

Stress in Construction Study

Summary of Key Information, Insights and Messages

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Question / Topic	Key insights / messages / talking points
<p>Why is the study relevant and significant?</p>	<p>Several studies across the world have identified work-related stress as one of the root causes for unsafe behaviours in Construction.</p> <p>It is also a widely known cause for other problems like high absenteeism, alcoholism, drug abuse and even suicide.</p> <p>Thus, it is critically important to ask our workers to tell us</p> <ul style="list-style-type: none"> - what these stressors are, and - what strategies they think would be effective in helping them prevent or cope with these stressors. <p>Understanding stress and perceived strategies at the coalface is the first step to tackling this health epidemic squarely, to help us improve</p> <ul style="list-style-type: none"> - the working environment for our workers and - enhance resilience and stress management proficiency in the industry.
<p>What will the project's contribution be?</p>	<p>The study provides evidence-based details on</p> <ul style="list-style-type: none"> - what's causing stress among construction professionals and - what stress prevention and coping strategies look like in the eyes of those experiencing stress. <p>Findings and insights from the study can be used to inform discussions and support initiatives to reduce the harm, accidents and injuries caused by stress.</p>
<p>Findings - Data</p>	<p>Out of a sample of 1000, 430 responded to the survey. Only 266 responses were complete and could be used for analysis.</p> <p>Descriptive data on the respondents:</p> <ul style="list-style-type: none"> • 80% male

	<ul style="list-style-type: none"> • 21 years - average years of construction industry experience • 84% were involved in 10 or more projects • 71% had Levels 4-7 qualification • Respondents came from the following 4 top sectors – commercial / retail (25.3%), residential (20.3%), industrial (19.4%) and infrastructure (14.1%) • 83% rated their required technical knowledge to complete a project as “high” to “very high” • 88% assessed their level of soft skills as being “high” to “very high”
<p>Key Insights -</p> <p>Impact of stress on construction workers</p>	<p>Stress (world and NZ-wide). Stress is the health epidemic of the 21st century, according to the World Health Organisation. It is more widespread than ever that 6 in 10 workers in major global economies are experiencing increased workplace stress.</p> <p>In New Zealand, this fact is echoed by Stats NZ’s wellbeing data which reported a consistent rise in people who experienced high or very high levels of stress and psychological distress, since 2014.</p> <p>Work-related stress in Construction. Several studies across the world have identified work-related stress as one of the root causes for unsafe behaviours in Construction. It is also a widely known cause for other problems like high absenteeism, alcoholism, drug abuse and even suicide.</p> <p>Our findings Our study confirmed that construction workers experience a combination of work-related stressors that affect their productivity, physical and emotional health.</p> <p>They have identified the following major psychological, behavioural and cognitive impacts of stress on them:</p> <ul style="list-style-type: none"> - burnout; fatigue; emotional distress; anxiety; and depression - job dissatisfaction, organisational detachment, job-disengagement, and low self-esteem - changes in sleep patterns and performance; lack of concentration; forgetfulness; and poor decision-making. <p>Analysis / implications / recommendations The study</p> <ul style="list-style-type: none"> • Provides coalface evidence on the negative impacts of stress on our workers’ wellbeing and productivity. <p>It confirms that stress and poor level of mental health in the workplace or worksite results in lack of concentration, forgetfulness, poor decision-making, etc which could lead to accidents and injuries.</p>

	<ul style="list-style-type: none"> ● It highlights the correlation between employee well-being, their productivity and organisational success. <p>Stress management is believed to be critical to project efficiency and organisational success. Thus, companies / businesses (supported by the industry) need to be at the forefront in dealing with the stress issue for their benefits.</p> <ul style="list-style-type: none"> ● We have no official calculation on the costs of stress-related illnesses in the industry or New Zealand, in general. However, in Great Britain, it is estimated that stress-related illnesses costs the British construction industry £5 billion each year. The Health and Safety Executive calculates that stress, depression or anxiety account for 44% of all work-related ill health cases and more than half of all sick days in a year. <p>Our study identified the physical and psychological toll of stress on our workers, e.g. burnout, fatigue, emotional distress, anxiety, depression, etc. It would be valuable for our construction industry to partner with key stakeholders in expanding this study and dig deeper to investigate the impact of work-related stress on our workers' performance, risk of accidents and costs to employers.</p> <p>Obtaining a clearer perspective of the costs associated with work-related stress and related psychosocial issues will help us</p> <ul style="list-style-type: none"> - Understand better the financial burden of work-related stress at the individual, organisational, sectoral and societal levels; and - Explore and discuss the complexity of the issue, identify gaps and opportunities for collaboration; and - Contribute to a stronger case for collaboration and investment in preventing and managing work-related psychosocial risks.
<p>Key Insights -</p> <p>Organisational Stressors –</p> <p>Time pressures / volumes of work</p> <p>Pressures on cognitive ability</p>	<p>Our study confirmed that New Zealand construction workers experience myriad stressors, most of which are work-related.</p> <p>The workers identified organisational pressures as the major cause for their stress. These pressures stem from the context or content of work imposed on the workers. These are stressors created through varying job demands that are placed on the workers and their ability to control these demands.</p> <p>These include -</p> <p>Time pressures and volumes of work – such as the pressure to complete projects on time; being asked to do too much; juggling several projects at the same time; high levels of interruptions in execution of tasks; overload; long working hours; inflexible work schedules; unpredictable working hours and pacing of work.</p>

Pressures of cognitive ability and emotional requirements for the role – concerns about the task at hand and level of technical skills required; lack of preparation or training for the task; limited ability to work with new technology.

Analysis / implications / recommendations:

Construction is a high-risk industry for work-related stress. Our study has provided evidence to confirm this. It is, therefore, critical that we find ways to support our workers.

Our data suggests that even if most of our respondents have worked in the industry for an average of 21 years and been involved in 10 or more projects – they are not inured to workplace stress and are still heavily impacted by it.

There are a few things that employers and the industry can do to support its workers mitigate stress, or these psychosocial hazards in the workplace.

First step is acknowledging that stress exists and making it an acceptable topic to discuss on site. Contractors and workers can be part of the solution by working together to solve the stress problem. Contractors can use toolbox talks or lunch meetings to discuss stress and encourage workers to open up about the challenges they are facing and the pressure they may be feeling. Talking about specific stressors on site could help uncover collective solutions, or at the very least, clear the air and put everyone on the same page. Making sure supervisors are well-trained in identifying and reducing stress on the job is critical. Supervisors have high-stress jobs and can be a major cause of stress for workers, so they must be able to cope with stress and communicate well when listening to a worker's concerns.¹

Employers need to work with their workers in identifying the causes of stress in their workplace. They need to understand the impact of stress on the workers and try to implement strategies preferably aimed at prevention.

To ease organisational pressures, the respondents in our study suggested the following stress mitigation strategies

- being involved in the decision-making and having more control over their workload and responsibilities
- having the ability to take leave during / between projects
- flexible / reduced working hours and increased family time
- training and development to improve technical and soft skills
- increased project experience and site mentorship

Taking these suggestions on board and other prevention strategies could include

- regular reviews of workload allocations
- conducting stress appraisals

¹ <https://www.lhsfna.org/index.cfm/lifelines/september-2015/addressing-the-root-of-the-stress-problem-in-construction/>

	<ul style="list-style-type: none"> - conducting stress management workshops and facilitating stress counselling where warranted - empowering employees and - fostering a supportive work environment
<p>Key Insights -</p> <p>Stressors –</p> <p>Poor communication and collaboration</p>	<p>Findings</p> <p>Another top cause of workplace stress revealed by our study is poor communication and collaboration in the workplace / worksite which lead to</p> <ul style="list-style-type: none"> - conflict with external parties (e.g. consultants, stakeholders and contractors) - internal conflict or conflict with upper management, co-workers and fellow staff; poor team cohesiveness - fragmentation of work, high uncertainty in job process and unclear responsibilities <p>Analysis / implications / recommendations:</p> <p>Various studies suggest that poor communication is a big issue in construction. Reasons for this include lack of clear objectives, faulty transmission, cultural barriers, lack of integration among professionals (e.g. architects, structural, mechanical and electrical engineers) in the industry which results in many shortfalls in work instructions.</p> <p>In an industry that has over-reliance on contracting, it is imperative to have a rigorous structure and clear strategy for communicating information and deadlines. While organisations may have their own effective communication strategies, communication might still be challenging across various collaborating companies, resulting in counterproductive procedures on a project.</p> <p>The government’s efforts to develop a Building Information Modelling in New Zealand looks promising for the industry. The technology, with its collaborative approach, has revolutionised the construction industry in other countries and has become mandatory for all public procurement in the UK.</p> <p>BIM facilitates information sharing and communication as it requires participants to provide necessary information in a format accessible across project stakeholders. It helps reduce stress as it creates a shared information platform. It provides easy and timely access to information, thus, reducing the need to chase information from collaborating partners.</p> <p>The increasing adoption of BIM not only reap substantial benefits for effective project delivery and facilities management. It is also anticipated to provide health benefits from preventing work-related stress.</p> <p>It would be beneficial for our industry leaders to collaborate closely with the government in this BIM project, to ensure that the needs and complex nature of the industry are properly scoped and considered in the model.</p>
<p>Key Insights -</p>	<p>Findings</p> <p>Other main stressors identified by our respondents are</p>

<p>Stressors – Unrealistic timeframes and budgets</p> <p>Being asked to do something unethical on a project</p>	<p>Unrealistic time frames and budgets. To gain competitive edges, unrealistic timescales and budgets are usually proposed leading to over-optimistic estimates to win the contract. This most often leads to workers overworking to meet ambitious deadlines that in the first instance has been set by the client.</p> <p>On top of this, our respondents added “being asked to do something unethical on a project” - another significant cause of stress. Literature expands this to cover practices such as inflation of bills, professional incompetence, poor work delivery, fraud, bribery, professional misconduct, intimidation, and kickbacks.</p> <p>Analysis / implications / recommendations: The Construction Accord presents a good platform to discuss and find collaborative solutions for these issues. Promoting awareness regarding the values of ethical behaviour and ensuring effective punishment for unethical activities at different stages of the project life cycle might reduce unethical practices in the industry and mitigate stress for our workers.</p> <p>It would be beneficial for industry leaders to be actively involved in the monitoring and review of this accord so they could share what is working and what needs to be improved and whether next steps would require giving this accord some teeth to ensure compliance.</p>
<p>Key Insights - Stressors – Lack of collaboration and teamwork</p>	<p>Findings Another main stressors identified by our respondents are</p> <p>Lack of collaboration and teamwork. The construction industry is said to be characterised by an “over-the-wall syndrome”, a phenomenon where groups that are supposed to work collaboratively on a project are working independently of one another.</p> <p>Such practice compromises both the effectiveness and profitability of the industry. It has been blamed for various problems in the construction industry, e.g. reworks, low-profit-margin and high level of litigation, among others.</p> <p>Analysis / implications / recommendations: Addressing this issue would greatly reduce stress among the professionals. Strategies to promote teamwork among collaborators in a project could include mandatory courses for construction professionals on team communication, leadership attributes or teamwork.</p>
<p>Key Insights - Dealing with Stressors – The New Zealand Self</p>	<p>The Construction Sector Accord was initially launched in 2019 by industry and government leaders. This was then followed by the launching of the Transformation Plan in January 2020.</p> <p>The Accord, through its Transformation Plan, supports changing workplace culture within the building industry by identifying stressors at all levels of the</p>

<p>Regulating Solution Construction Accord</p>	<p>participating organisations responsible for delivering projects within the built environment.</p> <p>Stress in the construction workplace has been noted as a contributing factor towards influencing levels of mental health and suicide rates.</p> <p>The challenge moving forward is to ensure that a positive transformation within the construction industry is being achieved by both industry and government. This can be measured using the following points (that could be used as KPI's) set out in the Guiding Principles.</p> <ul style="list-style-type: none"> ● Build trusting relationships ● Be bold ● Value our people ● Act with collective responsibility <p>Time will tell on how well this proactive and collaborative approach will pan out. This will be based on all parties embracing commonly agreed values and on future statistics confirming same.</p> <p>So, the question remains “Should the Accord be legally imposed with consequences to those who fail to meet its expectations as intervention to reduce its stressors is required now?”.</p>
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