"We are our own worst enemy": a qualitative exploration of work-related stress in the construction industry

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Abstract

Purpose – Around 400,000 working days per year are lost in the construction industry due to stress, depression or anxiety, but a large proportion of the industry – those primarily not based "on-site" – is not included in these statistics. Little research has been conducted in this group about their experiences of occupational stress. The authors explored how stress was experienced and managed by construction professionals and its perceived impact on health.

Design/methodology/approach – The authors interviewed 32 construction professionals in a British construction company, with varying levels of seniority and years in the industry. Interviews were transcribed, coded and analysed thematically.

Findings – Stress was viewed an inevitable and increasing part of the construction industry, exacerbated by recent economic challenges. Participants talked about a culture of stress and overwork but often felt unable to challenge it due to job insecurity. Senior management acknowledged stress was a problem within the industry and something that potentially threatened company productivity. Company-wide initiatives had been implemented to address stress levels (e.g. Mental Health First Aiders), but were criticised for ignoring

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underlying issues. Informal means of managing stress were identified, such as careful consideration of team dynamics, which allowed employees to form close bonds and using "banter" and camaraderie to relieve stress. However, the persistence of a macho male image meant some participants were reluctant to talk about their feelings at work. Participants described individual coping strategies, such as exercise, but these were hard to prioritise in challenging times.

Originality/value – There is growing recognition that health and well-being must be given greater priority in the construction industry. Industry pressures and competitive practices undermine efforts to improve staff well-being. Action must be taken at senior levels to address this conflict, while building on existing informal mechanisms of support and stress relief.

Keywords Construction, Occupational stress, Health and well-being, Workplace

Paper type Research paper

List of abbreviations

CCS	Considerate Constructors Scheme
MHFA	Mental Health First Aid
ONS	Office of National Statistics

Background

Employment can promote well-being by providing meaningful structured activity, social contact, and a sense of collective and social identity (Roche *et al.*, 2016; Warr, 1987). Conversely, poor working conditions—both physical and psychological—can harm health and well-being. Occupational or work-related stress has been defined as "the adverse reaction people have to excessive pressures or other types of demand placed on them at work" (Health and Safety Executive, 2021, p. 1). Pressures can include challenging management style, unrealistic deadlines and excessive workload (Chartered Institute of Builders, 2020).

Those employed in male-dominated industries comprising >70% male workers (e.g. construction, transport and mining (Roche *et al.*, 2016)) are particularly vulnerable to poor mental health, with higher rates of depression than the general population (Roche *et al.*, 2016). Men in male-dominated industries are also at greater risk of poorer physical health and more likely to engage in health-harming behaviours (Milner *et al.*, 2020). Research suggests these poor health outcomes and behaviours may be a consequence of traditional masculine norms such as self-sufficiency, emotional control, acting "tough" and risk-taking (Ragonese *et al.*, 2019). Such norms may promote a culture that is harmful to health, resulting in individuals avoiding help-seeking in favour of attempting to "fix" the issues themselves and in case they are seen as weak (Verdonk *et al.*, 2010; Lash *et al.*, 1998; Smith *et al.*, 2008). The combination of risk-taking behaviours (smoking, excessive drinking, avoidance of health services) and occupational stressors (long working hours, excessive workloads) can contribute to poor mental health and an ineffective work-life balance (Sherratt, 2018).

The UK construction industry currently employs 1.28 million people (Office for National Statistics, 2020), of which 87.5% are men (GMB Union, 2019). The construction industry is a notably challenging industry where work-related stress has become an inherent feature of the workplace environment (Love *et al.*, 2010). Around 400,000 working days per year are lost in the construction industry due to stress, depression or anxiety (Construction Industry Training Board, 2019). A survey among construction workers found that 44% had time off work for mental health issues, but 75% did not raise their problems with management (Health and Safety Matters, 2016). In addition, more than 1,400 construction workers died by suicide in the UK between 2011 and 2015 (Chartered Institute of Builders, 2020).

However, a large proportion of the construction industry is not represented in these statistics. The current UK Office for National Statistics (ONS) definition of construction work includes only *on-site* workers, e.g. "trades" such as bricklayers, plumbers, etc., with these commonly employed as independent subcontractors. This on-site group accounts for 53% of

those employed within this industry. The remaining 47% work in predominantly office-based roles (e.g. quantity surveyors or operations managers) and are usually employees of medium to large construction companies. These staff experience many of the same stressors as those working on-site: lengthy commutes, time away from family and pressure to complete works on time and within budget (Chartered Institute of Builders, 2020). Yet little research has been conducted with this group to understand their experience and response to workplace stress. One of the few surveys conducted with this group suggested workplace stress was a significant problem. Of 2000 respondents, 97% reported experiencing stress in 2019 (Chartered Institute of Builders, 2020). Furthermore, 91% felt overwhelmed, 87% experienced anxiety and worryingly, 26% had had suicidal thoughts in the previous year.

A recent review of health promotion programmes in the construction industry reported most research has focused on-site-based construction workers and called for further work in conjunction with a wider range of stakeholders within the construction industry (Fuller *et al.*, 2021). This qualitative study addresses this gap by exploring occupational stress within construction professionals employed by a large, UK-based international construction contracting company. The study focused on three main areas: the experiences of workplace stress, its management within the company and its perceived impact on health and well-being.

Methods

We conducted semi-structured interviews with employees within one region of a leading international construction company. The company employs over 5,000 people within the UK and specialises in building and civil engineering. Permission to conduct the study was granted by the Regional Director. Anonymised summary findings were made available to the company, but they played no role in the study design, analysis and interpretation of findings, nor did they fund the study.

To elicit a range of perspectives, we interviewed construction professionals in different roles and seniority (see Table 1). Data collection continued until data saturation was achieved (e.g. no new issues were raised in subsequent interviews) (Saunders *et al.*, 2018).

The company's Regional Director sent a recruitment email to all regional employees, outlining the research and asking them to contact the lead researcher (PMH) if they wished to take part. Participation was voluntary. Interested participants were sent an information sheet and consent form and were subsequently contacted by PMH to answer questions and arrange an interview time. Interviews were conducted face-to-face at their place of work between September and December 2019. Participants could choose to be interviewed on their own ($n = 22$) or with another employee ($n = 10$ participants in five paired interviews). Seven participants declined to participate after initially expressing interest; no reasons were given. Participants provided written informed consent before starting the interview.

Interviews were conducted by PH and were audio recorded. We used a semi-structured topic guide to ensure key topics of interest were covered, while allowing participants to raise new issues. Interviews focused on the following topics: employment background; experiences of occupational stress in the construction industry; impact on health and well-being; and

Participant	Job role examples	Number of interviews	Length of time in industry
Junior Employees (J)	site manager, quantity surveyor	20	2–10 years
Middle Management (M)	contracts manager, operations manager	8	10–20 years
Senior Management (S)	operations director, regional director	4	10–38 years

Table 1. Examples of job roles at different levels of seniority, as defined by the authors

current support and initiatives within the company. Interviews ranged from 40 to 75 min with field notes made after each interview.

Interview recordings were transcribed, anonymised, checked for accuracy and analysed thematically (Braun and Clarke, 2006). PMH and RML read transcripts to familiarise themselves with the data, independently noting potential codes. Through discussion we developed these into a coding framework which was subsequently applied to further transcripts by PMH. We modified this framework as required, with PMH/RML meeting regularly to discuss coding and development of our analysis. To produce overall themes, initial codes were reviewed, revised, grouped together or separated into sub-codes, and then ordered hierarchically. We used NVivo 12 (QSR International, 2017) to facilitate data management and analysis. We present illustrative quotes to support our analysis. Participant identifiers denote seniority (*J*unior, *M*iddle or *S*enior).

Ethical approval for this study was granted by University of Bristol's Health Sciences Faculty Research Ethics Committee (ref 84,803).

Results

We interviewed 32 employees (30 males, two females): 20 junior employees, eight middle managers and four senior management (see Table 1). Length of employment in the construction industry ranged from 2 to 38 years. We identified four themes to explain participants' experience of and response to occupational stress within the construction industry.

A challenging and changing industry

Stress was seen as an inevitable and expected part of working in the construction industry. Construction projects are complex, sequential and time-sensitive and managing this complexity was reported to be a challenge. Staff operated within a dynamic environment involving multiple teams, requiring them to react flexibly as problems arose: "*something comes up then you've got to change job, that's quite hard*" (J78). Periods of intense pressure were expected at "crunch" points (e.g. towards the end of a project) with a knock-on effect on staff stress levels. As J75 explained, "*I lose most of my sleep towards the end when you're fighting against [the schedule]*".

However, beyond these anticipated periods of stress, participants generally viewed construction as an inherently high-stress occupation. As one employee explained, *"it's a cutthroat industry. It's high risk, low margins. Just by its very nature it does create an immense pressure"* (J74). Participants who had been working in the industry for longer felt stress levels had increased over their working life, shifting from the acute stress at expected "crunch" points or when things went wrong, to becoming a more chronic, persistent issue. One senior manager explained:

> *There was a different pace in terms of your working day. You'd get a letter, and you'd have to respond to it in seven or fourteen days and that would be fine . . . [Now] it's bought a lot of pressure in that we are available 24/7 and we are expected to respond quickly, and we do things quicker* (S90).

Many felt the rising level of industry stress was in response to increased competition within challenging economic circumstances. One middle manager noted *"the whole industry is slowing up"* (M96) in part because of the UK's "Brexit" from the European Union putting pressure on company finances. To remain competitive and maintain profit margins, projects were under pressure to *"get commercially as lean as possible"* (J75). Consequently, employees often found themselves working on projects they perceived as underbudgeted and insufficiently resourced.

Many participants voiced concerns over the impact these financial pressures had on staff well-being. Staff felt the behaviour and expectations of senior management within the company were driving an unhealthy culture of stress. One middle manager described those at the top of the company as *"workaholics"* and noted *"that culture comes down and the expectation comes down, doesn't it?"* (M99). Similarly, another employee added "*You look at the senior management team . . . and they're perceived always to be working. The emails can start at 7 in the morning to 11 at night. They don't take lunch breaks; they don't leave work at a reasonable hour. So that's kind of the culture they're breeding"* (J76). These concerns were recognised by some senior managers but were often presented as unavoidable:

> *The problem is we, as an industry and as a company, are putting more and more pressure on employees, because it's tough. The market's very tough . . . You're trying to reduce programmes to make more money. And with that, you look at unfortunately working longer hours . . . So, we are our own worst enemy, but that's industry given* (S94).

Staff often felt reluctant to challenge this culture due to concerns over job insecurity. One employee explained when work was scarce "*you feel like you're having to go an extra mile in order to be employed*" (J75). Another acknowledged working hours and conditions had got harder but added "*the trouble is, what happened, the redundancies of 2008, everyone's really happy to be employed"* (J79).

Formal management of stress

Managers were concerned about levels of staff stress, recognising its negative impact not just on employees but the wider business itself. As one explained, once staff have gone "off sick" with stress *"it's much harder to get them back. And often when they come back, they're different people"* adding that *"spotting them early is golden nugget really"* (S90). Others commented about the importance of early intervention: *"it's probably more picking up when they are struggling so you're aware now that when someone in your team is under pressure or failing in some area, or it's just taking them away from that"* (M86).

In recent years, several company-wide initiatives have been implemented to improve staff health and well-being and reduce stress. This included participation in the Considerate Constructors Scheme (CCS) (Considerate Constructors Scheme, 2021) which includes a focus on staff well-being, Mental Health First Aid (MHFA) training (MHFA England, 2021), team building days, awareness raising campaigns and guest speakers. The company had also allocated a small percentage of each project's budget to be spent on activities or equipment to improve staff well-being.

Some of these initiatives were well-received by staff. Staff found guest speakers on mental health or nutrition useful and though-provoking. Many also valued the health and well-being budget and the flexibility with which this could be spent. Some teams had purchased standing desks or organised daily fruit deliveries, while others used it to build team cohesion: "*It's [used for] anything team building that will take you away from the workplace for an hour. If you wanted to rent a football pitch after work, you could have a [subcontractors] versus [company] kickabout. It's all about that sort of thing"* (M96).

However, while this budget was available to all projects, its uptake was heavily dependent on the personal interest and willingness of the project and site manager responsible for administering it. Sites that were behind schedule and under pressure had the least time to dedicate to these initiatives. As one participant noted "*[site managers] are under their own stresses and pressures . . . It's probably one of the last things, it goes to the back of their mind"* (M89), while one site manager admitted:"*It's another thing that's going to take my time up and it's another thing that's going to stress me out"* (J80).

Participants were often sceptical of industry wide initiatives such as the Considerate Constructors Scheme (CCS). One employee was pleased the company was working towards the highest CCS level because *"it's dragging us to the next level, moving away from plant pots outside the cabins and moving to things like talking about mental health and educating people"* (J80). However, several others viewed it as purely performative, with no meaningful changes being made. One employee admitted telling *"porkies"* to the CCS assessor that *"we go on walks every Friday and we do all sorts of things, which we don't generally do"* (J74). Similarly, a manager admitted *"when the CCS man comes . . . [my colleague] always brings his pool table in. And the perception is it's there all year . . ., and the following day it's gone"* (S90).

While staff recognised the importance of addressing mental health issues in the workplace, there were similar criticisms of the MHFA scheme. This scheme trains staff members to become a point of contact for employees experiencing mental or emotional distress. Their role ranges from simply to having a conversation to supporting the employee to get appropriate help. However, participants often reported feeling uncomfortable talking to their colleagues about personal issues and uptake of the service had generally been weak. Importantly, several participants felt the MHFA scheme failed to address the real causes of stress in the workplace. One employee described the scheme as *"a sticker on a dam that's leaking"* (J100), while a senior manager similarly recognised its limitations: *"We've got mental health first aiders, but we are still expecting people to do more in the amount of time and how is that helping, you know?"* (S94).

Informal management of stress

Beyond formal company-level well-being initiatives, participant narratives provided examples of how stress was managed informally within teams and employee relationships. Participants talked frequently about the importance of having the "right" team as a means of preventing unnecessary stress. A cohesive team was needed to keep things running smoothly and avoid delays, and thus reduce stress. By contrast, a dysfunctional team could be very challenging.

> *That is really powerful because you're as a team and if something goes wrong, you work together, whereas I've seen it here whereas almost people get singled out and it's made to be their fault. I don't think that's good and that puts a lot of pressure on those individuals* (J80).

Consequently, managers carefully considered *"personalities, skill sets, capabilities,"* (S90) in choosing staff to deliver a project. As one manager explained *"we try to look at who works well together . . . because if I put someone on a project who I know is not going to gel with someone else, that's not going to work"* (M96). Another admitted configuring the right teams was *"one of the hardest things"* but added *"when you when you get it right, it's really good"* (M98). Inevitably however the perfect team was not always possible due to the timings and availability of staff. In such cases, managers *"have to work harder with the balance of people's emotions on the sites"* (M98).

Employee "banter" and "camaraderie" were also identified as important ways of managing stress within teams. "Banter" between colleagues helped forge relationships within the team and, as one manager explained, was an important way of looking out for one another: *"So if one of them has any issues, either by taking the mick or actually having a word, they are there for each other to support . . . It's a little family. It does work well"* (M86). Another junior employee echoed this:

> *We all had a lot of banter, we had a lot of fun . . . even when work was hard, there was still really good, kind of, team thing. You could kind of see in the team when things were getting a bit stressful, who was feeling the pressure. And we'd all rally round and bring them back up and you'd just kind of look after each other* (J77)

Several participants felt that their colleagues would be "*more likely to talk to their mate on site than they are to phone up* [a MH first aider] *in an office*" (J76). However other participants expressed a reluctance to talking about their feelings which some related to the gendered nature of the workforce:*"we're a predominantly male industry, aren't we? . . . we don't tend to talk about stuff much. We don't like admitting we've got problems or need to deal with stuff"* (J74). Similarly, a senior manager acknowledged "*there's also that macho manly thing, I think, that people crack on with it and get on with it" (S87).* However, others felt things were slowly changing in this area allowing for greater discussion of well-being issues, though noting it would take time to change culture.

> *People are waking up to the whole mental health thing and discussing it . . . in the past, they're the people who would take the piss out of you, but, now . . . they're much more mature about it and awake to that kind of thinking* (J80).

Personal experience and management of stress

While there was an acknowledgement of mental health issues within the industry, few participants reported personal experiences of issues such as depression or anxiety. Rather, participants more commonly framed work-related stress in terms of impact on physical health. Many participants talked about disturbed sleep as deadlines approached: *"as the stress levels increases you have more difficulty sleeping and you're up at five thinking, 'got to do that, that and that'"* (M90). One participant developed a stomach ulcer and gall stones which they related to work stress. Several others talked about heart problems such as palpitations and high blood pressure. At times, these health issues led to colleagues leaving the industry together:

> *Looking back now on the people I trained with and the condition they were in, yes, it was screaming out that they were stressed. Three of them all had- one was hypertension, two heart attacks . . . We lost all three of them through the course of that job. They all survived but they all didn't work again* (M96).

Participants talked about different ways of managing their own personal levels of stress. Some talked to partners, family members, colleagues: *"I'm definitely more honest with her. Or she sees it and I can't hide my emotions from my wife"* (E81). Several participants developed strategies for dealing with sleeplessness, such as leaving a pen and paper by their bed: *"If I do wake up and think, oh my God I didn't do that, I try and write it down so I don't need to remember it because I've written it down"* (S90).

Exercise was important for some participants in managing stress levels. One participant described trying to get out for a walk at lunch time *"to clear my head"* (M99), while another found exercise helped him maintain a healthy mindset: "*As long as I get 100 miles cycling in* [per week]*, everything else is inconsequential"* (M93). Some interviewees talked about using apps such as Strava, to "compete" with other colleagues and provide motivation to exercise. *"Like having Strava is quite good fun, because I see participant 87's out on his bike at the weekends . . . and there's a bit of chat and a bit of banter about that"* (M88). However, at times the conditions of the job – long working hours, long travelling times – or personal circumstances (e.g. having a young family) often impacted on their ability to engage in such stress-relieving behaviours. As one participant explained: "*I feel slightly guilty if I spend a load of time at work and then I was to go to the gym" (E76).*

Discussion

Participants in this study perceived stress to be an inherent feature of the construction industry, with stress levels continuing to increase in response to challenging economic circumstances. We identified both formal and informal attempts to manage stress within the workplace. Company-level initiatives had been implemented to address staff health and well-being, but to a mixed reception with many participants' feeling, these initiatives were largely

performative and failed to address the real causes of stress. Informally, managers worked hard to create teams that worked well together, acknowledging dysfunctional teams created significant stress and threatened project success. Banter and camaraderie between team members could create light-hearted but supportive environments where staff looked out for one another, potentially offering opportunities for informal support. However, this was not present in all teams, with a reluctance to discuss feelings reported by some. Participants discussed the impact of occupational stress on their health, most commonly reporting disturbed sleep. Exercise was often used to manage stress. However, job conditions (long hours, lengthy commutes) could prevent them from engaging in these coping techniques. Our findings add to the growing body of literature exploring the potentially harmful conditions and practices within the construction industry for employee health and well-being (Hanna *et al.*, 2020; Hanna and Markham, 2019; Boschman *et al.*, 2013a; Love *et al.*, 2010; Sherratt, 2018; Fuller *et al.*, 2021).

Approximately one-third of one's lifetime is spent working (Bailey, 2018). Creating healthy workplaces could improve the health of a significant proportion of the adult population. Evidence indicates that workplace interventions can positively impact mental well-being (Joyce *et al.*, 2016; Pieper *et al.*, 2019), including specifically within male-dominated industries (Hulls *et al.*, 2021). There are clear benefits to businesses in having a healthy, happy workforce, including increased productivity, improved employee retention, reduced sickness absence and greater employee resilience (Hulls *et al.*, 2021; Bevan, 2010). In our study, all participants, regardless of seniority, agreed that health and well-being should be addressed in the workplace. However, participant narratives also highlighted the difficulties of addressing health and well-being at work, where business priorities (such as maximising profit) may conflict with healthy ways of working for staff.

Challenging economic circumstances – including "Brexit" uncertainty and the recent collapse of the Carillion international construction company (Thomas, 2018) – meant managers were having to do more with less, resulting in tighter budgets, fewer resources and squeezed schedules. For employees, this resulted in increased stress and anxiety, and frustration at initiatives, such as MHFA, in which they felt failed to address the fundamental causes of workplace stress, was also found in previous research (Narayanasamy *et al.*, 2021). Even where initiatives were generally welcomed (for example, the flexible well-being budget) uptake was dependent on project delivery. For sites behind on programme and budget (e.g. where staff are likely to be highly stressed), there was often little or no engagement with health and well-being initiatives, illustrating the conflict between staff well-being and delivering on projects.

The potential conflict between promoting staff well-being and construction company interests has been noted elsewhere. A recent review by Fuller *et al.* identified time and cost as major organisational-level barriers to implementing health promotion activities in the construction industry, with some employers suggesting their implementation potentially "jeopardised work progress and construction productivity" (Fuller *et al.*, 2021, p. 9). A report by Smyth *et al.* based on 43 interviews with construction professionals found interviewees felt that commercial and financial interests remained a high priority, despite company intentions to address health and well-being and that commercial and well-being practices often operated in contradiction to one another (Smyth *et al.*, 2019). Hanna and Markham, also writing about the UK construction industry, similarly noted the highly competitive and pressurised nature of the construction industry left little room for workplace health initiatives when "earning income was viewed as fundamentally more important" (Hanna and Markham, 2019, p. 7).

Nonetheless, concern over mental well-being in the industry is growing, with sector-wide calls to ensure "the levels of investment and focus we offer are the same as that of the safety and security of our construction sites" (Chartered Institute of Builders., 2020, p. 2). Our study

identified some informal mechanisms for managing stress within the industry which could potentially be built upon to improve staff well-being.

Firstly, banter and camaraderie were viewed as potentially important ways in which staff offered support and dealt with stress. Previous research has found work-place support and camaraderie is an important informal mechanism of support (Hanna *et al.*, 2020; De Visser *et al.*, 2009). Encouraging peer-support could be a useful and comparatively inexpensive tool in alleviating occupational stress. However, while potentially promising, there is clearly more to do within the construction industry to challenge the "macho" culture where some staff are reluctant to discuss concerns with their peers (Wester *et al.*, 2010; Chartered Institute of Builders., 2020; Hanna *et al.*, 2020).

Secondly, physical activity as a stress-management tool was actively used by some participants, with several participants using apps (such as Strava) to "compete" with colleagues. Physiological changes bought about as a result of exercise (e.g. increased endorphin levels) can lead to lower stress and anxiety (Mikkelsen *et al.*, 2017; Jackson, 2013; Lopresti *et al.*, 2013; DiLorenzo *et al.*, 1999). Using competition to motivate behaviour change has been previously used for other health behaviours (i.e. smoking cessation (Sohn and Lee, 2007; Graham *et al.*, 2006) and healthy eating (Orji *et al.*, 2013; Kaipainen *et al.*, 2012)). Fuller *et al.* recently called for further research into the potential of using apps for promoting healthy lifestyles within the construction industry (Fuller *et al.*, 2021). Focusing on physical activity and competition, viewed as intrinsic to the construction industry (Hanna *et al.*, 2020) – potentially through apps such as Strava, could appeal to the male cultural norms (Hanna *et al.*, 2020; Roberts and Walker, 2018) and provide an acceptable way for men to focus on their mental health (Peters *et al.*, 2018; Clemensen *et al.*, 2007).

However, both of these suggestions operate solely at the inter-personal level (Bronfenbrenner, 1986) and do little to address the wider company-level issues which participants viewed as driving the culture of stress and over-work in the construction industry. A recent successful workplace intervention within the Australian mining industry (Tynan *et al.*, 2018) noted interventions must recognise industry characteristics and seek to address policy and environmental challenges, rather than simply relying on individuals to make changes. Similarly, a systematic review looking at workplace interventions within male-dominated industries concluded that those which engaged at multiple levels in the workplace appeared to be more effective (Hulls *et al.*, 2021). We recognise that broader macro-level conditions (Bone, 2015) (i.e. Brexit, COVID-19 pandemic) pose significant challenges to construction companies at this time (Adekoya *et al.*, 2019; Ataei and Taherkhani, 2019; Pamidimukkala and Kermanshachi, 2021). However, industry managers are also clear on the business benefits accrued from having a (physically and mentally) healthy workforce (Pescud *et al.*, 2015). Given this, we suggest further research is needed within the construction industry to work with staff *at all levels* to co-develop comprehensive, multi-level workplace interventions (Quintiliani *et al.*, 2010) to address staff mental health and well-being. Thoughtful co-production of such interventions is most likely to result in feasible and acceptable interventions within this industry (Griffiths *et al.*, 2021; Cameron *et al.*, 2019; Mackenzie *et al.*, 2021).

Strengths and limitations

This is one of the first qualitative studies to explore the health and well-being of those formally employed within the construction industry. By taking this approach (rather than focusing only on-site-based workers, as in previous studies (Boschman *et al.*, 2013b; Campbell and Gunning, 2020; Broadbent and Papadopoulos, 2014), we offer a novel insight into the experiences of a large part of the construction workforce and identify potential ways in which construction companies could address stuff health and well-being.

Our participants were all from one large construction company. While this company is representative of the industry as a whole and we raise similar issues to those identified in other studies (Chartered Institute of Builders, 2020; Tonnon *et al.*, 2014; Mette *et al.*, 2018; Verdonk *et al.*, 2010), future work should explore differences in company culture and approach on employee health and well-being, including other large firms as well as small-to-medium construction companies. We also acknowledge this was a self-selecting convenience sample. Company-wide staff surveys, building on the findings of this study, would offer a useful insight into the views of a much wider range of employees while a larger industry-wide survey would provide more comprehensive insights nationally.

Conclusion

Although health and well-being in the construction industry has been a neglected area, there is a growing awareness that it requires greater priority. Industry pressures and competitive practices undermine efforts to improve staff well-being. Action must be taken at senior levels to address this conflict, while building on existing informal mechanisms of support and stress relief.

Declarations

We thank all the employees who participated in this study.

Ethics approval and consent to participate: Ethical approval for this study was granted by University of Bristol's Health Sciences Faculty Research Ethics Committee (ref 84803).

Written informed consent was obtained from all subjects prior to data collection.

All methods were carried out in accordance to the Declaration of Helsinki.

Availability of data and materials: The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests: The authors declare they have no competing interests.

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Authors' contributions: PMH, RMM, FdV and RML conceived and designed the study. PMH coordinated the study, interviewed the participants and analysed the data. PMH and RML interpreted the data and drafted the manuscript, with critical input from FdV and RMM. All authors read and approved the final manuscript.

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