and enjoyable, the content was relevant, and the facilitator was real and relatable. Most participants strongly agreed or agreed that they will follow up on the things learned from the training.

Table 15. Participants' feedback on Apprentices Resilience Training session.

Item	<i>n</i>	%
The session was informative and enjoyable		
Strongly Disagree	0	0
Disagree	0	0
Neutral	2	2.1
Agree	13	13.7
Strongly Agree	64	67.4
<i>Did not answer</i>	16	16.8
The content was relevant		
Strongly Disagree	0	0
Disagree	0	0
Neutral	2	2.1
Agree	13	13.7
Strongly Agree	64	67.4
<i>Did not answer</i>	16	16.8
My facilitator was real and relatable		
Strongly Disagree	0	0
Disagree	0	0
Neutral	2	2.1
Agree	14	14.7
Strongly Agree	63	66.3
<i>Did not answer</i>	16	16.8
I will follow up on the things I learned today		
Strongly Disagree	0	0
Disagree	0	0
Neutral	10	10.5
Agree	15	15.8
Strongly Agree	53	55.8
<i>Did not answer</i>	17	17.9



A black and white photograph of a construction site. In the background, there is a grid of vertical rebar (steel rods) held in place by wooden formwork. The ground in the foreground is dark and uneven, possibly dirt or gravel. A large, solid black rectangle is superimposed over the center of the image, serving as a background for the title text.

DISCUSSION

The Phase 2 evaluation builds on the positive research findings from Phase 1 by refining the evaluation survey measures to ensure a robust evaluation strategy for the MATES Apprentices' training programs. The inclusion of new validated measures such as Transformational Leadership for the Supervisor training, and Psychological Capital and Affective Organisational Commitment for the Apprentices' Resilience training evaluation surveys allowed for the capture of further valuable data relevant to the training sessions. This data is not only important for assessing the effectiveness of specific aspects of the training programs, but also provides a baseline measure against which to compare cohorts of trainees in the future.

As with Phase 1, the results of Phase 2 provide strong evidence for the effectiveness of all three training programs in improving construction workers' attitudes and knowledge in relation to issues around bullying and other related issues presented in the sessions. Statistically significant improvements were seen from pre- to post-training on all the survey questions for both the Toolbox and Supervisor training evaluation, and for the majority of questions for the Apprentices' Resilience training evaluation.

The Toolbox training results showed that after attending a 15-minute, stand-up presentation, participants consistently attained significantly improved scores from pre-to post-training on all items (i.e., on attitudes towards bullying, and their knowledge of and willingness to connect a workmate to help). Consistent with the Phase 1 results, participants also indicated significantly higher agreement post-training that they had personally experienced and/or witnessed bullying on site. These findings appear to suggest that after attending the training session participants had a clearer understanding of what constitutes bullying and were thus better able to identify it.

The results also provided strong evidence for the effectiveness of Supervisor Training, with attendees attaining significantly higher scores post-training on all items measuring their understanding of the impacts of bullying, their legal obligations regarding bullying, knowing how to respond appropriately if they witnessed bullying at work, and feeling empowered to intervene. Supervisors were also significantly more optimistic about the future of the construction industry and in how they felt emotionally/mentally after attending the training. In addition, supervisors showed significant positive changes post-training on all items for the new Transformational Leadership measures.

The Apprentices' resilience training results showed that apprentices achieved significantly higher post-training scores on all items on their confidence in their ability to identify issues such as workplace bullying, problem gambling, understanding basic financial management, and having awareness of risk control for alcohol and drugs. Significant improvements were also seen on all items measuring awareness of mental health and suicide, the importance of self-care, awareness and knowledge about bullying, workplace rights, accessing help and connecting others to help. There were also significant positive changes for the items regarding views on the construction industry, specifically having a sense of belonging, personal meaning, and emotional attachment to working in the industry, as well as confidence in completing their apprenticeship and enjoyment in discussing the construction industry with others outside of the industry. However, no significant changes were found for the items measuring participants' self-reported sense of pride in working in the industry, confidence in completing their apprenticeship, or feeling they have access to broad support system to complete their apprenticeship.

With regard to the new Psychological Capital measures for the Apprentices' Resilience Training, significant improvements were also seen for self-efficacy and hope for apprentices after attending the training session. There were also slight improvements in resilience and optimism, although these were not statistically significant.

The results of the Phase 2 research, in addition to the Phase 1 findings provide compelling and reliable evidence for the effectiveness of the overall MATES in Construction Apprentices' Training Intervention Program. The evaluation research, undertaken on data collected from June 2022 to February 2024 has consistently demonstrated statistically significant improvements on apprentices' and other construction workers' awareness, knowledge and attitudes relating to bullying, mental health and suicide in the workplace. Given the well-established issue of poor mental health and suicidality within the construction industry (Andersen et al., 2010; Milner, Niven & La Montagne, 2014; Ross et al., 2021), it will be imperative to ensure this training continues to be delivered and rolled out as widely as possible. It will also be critical to continue to monitor, evaluate and fine-tune the overall training program to ensure it consistently meets the needs of target audiences.

REFERENCES

Andersen, K., Hawgood, J., Klieve, H., Kølves, K., & De Leo, D. (2010). Suicide in selected occupations in Queensland: evidence from the State suicide register. *Australian & New Zealand Journal of Psychiatry*, 44(3), 243-249.

Avolio, B. J., and Bass, B. M. (2004). Multifactor Leadership Questionnaire. Manual and sampler set: Multifactor Leadership Questionnaire, Manual and Sample Set. 3rd ed. Redwood City, CA. Mind Garden.

Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1), 42.

Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541–572.

Milner, A., Niven, H., LaMontagne, A., 2014. Suicide by occupational skill level in the Australian construction industry: data from 2001 to 2010. *Australian and New Zealand Journal of Public Health* 38, 281–285.

Ross, V., Mathieu, S. L., Wardhani, R., Gullestrup, J., & Kølves, K. (2021). Factors associated with workplace bullying and the mental health of construction industry apprentices: A mixed methods study. *Frontiers in Psychiatry*, 12, 629262.

Ross, V., Mathieu, S., Wardhani, M. R., Gullestrup, M. J., & Kølves, K. (2022). Suicidal ideation and related factors in construction industry apprentices. *Journal of Affective Disorders*, 297, 294-300.
42

Ross, V., & Wardhani, R. (2023). Evaluation report: MATES in Construction Apprentices training intervention Program. Phase 1. Australian Institute for Suicide Research and Prevention, School of Applied Psychology: Brisbane.

Ross, V., Wardhani, R., & Kølves, K. (2020). The Impact of Workplace Bullying on Mental Health and Suicidality in Queensland Construction Industry Apprentices. Report by the Australian Institute for Suicide Research and Prevention (AISRAP) for Mates in Construction (MATES). Australian Institute for Suicide and Research Prevention: Mount Gravatt, Australia.

Appendix A

Toolbox training evaluation survey

FEEDBACK FORM

Please provide your details and respond to the statements **BEFORE** completing MATES Apprentice Toolbox.



YOUR DETAILS

Gender: ☐ Male ☐ Female ☐ Non-binary ☐ Other

Name

D.O.B.: Age:

Years in the Industry:

Email

Employer

Occupation

Phone

Mobile

Address

Postcode

Site

Have you had previous training by MATES?

☐ GAT ☐ Connector ☐ ASIST

Please tick the number to indicate your level of agreement with the statement below:

1 = Strongly Disagree 2 = Disagree 3 = Neither Agree or Disagree 4 = Agree 5 = Strongly Agree

	1	2	3	4	5
1. Bullying is a normal part of working life for apprentices and helps toughen them up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Bullying and banter are both the same thing – just a bit of harmless fun.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. If I knew someone was being bullied, I would know how to connect them to help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. If someone was being bullied, I would be willing to offer to connect them to help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I have personally experienced bullying and/or witnessed others being bullied on site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please respond to these statements **AFTER** completing MATES Apprentice Toolbox

Please tick the number to indicate your level of agreement with the statement below:

1 = Strongly Disagree

2 = Disagree

3 = Neither Agree or Disagree

4 = Agree

5 = Strongly Agree

	1	2	3	4	5
1. Bullying is a normal part of working life for apprentices and helps toughen them up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Bullying and banter are both the same thing – just a bit of harmless fun.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. If I knew someone was being bullied, I would know how to connect them to help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. If someone was being bullied, I would be willing to offer to connect them to help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I have personally experienced bullying and/or witnessed others being bullied on site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MATES may send you important information about your health and wellbeing and MATES activities by email or post.

- ☐ Please tick here if you do not want to receive any MATES information or material
- ☐ Please note non-identifiable information may be shared with third parties when it is useful to meet or advance the aims and objectives of the MATES organisation. Please tick if you do not consent to sharing of non-identifiable data

Would you like a follow-up call from a MATES Field Officer?

- ☐ Yes
- ☐ No



Scan this code for the latest MATES Connector and ASIST training sessions available.

SUPPORTED BY



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Appendix B

Supervisor training evaluation survey

Supervisors Survey – BEFORE

The purpose of this survey is to assess the impact of the Mates Supervisors' training. The survey is voluntary, and you can withdraw at any time. Your responses will be confidential and cannot be linked to your identity. There are no direct benefits to you, but the results will help identify conditions that could be improved in the construction sector. The overall findings from this survey will be reported to Mates in Construction and may also be disseminated via journal articles and/or conference presentations. Griffith University research is in accordance with the National Statement on Ethical Conduct in Human Research (2007). If you have any concerns about the ethical conduct of this study you should contact the Manager, Research Ethics on 07 3735 4375 or research-ethics@griffith.edu.au and quote GU Ref No:2019/407. If you have any questions, you can contact Dr Victoria Ross, 07 3735 3381, or victoria.ross@griffith.edu.au. A summary of the survey results can be obtained by contacting Dr Ross via email.

Completing this survey should not present any risks to you, although it does include the topic of suicide. If you feel distressed at any time, you can stop the survey and get help at:

Mates in Construction Hotline: 1300 642 111

Beyondblue: 1300 224 638

Lifeline: 13 11 14

headspace: 1800 650 890

Completion of this survey will be taken as your consent to participate in the research.

Please provide your details and responses to the following statements BEFORE completing the Supervisor training.

Please create a unique code using the following format to match your responses before and after completing the training:

- First letter of your first name
- First letter of your mother's first name
- Day of birth (2 digits)
- Month of birth (2 digits)

For example: if your first name is John, your mother's first name is Mary, and your birthday is on the 10th of June, your unique code is: JM1006

Please write the date of completing the Supervisor Training

What is your job/role title?

What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Non-binary (3)
- ☐ Other (4)

Age (in years)

I have personally experienced bullying in the workplace

- ☐ Yes (1)
- ☐ No (2)
- ☐ I don't know (3)

I have witnessed others being bullied in the workplace

- ☐ Yes (1)
- ☐ No (2)
- ☐ I don't know (3)

Please select the number to indicate your level of agreement with each of these statements

	1 = Strongly disagree (1)	2 = Disagree (2)	3 = Neither agree nor disagree (3)	4 = Agree (4)	5 = Strongly agree (5)
I understand what the relevant laws say in relation to bullying in the workplace. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bullying can lead to poor mental health and suicidality. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I understand my legal obligations regarding bullying. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I witnessed bullying at work, I would know how to respond appropriately. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I witnessed bullying at work, I would feel empowered to intervene. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel optimistic about the future of the construction industry. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please select the number to indicate your level of agreement with each of these statements

	0 = Not at all (0)	1 = Once in a while (1)	2 = Sometimes (2)	3 = Fairly Often (3)	4 = Frequently if not always (4)
I go beyond self-interest for the good of my workgroup (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider the moral and ethical consequences of my decisions (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I talk optimistically about the future (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I reexamine assumptions to question whether they are appropriate (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I help others to develop their strengths (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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So far, the best way to describe how I'm feeling emotionally/mentally is....

- ☐ Very Poor (1)
- ☐ Poor (2)
- ☐ OK (3)
- ☐ Good (4)
- ☐ Very Good (5)

Supervisors Survey - AFTER

Please provide your details and responses to the following statements **AFTER** completing the Supervisor training.

Please write the same unique code that you created when completing the survey before completing the Supervisor training.

The unique code was created using the following format:

- First letter of your first name
- First letter of your mother's first name
- Day of birth (2 digits)
- Month of birth (2 digits)

For example: if your first name is John, your mother's first name is Mary, and your birthday is on the 10th of June, your unique code is: JM1006

I have personally experienced bullying in the workplace

- ☐ Yes (1)
- ☐ No (2)
- ☐ I don't know (3)

I have witnessed others being bullied in the workplace

- ☐ Yes (1)
- ☐ No (2)
- ☐ I don't know (3)

Please select the number to indicate your level of agreement with each of these statements

	1 = Strongly disagree (1)	2 = Disagree (2)	3 = Neither agree nor disagree (3)	4 = Agree (4)	5 = Strongly agree (5)
I understand what the relevant laws say in relation to bullying in the workplace. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bullying can lead to poor mental health and suicidality. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I understand my legal obligations regarding bullying. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I witnessed bullying at work, I would know how to respond appropriately. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I witnessed bullying at work, I would feel empowered to intervene. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel optimistic about the future of the construction industry. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The supervisor training was well-presented and informative. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The supervisor training was relevant to my role and responsibilities. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please select the number to indicate your level of agreement with each of these statements

	0 = Not at all (0)	1 = Once in a while (1)	2 = Sometimes (2)	3 = Fairly Often (3)	4 = Frequently if not always (4)
I go beyond self-interest for the good of my workgroup (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider the moral and ethical consequences of my decisions (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I talk optimistically about the future (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I reexamine assumptions to question whether they are appropriate (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I help others to develop their strengths (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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So far, the best way to describe how I'm feeling emotionally/mentally is....

- ☐ Very Poor (1)
- ☐ Poor (2)
- ☐ OK (3)
- ☐ Good (4)
- ☐ Very Good (5)

Any feedback or further comments

Appendix C

Apprentices' Resilience Training evaluation survey

Apprentices Survey - BEFORE

The purpose of this survey is to assess the impact of the Mates Apprentice Resilience training. This will involve completing a short survey before and after the training. The survey is voluntary, and you can withdraw at any time. Your responses will be confidential and cannot be linked to your identity. There are no direct benefits to you, but the results will help identify conditions that could be improved in the construction sector. The overall findings from this survey will be reported to Mates in Construction and may also be disseminated via journal articles and/or conference presentations. Griffith University research is in accordance with the National Statement on Ethical Conduct in Human Research (2007). If you have any concerns about the ethical conduct of this study you should contact the Manager, Research Ethics on 07 3735 4375 or research-ethics@griffith.edu.au and quote GU Ref No 2019/407. If you have any questions, you can contact Dr Victoria Ross, 07 3735 3381, or victoria.ross@griffith.edu.au. A summary of the survey results can be obtained by contacting Dr Ross via email. Completing this survey should not present any risks to you, although it does include sensitive topics such as mental health issues and suicide.

If you feel distressed at any time, you can stop the survey and get help at:
Mates in Construction Hotline: 1300 642 111
Beyondblue: 1300 224 636
Lifeline: 13 11 14
headspace: 1800 650 890

Completion of this survey will be taken as your consent to participate in the research.

Please create a unique code using the following format to match your responses before and after completing the training:

- First letter of your first name
- First letter of your mother's first name
- Day of birth (2 digits)
- Month of birth (2 digits)

For example: if your first name is John, your mother's first name is Mary, and your birthday is on the 10th of June, your unique code is: JM1006

Please write the date of completing the Apprentice Training

What is your job/role title?

What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Non-binary (3)
- ☐ Other (4)

Age (in years)

How confident are you in your ability to do the following?

	Not at all confident (1)	Somewhat confident (2)	Neutral (3)	Very confident (4)	Extremely confident (5)
To identify bullying in your workplace? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To know problem gambling looks like? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To understand basic financial management such as budgeting, debt, savings and future planning? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have an awareness of risk control for alcohol and drugs? (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate how much you agree with the following statements:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
If I was being bullied at work, I would know how to access help. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I knew someone was being bullied at work, I would know how to connect them to help. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When it comes to bullying at work, I know my rights and I know where to access help. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know where to get information and regarding workplace rights. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe it's important to talk about mental health. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have thought about strategies for self-care. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talking about suicide can prevent suicide. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I was going through a difficult time, feeling upset, or was thinking about suicide, I would know how to access help. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If my workmate was going through a difficult time, feeling upset, or thinking about suicide, I would know how to connect him/her to appropriate help. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate how much you agree with the following statements:

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Somewhat Agree (4)	Agree (5)	Strongly Agree (6)
I feel confident analysing a long-term problem to find a solution. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident helping to set targets/goals in my work area. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident contacting people outside the organization (e.g., suppliers, customers) to discuss problems. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident presenting information to a group of colleagues. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I was stuck on something at work, I could think of many ways to get out of it. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At the present time, I am energetically pursuing my work goals. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are lots of ways around any problem. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Right now I see myself as being pretty successful at work. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can think of many ways to reach my current work goals. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At this time, I am meeting the work goals that I have set for myself. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I have a setback at work, I have trouble recovering from it and moving on. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I usually manage difficulties one way or another at work. (12)

☐☐☐☐☐☐☐

I can be "on my own," so to speak, at work if I have to. (13)

☐☐☐☐☐☐☐

I usually take stressful things at work in stride. (14)

☐☐☐☐☐☐☐

I can get through difficult times at work because I've experienced difficulty before. (15)

☐☐☐☐☐☐☐

I feel I can handle many things at a time at this job. (16)

☐☐☐☐☐☐☐

When things are uncertain for me at work, I usually expect the best. (17)

☐☐☐☐☐☐☐

If something can go wrong for me work-wise, it will. (18)

☐☐☐☐☐☐☐

I always look on the bright side of things regarding my job. (19)

☐☐☐☐☐☐☐

I'm optimistic about what will happen to me in the future as it pertains to work. (20)

☐☐☐☐☐☐☐

In this job, things never work out the way I want them to. (21)

☐☐☐☐☐☐☐

I approach this job as if "every cloud has a silver lining." (22)

☐☐☐☐☐☐☐



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