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Exploring mental health challenges and implications for construction safety

Purpose: Over 2.7 million workers are employed in the UK construction industry and with the fragmented nature of the construction sector; cases of poor mental health of workers are on the increase. This upsurge in the number of workers experiencing poor mental health could directly impact construction safety with significant financial adverse consequences on employers and the UK economy. Studies have identified lapses within the construction sector emphasising the lack of transparency regarding reporting of mental health and wellbeing of construction workers due to the inadequate engagement from employers and the lack of genuine leadership commitment to tackle mental health.

Design: This study adopted a non-probability purposive sampling strategy, using a self-selected sample. A self-administered questionnaire benchmarked against the mental health core and enhanced standards tools by the ‘Stevenson/Farmer review of mental health and employers’ served as the basis for the methodology. One hundred and six (106) industry managers from highways, construction, maritime, utilities, home building, rail, and haulage/fleet were involved in this study.

Findings: The findings indicate that the industry is making good strides towards addressing mental health issues; poor mental health have significant financial burdens on businesses and the economy; some contractors have mental health initiatives and programmes in place; there is inconsistency of support available to employees; some contractors now integrate leadership training; the level of engagement vary based on the strategy and action plan adopted by organisations; different mechanisms are adopted for monitoring mental health issues; and there are cross-industry initiatives.

Originality: Employers should have a clear representation of the mental health of their employees to help them understand what affects worker’s mental wellbeing and how they can support them. Disregarding the multifaceted causes of mental ill-health due to the perceived financial implications could be more devastating for the industry.

Keywords: Mental Health, Construction Safety

INTRODUCTION

The United Nations Sustainable Development Goals (UNSDG) is based on the premise that no one will be left behind (United Nations: Department of Economic and Social Affairs, 2021). In particular, the aim of Goal 8 is to ‘Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all’. Although the concept of ‘decent work’ seems to lack clarity; the International Labour Organization (ILO) recognises decent work as an opportunity for work that is productive, provides better prospects for personal development and social integration, as well as allowing people the freedom to express their concerns (International Labour Organization, 2021). It can be argued that many roles within the United Kingdom (UK) construction industry aligns with this definition of decent work, but the reality is that the construction industry in general has a longstanding history of work-related stress and has continued to record significantly high cases of mental health globally. This trend is also at variance with UNSDG 3 ‘Good health and wellbeing’. The industry is known to have very high records for working days lost due to stress (Love *et al.*, 2010; Zhang *et al.*, 2023), depression or anxiety (Nwaogu *et al.*, 2023) and this has been further exacerbated by the recent spate of the global Covid-19 pandemic. The inherent stressors associated with the industry (Leung *et al.*, 2016; Lundeborg & Johansson, 2000) and the global pandemic has significantly impacted construction workers resilience, thus further triggering an upsurge in poor mental health in the UK construction industry.

The UK construction industry employs around 8% of the population and contributes on average over 6% in value added to the UK economy (Kotera *et al.*, 2019; Stiles *et al.*, 2021), indicating that workforce related issues such as mental health could have significant financial consequences for both the construction sector and the wider economy. It is suggested that one-fifth of all sick time is related to poor mental health (Laidler, 2019) and another study indicates that one in every four construction workers in the UK have contemplated suicide and these workers are more likely to take their own life compared to the rest of the working population (Kotera *et al.*, 2019). Therefore, it is essential to explore mental health and wellbeing challenges due to the adverse effects it has on the working population, and a trigger for high rates of suicide. Kotera *et al.*, (2019) allude that 55% of workers have experienced a mental health challenge during their lifetime. With the impact of the Covid-19 pandemic, it becomes even more difficult to assign specific cost of mental health to the construction sector and the UK in general, but Nwaogu *et al.*, (2020) indicates that such cost is significant. The objective of this study is to explore the policies and procedures of construction employers regarding the mental health of their employees. This is examined by evaluating how mental health plans are communicated and implemented at work; what construction companies are doing to encourage open conversations about mental health and the availability of support to employees that are struggling; and what organisations are doing to routinely monitor employees' mental health and wellbeing.

It is suggested that males working in the lowest-skilled occupations potentially have a 44% higher risk of dying by suicide than the male national average, while the risk among males in skilled trades is thought to be about 35% higher (Oswald *et al.*, 2019; Smyth *et al.*, 2019). Both authors have identified the global trend regarding the mental wellbeing of construction workers. Within the construction sector, it is believed that the risk of suicide among low-skilled male labourers/operatives could be three times higher than the male national average, and Cedstrand *et al.*, (2020) suggests that mental health issues quadruple the chances of workers being involved in a major accident while on the job. For male construction workers within the skilled trades, the highest risk is among those involved in building finishing trades such as plasterers, painters and decorators that are more than twice at risk of suicide than the male national average. The high number of mental health cases amongst construction workers provides a strong indication that considerable proportion of construction workforce are susceptible to experiencing mental health issues. Some workers identified that they have experienced mental health issues at their current place of work and there are suggestions that most of the construction workforce agree that there is social stigma surrounding mental health in the construction industry (Bowers *et al.*, 2018; Guerin & Spillane, 2021). This often leads to the reluctance of workers discussing the state of their mental health and help-seeking (Laidler, 2019). Therefore, the economic impact or the actual cost of poor mental health in the UK construction sector is likely to be much higher than estimations by studies because of under-reporting of cases.

LITERATURE REVIEW

The UK construction industry has grappled with the issues of mental health amongst its over 2.7 million workforce and Laidler (2019) suggests this as an epidemic within the construction sector. Furthermore, it is considered that the mental health crisis has led to an upsurge in the rates of suicide amongst construction occupations (Milner *et al.*, 2017) and Laidler (2019) suggests that the industry's suicide rate is now over three times higher than the United Kingdom's national average, which accounts to two workers taking their own life every working day. However, this high rate of suicide within the industry is not UK specific but a pattern recognised to be pervasive within the global construction sector. Nwaogu *et al.*, (2020) showed that the United States and Australia are in the same precarious situation with reports indicating significantly higher suicide rates amongst construction workers compared to their national average.

There are existing industry-wide initiatives to address this issue, but it is not explicitly clear how effective these initiatives have been (Nwaogu *et al.*, 2020), as there are speculations that the main beneficiaries are mostly industry professionals, whilst the suicide rate for operatives and labourers continues to increase (Stein, 2022). It is worthy to state that the causes of mental health within the construction sector is multifaceted. However, the UK Health and Safety Executive highlight six key areas often associated with work-related stress which are workload, work pattern, and work environment; available support or resources; lack of control over one's work; understanding of one's role at work; work relationships; and how change is communicated (Paton, 2017). That is why issues such as lack of job security, long working hours, long commute to and from work, and challenging work activities are also considered as precursors to the high stress factors in the industry often associated with frontline workers (Laidler, 2019; Oswald *et al.*, 2019).

The economic, financial, and long-term health impact of COVID-19 pandemic on the lives of construction workers has further added more layers of stress on the already existing high stress and anxiety levels within the workplace. The levels of uncertainty in relation to job security and unemployment because of COVID-19 has made frontline operatives and manual workers even more susceptible to high stress levels due to the changes in the dynamics of their daily lives (Morton, 2020). The pandemic has significantly altered how construction sites are managed and how formal and informal employees in the industry carry out their work, and measures implemented have helped to make construction tidier, more effective, and better organised according to Jones *et al.* (2020). This was mostly difficult for frontline workers that were required to physically work on site with the imposed social and physical distancing measures while office-based professionals within the industry were able to work remotely.

The perception of the construction industry and preconceptions of construction workers by the public including the overall image of the industry needs overhaul as public opinion often see it as an industry that is dirty, demanding and an unsafe place to work. Globally, the construction industry is male dominated and a study conducted by Riva *et al.*, (2019) suggests that the male population is on average 89% of the workforce. These male construction workers disproportionately experience a range of factors that increase their risk of poor mental health, for example low job control, high demands at work (Lawani *et al.*, 2017), and occupational stress (Abbe *et al.*, 2011). It is an industry that places emphasis on being tough and independent and this mentality still exists amongst male workers contributing to the sense of shame by construction workers regarding help-seeking when they experience mental health issues (Kotera *et al.*, 2019). Aside the risk factors, construction workers are exposed to physical hazards within the workplace (Lingard & Turner, 2015), coupled with the strict health and safety regulations in place to mitigate injury to themselves and others. This could potentially create conflicting physical and psychological demands within the work environment (Bowers *et al.*, 2018) which could lead to overall psychological strain.

Due to the perceived masculine nature of the industry, frontline workers that are experiencing and struggling with mental ill health issues are often reluctant to seek help (to avoid being considered as weak) and sometimes revert to alcohol abuse and substance misuse (Lawani *et al.*, 2020). The study conducted by Milner *et al.* (2018) suggests that some sort of substance use contributes to over half of the mental health cases recorded within the construction industry. All these potential triggers and the financial burdens experienced by construction workers can further complicate the already complex problem. Therefore, addressing the mental health crisis would not only improve workers' mental wellbeing, but could potentially reduce the risk of harm to their physical health and associated costs to

companies. Poor mental health has significant economic cost implications to the UK economy (Chan *et al.*, 2020; and Kotera *et al.*, 2019). Furthermore, worker fatigue which is a common occurrence in the construction industry that affects job and safety performance (Smyth *et al.*, 2019), could become the precursor to issues like depression, anxiety, psychological distress, and sleeping disorders which makes workers more susceptible to injuries or accidents at work. It suffices to say that the industry leaders have been focusing on reactive measures in their efforts to reduce poor mental health amongst its workforce and the existing measures are available to provide support and resources to individuals experiencing poor mental health. However, it only addresses one of six key areas for work related stress that was published by the UK Health and Safety Executive. This suggests that there is much more the industry could do to combat the myriad of factors that are considered as precursors of the mental health crisis plaguing the industry.

There are strategies currently being adopted by organisations towards addressing the surge of poor mental health cases in manual labour professions such as construction work and this includes training courses and psychological education (psychoeducation) to tackle mental health literacy (King *et al.*, 2018). The most notable mental health-training course is the mental health first aid course, designed to increase awareness of mental health amongst members of the public, and train people as MHFAiders (MHFA England, 2018). The fundamental role of MHFAiders is to signpost people in crisis and promote mental health awareness but there are mixed reactions on the appropriateness of the MHFA training for diverse workplaces and the ability to measure the impact that MHFA has on mental health with various professions. Studies do tend to support the notion that MHFA increases mental health awareness, increases frequency of conversations about mental health, and improves signposting techniques but there is insufficient evidence to justify its impact in the UK construction industry (Bell *et al.*, 2018; Narayanasamy *et al.*, 2018). These studies highlighted that whilst there are reports of success of using MHFA in the workplace, the way the success or effectiveness are measured is subjective and based on individual cases. It also suggested that the MHFA does not provide tools to tackle underlying workplace issues that affect mental health, such as workplace stigma, job design, and workplace-induced stress, which are commonly associated with the construction industry.

The adoption of training sessions by companies to address poor mental health or to increase the level of awareness has not been supported by evidence that it resolves the myriad of the causes of poor mental health. Also, there are no clear evidence suggesting that training sessions mediate workplace attitudes or discrimination/stigma of those experiencing mental health struggles (Clement *et al.*, 2015; Janusonyte *et al.*, 2019). The idea of adopting mental health training or a psychoeducation course to encourage help-seeking behaviours amongst workers as an indicator of early recognition of mental illnesses and suicide prevention have not been considered as effective in terms of increasing help-seeking behaviours. The dangers of stigma cannot be downplayed in the construction sector as it negatively impacts on psychological wellbeing (Stutterheim *et al.*, 2011); self-esteem (Struening *et al.*, 2001); aggravate psychological distress (Herek, 2013); with the belief that the worker is unable to undertake their tasks, unpredictable, or unsafe (Milner *et al.*, 2018).

The Health and Safety at Work Act 1974 stipulates that all workers have a right to work in places where risks to their health (including wellbeing) and safety are properly controlled and managers have a responsibility to ensure that this goal is achieved. Furthermore, the Management of Health and Safety at Work Regulations 1999 places a duty of care on employers to conduct suitable and sufficient risk assessment of the work and on the worker. This is an essential part of managing the risks to the health, safety, and wellbeing of employees at work including conducting health surveillance. Even with these laws in place, the cases of mental health and suicide in construction has continued to increase year on

year. However, the ability of organisations to put in place strategic measures towards managing mental health could be dependent on the size of the firm (Hanna & Markham, 2019). It is significant to note that workers still have this fear of reprisal if they openly disclose their mental health issues (Martin & Wachter, 2018; Milner *et al.*, 2018) and this could be due to the lack of trust and genuine benevolence from employers (Lawani *et al.*, 2019). This further deepens the complexity of the workers to openly seek help and support. This has detrimental impact on male construction workers that are less likely to seek treatment for mental ill health (Milner *et al.*, 2018). All these factors have contributory effects on the high suicide rates amongst male construction workers compared to other occupations. Therefore, the influence and commitment of leadership to holistically address issues of mental health within the construction industry can potentially change the mind-set and attitudes of workers to confidently disclose their mental health challenges and needs; seek the right available help; and mitigate the associated stigma.

Ideas such as environmental stressors are also considered to potentially have contributory effect on the wellbeing of workers. Stedman (2002) whose 'Sense of Place' theory focuses on an individual or group's attachment and sense of belonging to a given setting (community; respect; life balance; support; resilience; and engagement) when adapted to the context of a construction workplace can contribute to overall employee wellbeing (Turner *et al.*, 2021). However, developing a sense of place within the construction sector might be difficult to fully achieve due to the temporary nature of construction projects and the peripatetic workforce (Lawani *et al.*, 2018). This could lead to poor worker performance, reduced engagement and workplace satisfaction, and burnout of the affected workers. Harandi *et al.*, (2017) thus indicate that there is evidence to suggest that low levels of social support significantly correlate with the prevalence of mental health which might be other reasons why construction workers are more susceptible to experiencing mental health episodes.

The antecedents of mental ill-health are complex and unique to the individual experiencing that situation. It should be acknowledged that the workplace alone may not be the primary cause as there are other significant factors in a worker's personal life that play a part in determining whether mental ill-health is exacerbated or improves. It is therefore paramount to explore what guidance or resources are available to employers regarding supporting workers with their mental health needs as well as the legal obligations on the employer with regards to workplace mental health risks. The HSE's 'Talking Toolkit' is another form of resource available to support line-managers to facilitate engagement with employees regarding mental health related issues (HSE, 2021). Through early engagement with employees, organisations can boost the level of awareness regarding workplace mental health and reduce the likelihood of mental health stigma. It is in an organisation's best interest to address employee wellbeing at an early stage as it can result in both social and economic benefits for the organisation and the individual involved.

RESEARCH DESIGN

This study explores mental health challenges and the implications for construction safety from the lens of participants (managers and those with managerial responsibilities) that are employed in highways, construction, maritime, utilities, home building, rail, and haulage/fleet. The idea was to draw on the experiences of the participants using the phenomenological qualitative study (Creswell 2013; Kalpita 2017). To address the issue of mental health in construction, it is important to understand the phenomena under investigation and to have knowledge of the construction industry (Creswell & Creswell 2018; Creswell & Poth 2017). The adoption of the phenomenological study using van Manen's approach enabled the participants (managers and those with managerial responsibilities with over 10 years working experience) to explicitly express their views of mental health and the challenges that their

organisations and employees experience and the implications for the construction sector. The adoption of the van Manen’s approach was chosen because it offers some level of flexibility regarding data collection (Van Manen 2016). With this approach, there is more of an emphasis on the facilitation of participants to share their views on issues of mental health in their organisations in a non-coercive way and the production of meaning between the researcher and researched compared to other phenomenological approaches. The non-probability purposive sampling strategy was adopted by using the self-selected sampling strategy that allows individuals or organisations to voluntarily choose to participate in the study on their own accord (Palinkas *et al.*, 2015; Creswell & Creswell 2018). The surveys were conducted using Microsoft Forms (open-ended questions) and the participants had the opportunity to provide their lived experiences of the questions asked. This method was considered useful as it eased the deployment of the self-administered questionnaire. The questionnaire was designed explicitly to be completed by respondents without the interviewer's assistance (or bias) benchmarked against the mental health core and enhanced standards tools (Table 1) adopted by the ‘Stevenson and Farmer review of mental health (Stevenson, 2017). The qualitative study with the 106 participants designated as managers and those with managerial responsibilities within the UK followed institutional ethical procedures and the Data Protection Act 2018 protocols.

Table 1: The mental health core and enhanced standards tools adopted by the ‘Stevenson and Farmer

CORE	
1	Does your organisation produce, implement and communicate a mental health at work plan?
2	Has your organisation started to develop mental health awareness among employees?
3	Does your organisation encourage open conversations about mental health and the support available when employees are struggling?
4	Does your organisation provide your employees with good working conditions and ensure they have a healthy work life balance and opportunities for development?
5	Does your organisation promote effective people management through line managers and supervisors?
6	Does your organisation routinely monitor employee mental health and wellbeing?
ENHANCED	
1	Does your organisation report on health and wellbeing; specifically impact and outcomes?
2	Does your organisation have a health and wellbeing lead at Board or Senior Leadership level, with clear reporting duties and responsibilities?
3	Does your organisation encourage openness around health during recruitment, emphasising why information is required and having support in place to facilitate a good response following disclosure?
4	Does your organisation provide tailored in-house mental health support and signposting to clinical help including Mental Health First Aiders, Occupational Health and EAP?

This sampling technique was useful for this study as the issue of mental health in the construction sector is not UK specific but global. Therefore, the participants were those with either some strong feelings or opinions about the research or they have specific interest in this study or the findings that evolve, or they genuinely want to participate in the study. Using the self-selected sampling approach is also beneficial as it is quick and easy to conduct sampling with a wide variety of participants (Creswell & Clark, 2018; Creswell & Poth, 2017). Furthermore, the voluntary participants may not be representative of the wider target population and there is a potential for the subjects to exhibit some level of self-selection bias. The approach used for the self-selection sample required the participants or organisations to know about the study whilst adopting all the requisite ethical guidelines, making it clear what the study involved, and the more practical information such as the type of participant required. It is believed that the motivation for participants to respond to research involving self-selection can be partly due to

the ease of response and because the participants want their voices to be heard. The analysis for this paper focuses on the outputs from the 106 participants (Table 2) and the data was analysed using content analysis to assess the levels of supportive environment available to manage the risks to worker’s mental health, and safety within their workplace.

The content analysis is useful in determining the presence of certain words, concepts, or emerging themes from the self-administered questionnaire to enable drawing inferences from the text (Hsieh & Shannon 2005). The analysis of the data involved systematically and objectively identifying keywords and recurring themes from the self-administered questionnaire into manageable content categories through a process of selective reduction (Elo *et al.*, 2014). Being able to reduce the text into pre-defined categories meant it was possible to manually examine for specific words, concepts, or patterns that inform the research question. Alongside the three main groups (Highways, Construction, and Rail), the Utilities, Maritime, Home Building and Haulage/Fleet sectors were grouped together as “Others” due to the low number of participants.

Table 2. Participant information

Industry	Number of participants
Highways	43
Construction	37
Rail	14
Utilities (Others)	7
Maritime (Others)	2
Home building (Others)	2
Haulage/fleet (Others)	1
Total	106

FINDINGS & DISCUSSION

Based on the content analysis adopted for the 106 participants, a set of themes reflecting the individual objectives of the study were developed.

How mental health plan is produced, communicated, and implemented at work

Action Plan/Policy/Strategy – The Action Plan includes organisational commitment to produce a mental health strategy or an easy and practical way of supporting workers’ mental health at work (Saxena *et al.*, 2013). The participants identified the different approaches adopted across different sectors regarding the action plan, policy, or strategy that their organisations have in place. Their responses indicate that some organisations are signatories to the building mental health charter with such organisations having mental health and wellbeing policies or plans for effective management including having employee action plan in place (Table 3).

Training/Workshops/Events – Workers in the construction industry potentially know or have a close contact experiencing mental ill health and understanding how to manage such difficult and complex situation is imperative. Training to equip workers to recognise and assist when someone has a mental ill health issue is needed (Booth *et al.*, 2017). The highways participants broadly indicated that their organisations tend to get employees involved in wellbeing campaigns, annual roadshows and safety briefings, dedicated toolbox talks on wellbeing and mental health. Mental health training including mental health first aiders, regular mental health workshops, site inductions that incorporate the opportunity for workers to start the mental health conversation, stand down days and opportunities for workers to get involved in wellbeing breakfasts are ways that organisations are communicating with employees. Modular emotional intelligence training programmes specifically tailored for managers (Lawani *et al.*, 2022) on how to manage issues of mental health of employees within the workplace are

steps being deployed to mediate on the wellbeing of the workers but the involvement of frontline workers in these types of training programmes which might be beneficial are not prioritised by many organisations.

The participants within the construction sector identified how their organisations get involved and promote mental health awareness training for workers and managers e.g. the mental health first aid training (MHFA England, 2018), including other relevant continuous professional development sessions. The participants alluded to opportunities for workers to attend events and share experiences and best practices on issues of mental health. The participants identified that most recently, the use of webinar sessions to communicate mental health, stress, mindfulness, financial wellbeing, domestic abuse, sleep, diet/nutrition, exercise, and men's health to construction workers is becoming the norm within the sector. However, the uptake of webinar sessions to address mental health issues could possibly be fraught by factors such as the workers right to privacy, confidentiality, and informed consent (Mindu *et al.*, 2023). Furthermore, the adoption of webinar and online sessions tend to take away the human interface and quality of relationship which is core to addressing mental ill health issues. Major and medium sized contractors tend to adopt this digital strategy, whilst the smaller contractors struggle to address this issue at the same level due to lack of digital competency and the lack of context-specific information. Major contractors now integrate leadership training at different levels addressing mental health and wellbeing of workers while some offer mindfulness and resilience training as part of promoting healthy work-life-balance amongst their employees. Furthermore, the Human Resource (HR) and managers are being encouraged to attend resilience training and webinar sessions to enable them have more supportive conversations with workers experiencing mental health issues at work.

For the rail sector, trained mental health first aiders are available across projects and sites to help with recognising early signs and symptoms normally associated with workplace mental health illnesses. Toolbox talks on mental health are delivered broadly to frontline workers and the senior management are involved in regular employee consultation and engagement on mental health and wellbeing issues. It is suggested that the engagement and involvement of senior managers on mental health and wellbeing issues should be genuine, consistent, and long-term so that workers recognise their workplaces as having a strong and transparent organisational leadership and integrity (Lawani *et al.*, 2019). However, the participants from the sectors grouped as 'others' (Table 3; utilities, maritime, homebuilding and haulage/fleet) only mentioned that their companies provide training but the depth and type of training available to workers were not explicitly stated.

Monitoring – Different organisations tend to employ different mechanisms for monitoring mental health within the workplace (Lorber & Dobnik, 2022) or the level of awareness amongst employees. The highways sector monitor and measure this through tracking of attendance, training records, absenteeism, Employee Assistance Programme (EAP), and referral to occupational health services for wellbeing. However, there are suggestions that the rapid growth of employee assistance Programmes (EAPs) has not been fully supported by evidenced-based research regarding their efficacy because of the inconsistent information relating to its effectiveness (Joseph *et al.*, 2018). The highways also adopt regular surveys to encourage openness about mental health and wellbeing as mechanisms for monitoring their own processes but the reality is that people do not want to openly share their mental health struggles due to the stigma and discrimination associated with it (Bowers *et al.*, 2018; Guerin & Spillane, 2021).

The construction sector adopts wellbeing audits which could be via monthly EAP report on usage by the workers; monitoring resignations, early/ill health retirements, rate of death in service, suicide, and absence rates. However, the complexity of assessing or evaluating the wellbeing of workers is multidimensional and could be impacted by a range of factors which are dependent on the individuals' ability to cope with life's stresses (Powell *et al.*, 2018). The use of employee surveys during COVID-19 lockdown was quite common amongst the contractors as a measure of their monitoring process, but

the shortcoming with self-reported survey is the likelihood for participants to provide ideal responses that might not be a true reflection of the depth of their mental ill health struggles (Zhang et al., 2023).

The rail sector which is a high-risk industry also adopt a similar strategy as the construction industry by making use of wellbeing audits via monthly EAP reports on usage; monitor resignations, early/ ill health retirements, rate of death in service, suicide, and absence rates; employee surveys including wellbeing during COVID-19 lockdown as feedback monitoring service; and MIND Workplace Wellbeing Index. However, the 'others' category only went as far as implementing Display Screen Equipment (DSE) hybrid working assessment and making use of monthly health fact sheets and this signifies an insignificant level of monitoring of their employees on issues of mental health. To achieve real change, there should be tangible commitment from all parties to integrate services and increase accessibility for improved mental health outcomes for workers (National Mental Health Commission, 2019).

Support/Engagement – Existing study on worker engagement specifies the increased significance of meaningful discussion, communication, knowledge sharing, and shared decision-making regarding occupational safety and health practices within the construction industry (Lawani *et al.*, 2017). Adopting this strategy reflects both legal and ethical requirements for management to collaborate with the construction workforce demonstrating management's commitment to safety, health and wellbeing of the workers. The level of support or engagement within the workplace can vary based on the strategy and action plan adopted by organisations in raising the level of mental health awareness (Table 3). The highways sector identified diverse ways they support and engage with workers through online mental health support and steering groups; making use of the Construction Industry Helpline App; newsletters and poster campaigns; and scheduling question and answer sessions amongst employees. Other forms of engagement with employees, stakeholders, and the supply chain to improve the wellbeing of workers at work and at home are some of the actions adopted within the industry. However, the level of such engagement is open to scrutiny based on the overall outcome, and this can unsettle the level of trust between management and workers (Lawani *et al.*, 2019), if some of the workforce feels disengaged.

The participants within the construction industry also indicated the type of engagement or support available to the workers. It is pertinent to state that most of these supports were not in-house but external to the companies, which raises the question regarding the adequacy of support available to construction frontline workers. A study focusing on the adequacy of workplace interventions or support indicate that they tend to have small short-term positive effects on health and wellbeing of workers and suggests that such workplace interventions should be implemented as routine programs (Shiri et al., 2023). This would be beneficial in sustaining its longer-term benefits. Referral of workers to handbooks for more information, using posters, information websites as agents of communication to raise the level of awareness is still considered as the norm within the construction sector. The downside with this type of referral is its failings to acknowledge or adequately consider the low level of literacy within the construction industry amongst frontline workers (Zulu *et al.*, 2023; Hare *et al.*, 2013). Other types of support in place from major contractors include signposting workers to third party services like Mates in Mind, Mind, Lighthouse etc, that are involved in emotionally, physically and financially supporting the wellbeing of construction workers and their families. Other available support mechanisms to construction employees include mental health awareness representatives, dedicated Group Health and Wellbeing manager, wellbeing champion, partnership with clinical experts, return to work and rehabilitation processes to support workers, and critical incident support for serious or fatal incidents, death of colleague, on or off site. It is important to state that these support mechanisms are not universally available to all construction employees neither are these services provided by all construction employers.

Participants from the rail sector identified the distinct types of support and engagement available to the employees such as being educated on work-life balance, use of wellbeing newsletters and champions

that are available to engage with workers needing extra support. The participants from the 'others' group identified approaches such as having the support of wellbeing practitioners, home fitness videos, and mental health first aiders but the level of support and engagement rendered to workers remains elusive.

These strategies are adopted by management to engage with their workforce towards raising the awareness of mental health to every worker across their companies. It is evident that the management across different organisations are making concerted effort with employees by getting them involved in dialogue and decision-making to create a culture of openness and trust within the workplace (Lawani *et al.*, 2019). If these strategies are implemented effectively, it could potentially promote a healthy work-life balance, provide opportunities for learning and development, and offer positive working environments and social connections amongst the employees and with management. All the support identified by the participants only flag the role of management in providing solutions to the symptoms of mental health within the workplace and they fail to address the multifaceted causes of mental health within the industry.

Table 3: How mental health plan is produced, communicated, and implemented at work

Question: Does your organisation produce, implement, and communicate a mental health at work plan?				
Themes	Highway (43)	Construction (37)	Rail (14)	Others (12)
Action Plan/ Policy/ Strategy	Wellbeing Plan including mental health Building Mental Health Charter signatories Health and Wellbeing policy	Policy document reinforcing commitment Wellbeing Policy and Programmes 5 Strategies - Leadership, Knowledge & Training, Working Environment, Communication and Stakeholders Building Mental Health Charter Stress, Fatigue and Mental Wellbeing at Work Policy and strategy for effective management	HSQE Plan and campaign on mental health and wellbeing Mental Health and Wellbeing Policy Employee Action Plan	Mental health strategy, with aims, objectives and actions HS&W policy that recognises mental health Active mental health at work plan
Training/ Workshops/ Events	Employee involvement in wellbeing campaigns Annual roadshows, annual safety briefings, dedicated toolbox talks on wellbeing and mental health Mental health training /mental health first aiders Regular workshops Site inductions incorporating a 'Start the Conversation' Stand Down Days and Wellbeing breakfasts Emotional intelligence modular programme to coach managers	Mental health awareness training is promoted Webinars and additional training for managers Mental Health First Aid Training Structured training and regular Champion forums to support CPD Sharing experience and best practice Webinars on mental health, stress, mindfulness, financial wellbeing, domestic abuse, sleep, diet/nutrition, exercise, men's health Leadership training for all levels Mindfulness and Resilience training HR and managers' resilience training/webinars to have supportive conversations 4 key awareness days each year: Time to Talk, Mental Health Awareness week, Suicide Awareness Day, and World Mental Health Day	MHFA to recognise early signs and symptoms of common workplace mental health illnesses Toolbox talks on mental health issues delivered to front line workers Consult with employees regularly on mental health and wellbeing	Company training
Monitoring	Monitoring and measurement through tracking of attendance, training records, absenteeism, Employee Assistance Programme (EAP), and referral to occupational health service for wellbeing Regular surveys to encourage openness about mental health Wellbeing surveys	Wellbeing audit via monthly EAP Report on usage Monitoring resignations, early/ ill health retirements, rate of death in service, suicide rates, absence rates Employee surveys during COVID-19 lockdown	Wellbeing audit via monthly EAP Report on usage Monitoring resignations, early/ ill health retirements, rate of death in service, suicide rates, absence rates Employee surveys during COVID-19 lockdown Wellbeing survey and feedback monitoring service MIND Workplace Wellbeing Index	DSE Working at Home Assessments Monthly Health Fact Sheets
Support/ Engagement	Online mental health support Mental Health steering group Construction Industry Helpline App Newsletters promoting mental health awareness Poster campaigns Question and Answer sessions Weekly news digests Engaging with employees and stakeholders to improve wellbeing at work and home	Information contained in handbooks Posters and information available on sites Support network across projects 3rd party supports - Mates in Mind, Mind, Lighthouse etc. Mental health awareness representative Dedicated Group Health and Wellbeing manager Wellbeing Champion and Mental Health First Aider network Partnership with clinical experts Return to Work and Rehabilitation processes to support workers Critical incident support for serious or fatal incident, death of colleague, on or off site Mental Health dedicated email address and information site	Educating employees on work-life balance Wellbeing champions Wellbeing Newsletter	Wellbeing Practitioner Home Fitness Videos Mental Health First Aiders

What construction companies are doing to encourage open conversations about mental health and the availability of support to employees that are struggling

Open conversations – Workers experiencing mental health problems often indicate that publicly admitting it comes with stigma, and this can stifle recovery (Clement *et al.*, 2015; Herek *et al.*, 2013). Study suggests that the underlying problem with stigma are the issues of ignorance, prejudice and discrimination (Kolb *et al.*, 2023) that are often shown towards workers experiencing mental ill health. Although mental ill health problems are common and affect thousands of UK workers, there is still a strong negative attitude around mental health from society, employers, and colleagues. Some workers even experience internalised stigma (Stuetzle *et al.*, 2023), where they begin to believe the negative messages or stereotypes about themselves. Therefore, organisations should be promoting open conversations towards providing support to employees (Table 4). The highways sector is involved in promoting stand-ups about mental health, stand-down meetings, and management safety tours to get workers talking and to build their confidence. If such an approach is sustained, there is the possibility that the issue of ignorance, prejudice and discrimination (Kolb *et al.*, 2023) could be moderated within the workplace. That way, the experiences of people are shared openly to encourage conversations and support through national campaigns, wellbeing training sessions, inductions and toolbox talks on equal opportunity and occupational health policies. Initiatives such as stress management training are being promoted, and one-to-one sessions with team leaders to discuss non-work-related issues and some question-and-answer sessions are also being adopted within the Highways sector.

For the construction sector, workers are still being signposted to handbooks which offers minimal support as a result of the literacy issues in construction (Zulu *et al.*, 2023; Hare *et al.*, 2013), with the assurance for open door policy in discussing any mental health challenges. The contractors encourage conversations using the Employee Assistance Programme, however, its efficacy is indeterminate (Joseph *et al.*, 2018). The use of external support organisations, webinars and face-to-face sessions with the opportunity for Q&A, raising the awareness of unconscious bias, discrimination and discussing best practices and areas to focus in supporting workers are measures being adopted by the construction industry. Other strategies being adopted include encouraging open conversations during employee induction programme, briefing sessions, toolbox talks and workshops with the involvement of trained mental health first aiders and group counselling services. Furthermore, the notion that reasonable conversation can be sparked off with notice boards and posters, intranet links to resources, project bulletins, and monthly company news magazines will not go down well amongst workers. There should be physical mechanisms and social opportunities to offer effective support and workplace interventions to workers experiencing mental ill health (Shiri *et al.*, 2023).

Different industries and organisations tend to encourage open conversations about mental health slightly differently and there are some overlaps in strategies being used by most of the companies. However, such strategies do not resolve the fundamental and multidimensional stressors of mental health issues amongst workers. The participants from the rail sector alluded that mental health first aiders cascade information to all employees, and there are opportunities for bespoke mental health awareness training for line managers to improve communication and support, including through inductions and open-door policy. Other sources of conversation which include newsletters and bulletins, wellbeing conversation starter cards, and the use of Employee Assistance Programme (EAP) are intended to help employees deal with personal problems that might adversely affect their work performance, health, and wellbeing.

The sectors in the ‘others’ kick off open conversations via their site inductions, toolbox talks, and through training. The types of training were not explicitly disclosed by the participants neither did the participants state how such trainings might meet the needs of the employees. Their organisations encourage employees to form discussion groups and signpost employees to attend safety conferences that promote mental health initiatives. The ability for managers to be able to manage expectations regarding having difficult conversations on issues of mental health with employees has resulted in managers undergoing some form of upskilling and leadership training. This suggests that frontline

workers are not exposed to or given equal opportunities to undertake such forms of trainings that could be an enabler to open conversations.

Available employee support – Having mental health support for employees within the workplace is important because help-seeking is fundamental towards getting the requisite support and staying well (Turner *et al.*, 2021). Even with this type of support in place, it can be difficult for construction workers to start such difficult conversations. This makes it even more difficult for male workers as they are often unsure, and if they should try to manage their mental ill health on their own. The participants from the highways sector indicated that there is employee support available within their workplaces e.g. Mental Health First Aiders and ambassadors; Employee Assistance Programme which is actively promoted to employees and their direct family members; access to Mental Health Professionals; access to confidential employee service and counsellors; and trained HR managers readily available to offer support. Study suggests that the provision of psychoeducational materials, face-to-face workshops and interventions based on cognitive behavioural therapy ranked as the most likely employee support that workers engage with (Hogg *et al.*, 2023). Other available support includes return-to-work interviews and in-house counselling, and risk assessments for employees. Aside the physical support, there are also online support services that participants identified, such as wellbeing platforms built into company apps to support employees, including intranet notices (Table 4).

The construction industry participants identified strategies being adopted by their organisations regarding employee support to include funding for specialist support and counselling, nominated mental health representative that liaise closely with workers, upskilling line managers to enable them manage difficult situations more robustly, and employee access to qualified psychotherapist. There are other support mechanisms such as ongoing rehabilitation and support for workers experiencing mental health issues, return-to-work programmes to enable reintegration into the workplace without feeling stigmatised (Milner *et al.*, 2018; HSE, 2021). Other strategies being adopted include stress risk assessment as a predictive tool for combating re-occurrence of mental health episodes, and employee attendance management policies as an indicator.

There are existing cross-industry initiatives based on available support that employees can access. The participants working within the rail sector indicated support such as bi-annual reviews of medical conditions of employees and their wellbeing and this is particularly important due to the high-risk nature of the workplace. There are provisions for mentors within the workplace, including individual risk assessment and referral to external professional counselling services which some workers consider helpful due to the confidentiality component of such support. However, in organisations where the workforce perceives high organisational stigma on issues of mental ill health, there is bound to be some level of resistance from workers to openly disclose their mental health struggles (Pischel & Felfe, 2023). The participants in the ‘others’ sectors alluded to two similar strategies being adopted by their organisations to help support employees i.e., the employee absence management policy and Employee Assistance Program (EAP) which provides free support, counselling, and advice.

Providing available help and support to employees is crucial for maintaining good mental health and wellbeing and can aid recovery from mental ill-health. The inclusion of recovery-orientated practice through the help of their peers towards achieving an optimal state of personal, social and emotional wellbeing, could be beneficial to workers (National Mental Health Commission, 2019). Engagement of employees with an online community could offer another avenue for networking and a source of connection with like-minded people experiencing mental ill-health but this comes with its own challenges. However, engagement with an online community could alleviate feelings of loneliness and boost social, and emotional support. Disclosure and open conversations around mental ill-health should be encouraged at all phases of the employee journey starting from the recruitment process. There should be steps in place regarding how companies communicate their commitment to equal opportunities during the recruitment process to ensure that potential employees are not discriminated against at any

stage. Managers, supervisors, and frontline workers should be provided with the opportunity to have effective conversations and be signposted to seek support when necessary.

Table 4: What construction companies are doing to encourage open conversations about mental health and the availability of support to employees that are struggling

Question: Does your organisation encourage open conversations about mental health and the support available when employees are struggling?				
Themes	Highway (43)	Construction (37)	Rail (14)	Others (12)
Open Conversations	<p>Stand-ups about mental health/ stand down meetings/ management safety tours 'team talk' film, with experiences of people to encourage conversations and support National campaign, with posters and toolbox talks Wellbeing and mental health awareness training sessions Induction briefing on equal opportunity and occupational health policies Wellbeing Bulletins, news, and resources Communication process maps Stress Management training 1-2-1 with team leaders on non-work-related conversations Question and Answer sessions</p>	<p>Contained within the handbook Employee Assistance Programme Webinars with Q&A session Open door policy Awareness of unconscious bias and discrimination Discuss best practise and areas of focus Induction Programme - policies, procedures, and training Mental health programme Trained MHFA's Training line managers Briefings, toolbox talks, and workshops Face-to-face or Zoom/Teams Notice boards and posters; intranet links to resources, project bulletins, and support organisations Mental Health Information Boards Group counselling services Monthly company news magazine External specialists</p>	<p>MHFA cascades information to all staff Induction, bulletins, and open-door policy Training and Employee Assistance Programme Newsletters Bespoke mental health awareness training for line managers Wellbeing conversation starter cards Improved communication and support during the pandemic</p>	<p>Induction, and toolbox talk Training Upskill leadership in having difficult conversations Discussion groups Safety conferences</p>
Available employee support	<p>Mental Health First Aiders and ambassadors Employee Assistance Programme actively promoted to employees and their direct family members Working with agencies to support people into work Risk assessments for employee support Access to a confidential employee service and Counsellors Access to Mental Health Professionals HR manager Wellbeing platform built into company App to support staff Notice boards, intranet, line managers Absence review with return-to-work interview; in-house counselling</p>	<p>Funding for specialist support and counselling Nominated mental health representative Ongoing rehabilitation and support Upskilling Line Managers Promoting media to all employees Return to work programme Stress risk assessment Employees access to qualified psychotherapist Attendance Management policy</p>	<p>Mental Health First Aider (MHFA) and policies Bi-annual reviews of medical conditions Mentorship Individual risk assessment External professional counselling services</p>	<p>Absence management policy Employee Assistance Program (EAP) which provides free support, counselling and advice</p>

What organisations are doing to routinely monitor employee mental health and wellbeing

Monitoring – There is a shift in attitude at organisational levels around monitoring employee mental health and wellbeing, resulting in an upsurge in the level of awareness amongst leaders. This suggests that steps are being taken to mitigate workplace mental health. Based on the Stevenson (2017) report, it suggests that 15% of people at work experience symptoms of existing mental health condition and routine monitoring of employees' mental health and wellbeing could go a long way to help with this situation.

The highways participants indicated that employers currently have several ways of managing and monitoring their employees like the use of annual culture survey and feedback, monthly health and wellbeing survey, employee engagement and health and safety climate survey, annual health and wellbeing surveillance and safety critical medicals. There are other practices being used to monitor wellbeing and mental health such as occupational health assessments and pre-employment health screening. The use of other third-party feedback and indicators like monitoring data from EAP, employee absence, monthly reports, confidential questionnaires and focus groups are some of the strategies adopted for monitoring employee mental health and wellbeing (Table 5).

The construction industry participants (Table 5) use monitoring initiatives such as annual and bi-annual engagement surveys that measures the culture within the workplace. Quarterly panel survey, annual mental health and wellbeing survey, and bi-annual mental health workshops are also adopted. Regular employee meetings, monitoring resignations, early/ ill health retirements, death in service rates, suicide rates, and absence rates are some of the indicators that employers adopt for monitoring employee mental health and wellbeing. Overall, EAP usage is widely adopted across the construction industry even though its efficacy is inconclusive (Joseph *et al.*, 2018). Furthermore, Wellbeing Action Plans and stress framework, observation/improvement card (which requires some level of literacy), discussion with line managers, HR or MHFAs and regular occupational health screening are also used but there is no credible evidence regarding their effectiveness.

The rail sector adopts mental health and wellbeing monitoring, including audits of provisions in place to support the wellbeing and health of their workers, health surveys and annual medical questionnaires, MIND Wellbeing Index, and confidential, independent and internal surveys. Site safety audits, absence management processes and referrals to occupational health providers are examples of monitoring initiatives deployed by employers towards routinely monitoring employee mental health and wellbeing within the rail industry. The participants in the 'others' group indicated that their employers use surveys at company training days, annual staff surveys, monthly mental health and wellbeing monitoring and anonymous staff surveys. However, there were no indications of how employees receive feedback on outcomes and this could lead to a sense of lack of trust and genuine benevolence from management (Lawani *et al.*, 2019) regarding the mental health and wellbeing of employees. It is acknowledged that many organisations have measures in place, but routine monitoring of employee mental health and wellbeing is often a challenge for employers as very few have the resources and commitment to effectively undertake continuous or longitudinal monitoring. Therefore, employees often perceive such monitoring initiatives as lacking genuine long-term impact on their mental health and wellbeing, neither does it achieve the best outcome for both the business and for employees. The expectations are for employers to start developing a clear picture of the mental ill health issues within their organisations and how that could help to understand what affects workers' mental wellbeing. This could be an opportunity to define the best support mechanisms that can be made available and tailored to the needs of the employees.

Table 5: What organisations are doing to routinely monitor employee mental health and wellbeing

Question: Does your organisation routinely monitor employee mental health and wellbeing?				
Themes	Highway (43)	Construction (37)	Rail (14)	Others (12)
Monitoring	Annual culture survey Employee engagement survey and health and safety climate survey Surveys and feedback Occupational health assessments and pre-employment health screening Third party feedback and indicators Monitoring based on data from Employee Assistance Programme Employee absence Confidential questionnaires and focus groups Wellbeing forum/surveys Mental Health and Wellbeing platform within company App Annual health and wellbeing surveillance/ safety critical medicals Discussion in 1-1 meetings Monthly health and wellbeing survey Monthly reports	Employee Engagement survey Regular meetings Annual engagement surveys, which measures the culture Bi-annual Mental Health Workshops Bi-annual engagement survey and quarterly Panel survey Monitoring resignations, early/ ill health retirements, death in service rates, suicide rates, absence rates Employee Assistance Programme usage Wellbeing Action Plans and stress framework Annual Mental Health and Wellbeing survey Observation/improvement card Discussion with Line Manager, HR or MHFAs Regular occupational health screening	Mental health and wellbeing monitoring Audits of provisions in place to support Open door policy Health surveys Annual medical questionnaires MIND Wellbeing Index, confidential and independent survey Internal surveys Open door policy Site safety audits Absence management process Referrals to Occupational Health Provider	Survey at every company training day Annual staff surveys Monthly Mental Health & wellbeing monitoring Anonymous staff surveys

Conclusion

The reported cases of mental ill-health within the construction industry are higher than average and this is often related to the high stress conditions and the toxic culture that exists within the industry. Although the industry is making good strides towards addressing mental health issues, these steps are more reactive than proactive as it struggles to address the multifaceted nature of mental ill health problem. As such, poor mental health within the UK construction industry is having significant financial burdens on businesses and the economy in general. Some major contractors have initiatives and programmes in place dealing with the consequences of mental health, but the emphasis is still not addressing the myriad of causes behind workplace issues and more effort should be geared towards sustainable wellbeing of the employees for economic growth.

Providing support network to workers experiencing mental health is a good first step but it is simply not enough as the industry is capable of developing services that could be instituted to protect the wellbeing of workers thereby preventing the occurrence of mental health problems. Some organisations are signatories to the building mental health charter and these organisations have mental health and wellbeing policies and employee action plan in place to aid effective implementation. However, the peripatetic nature of the workers within the industry might also contribute to the inconsistency of support available to employees as some workers constantly change roles, jobs, and projects managed by different contractors.

It is acknowledged that some main contractors now integrate leadership training at different levels to address the mental health and wellbeing of workers while some offer mindfulness and resilience training as part of promoting healthy work-life-balance amongst their employees. Furthermore, the Human Resource and managers attend resilience training and webinar sessions to enable them have more supportive conversations with workers experiencing mental health at work. It is evident that the management across different organisations engage their employees by getting them involved in dialogue and decision-making to create a culture of openness and trust within the workplace. This strategy could potentially promote a healthy work-life balance that provides opportunities for learning and development and offer positive working environments and social connections amongst employees and with management. Providing available help and support to employees is crucial for maintaining good mental health and wellbeing and can aid recovery from mental ill-health.

The level of engagement within the workplace can vary based on the strategy and action plan adopted by organisations in raising the level of mental health awareness. The level of such engagement is open to scrutiny based on the overall outcome and the adequacy of support available to employees. Engagement of employees by encouraging open conversation on issues of mental health could offer an avenue for networking and a reliable source of connection with like-minded people experiencing mental ill-health. This could alleviate feelings of loneliness and boost social, and emotional support for employees that are struggling. The construction companies encourage open conversations about mental health towards providing support to employees that are struggling. Different organisations tend to encourage open conversations about mental health slightly differently and there are some overlaps in strategies being adopted by some of the companies. However, there are underlying problems with stigma and issues of ignorance, prejudice and discrimination due to the negative attitude around mental health from parts of the society, employers, and colleagues. Therefore, sustained and open conversations by management geared towards providing support to employees could moderate the issue of stigma within the workplace. Disclosure and open conversations around mental ill-health should be encouraged at all stages of the employee journey starting from the recruitment process. How companies communicate their commitment to equal opportunities during the recruitment process and ensuring that potential employees are not discriminated against at any stage could make a difference around resolving the problem or understanding the mental health challenges.

Different organisations employ different mechanisms for monitoring mental health issues within the workplace. However, the complexity of monitoring or evaluating the wellbeing of workers is multidimensional and could be impacted by a range of factors which are dependent on the individuals' ability to cope with life's stresses. As much as organisations have measures in place, routine monitoring of employee mental health and wellbeing is often a challenge for employers as very few have the resources and commitment to effectively undertake continuous or longitudinal monitoring that could provide some indicators on the antecedents of mental health.

There are existing cross-industry initiatives and available support that employees have access to. Providing help and support to employees is crucial for maintaining good mental health and wellbeing and could aid recovery. The inclusion of recovery-orientated practice through the help of their peers towards achieving an optimal state of personal, social and emotional wellbeing, could be beneficial to workers. Furthermore, online community support could offer another avenue for networking, alleviating feelings of loneliness and boost social and emotional support with like-minded people experiencing mental ill-health, but this also comes with its own challenges. It is imperative that the industry work towards understanding the mental health challenges of their employees for a more tailored and robust support. Disregarding the multifaceted causes behind the epidemic due to the perceived financial implications could be more devastating for the industry. The construction industry continues to lose millions of pounds each year due to the high number of lost man-hours as a direct consequence of poor mental health and addressing these underlying issues of poor mental health may be a net positive for businesses long-term.

Limitations

A limitation of this study is the number of participants which is not representative of the entire UK construction workforce. Therefore, the findings from this study as much as it presents some understanding of employee mental health and wellbeing cannot be overtly generalized across multiple industries, different geographic regions or contexts. As a result of the different work settings of the participants and the resources available to workers, further exploration and more exhaustive study of individual sectors, sizes, and settings might yield a more compelling and robust outcome that reflects the overall mental health challenges and their implications for construction safety. Furthermore, the non-probability sampling techniques (purposive sampling) comes with sampling bias or selection bias and voluntary participants may not be representative of the wider target population and there is a potential for the subjects to exhibit some level of self-selection bias.

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