

Supporting the mental health of self-employed construction workers

A study conducted by Mates in Mind and The Institute for Employment Studies (IES)

Funded by B&CE Charitable Trust

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Institute for Employment Studies

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Mates in Mind

Established in 2017 by the Health in Construction Leadership Group (HCLG) with the support of the British Safety Council, Mates in Mind charity exists to improve the mental health and wellbeing of workplaces across the UK. Mates in Mind accomplishes this by providing the skills, clarity and confidence to employers on how to raise awareness, improve understanding and address the stigma of mental ill-health within the workplace. We work with organisations of all sizes as well as supporting young apprentices entering the workplace for the first time as well as the hard-to-reach groups such as sole-traders and SMEs. Mates in Mind works across industries, focusing on construction, as well as related sectors including transport, logistics, manufacturing, and others.

Ethnicity Terminology

The terminology used to define ethnicity remains a challenging concept and one that continues to evolve with societal shifts. IES seeks to be a learning organisation; as such we are adapting our practice in line with these shifts. We aim to be specific when referring to each individual's ethnicity and use their own self-descriptor wherever possible. Where this is not feasible, we are aligned with Race and Disparity Unity (RDU) which uses the term 'ethnic minority' to refer to all ethnic groups except White British. RDU does not use the terms BAME (Black Asian and Minority Ethnic) or BME (Black Minority Ethnic) as these terms emphasise certain ethnic groups and exclude others. At the time of this publication, we have opted to use the RDU terminology where appropriate.

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1 Introduction

The health, safety and wellbeing of construction workers has been a major focus of government and employer attention in recent years because of its safety-critical nature. A sign of the success of this focus is that fatal incidents in the sector are now at their lowest level. However, data from the Health and Safety Executive (HSE) show that workers in the UK construction sector still experience higher rates of work-related ill-health and non-fatal injuries than in most other sectors of industry. One area which has only recently received dedicated attention is the mental health of workers in construction. Recent data suggests that 97 per cent of construction workers felt stressed at least once in the last year and that 26 per cent had considered taking their own lives in 2019. Office of National Statistics (ONS) data shows that more than 1,400 construction workers took their own lives between 2011 and 2015 but the number could be even higher. The rate of suicide in construction is more than three times the national average for men, with more than two construction workers taking their own life every working day. For men working in skilled trades, the highest risk was amongst those in building finishing trades who had more than double the suicide risk of the male national average.

The Mates in Mind charity in the UK has provided a welcome focus on the psychological wellbeing of construction workers and its work has highlighted some of the gaps in research evidence about the best ways to improve mental health, as well as the workers who remain 'hard to reach'. Foremost amongst these are self-employed construction workers. Research on the mental health of self-employed workers is contradictory. Some studies show that self-employed people appear to be more motivated and engaged with their work, have high job satisfaction and higher mental wellbeing compared with other groups because they exercise larger amounts of control and autonomy in their work. However other studies show that self-employment can be detrimental to mental health. High economic insecurity, low support, high workloads, and long working hours can have negative effects on mental health. In addition, the tendency for some self-employed people to work very long or irregular hours can also have a detrimental effect on family life, which also affects mental wellbeing negatively. Many of these factors are likely to have been exacerbated by the Covid-19 pandemic as many self-employed workers have been ineligible for many of the government support packages.

Whilst an increasing proportion of employed workers in construction have access to mental health services, a large proportion of self-employed construction workers have access to no such support and, as a result, remain an especially vulnerable group. For those who do have access to some support, this may well be inconsistent and sporadic as it likely varies from job to job. More generally, very little is known about their support needs nor about the best way to reach those whose needs may be greatest.

In response to these pressures, the construction industry's efforts to tackle mental health and wellbeing at work have intensified in recent years. The demographics of the

construction workforce dictate that this is a priority. Relative to other sectors, there is a predominance of workers who are largely young, male, with relatively low educational attainment and poor job security - all risk factors for mental illness and even self-harm and suicide. ONS statistics show alarming trends in this respect (ONS, 2015). Tackling this requires a thoughtful and empathetic approach because stigma and cultural norms can deter distressed individuals from speaking out (Kotera et al, 2019) and serious mental health problems can go unnoticed by colleagues in the run up to sometimes tragic events.

Construction businesses have become increasingly aware that mental health problems can be debilitating, even in their milder forms and can significantly affect both the quality of working life and wider wellbeing and safety on site. Sickness absence attributable to mental illness is another obvious concern and some short-term absences can easily become long-term if problems remain unidentified and/or untreated. Under-reporting of mental health problems due to stigma hinders the ability of businesses to estimate the extent of the challenge and constrains their capacity to calculate accurate costs. More broadly it is important that sites are operated by a motivated and undistracted workforce who feel their wellbeing is of concern to their managers and colleagues. In addition, the industry needs to remain attractive to younger cohorts who are more mental health-aware than the generations preceding them. Increased openness about mental health generally goes hand-in-hand with an expectation that support will be offered. Preventative action is also necessary: known stressors in the industry which can contribute to poor work-life balance and financial pressures need to be openly acknowledged and addressed.

In recent years, many large contractors in the construction sector have re-focused their occupational health (OH) provision, to respond to the growing awareness that traditional health and safety measures have sometimes underemphasised the risks and consequences of poor mental health in the workforce. However, most construction companies are not large corporations with the resources to do this and many operate from disadvantageous positions in the supply chain. Not all will benefit from increased efforts of larger contractors to extend OH provision to their suppliers. Furthermore, many self-employed construction workers and micro businesses work on domestic jobs or small sites, isolated from changes in the wider industry. These individuals are hard to reach, despite the best efforts of charities and NGOs such as Mates in Mind and Business in the Community (BITC).

The impact of Covid-19 on the mental health of the working age population has been examined closely across sectors and occupations, and construction workers (and their families) have been exposed to increased pressure, disruption and uncertainty. There was confusion early on in the lockdown about the status of construction workers (eg, whether they were deemed 'essential' or 'key' workers or not) who were reported to be travelling in packed tube trains to work and unable to access alternatives to public transport. Despite employer efforts to enforce social distancing measures, some employees complained they were being forced to go to work despite feeling unsafe¹. The

¹ <https://www.bbc.co.uk/news/av/uk-52028590/coronavirus-huge-issue-of-social-distancing-on-construction-sites>

crisis brought fresh work-life challenges for those caring for children at home or looking after someone vulnerable. Notably, the Construction Industry Training Board (CITB) urged supervisors to take a flexible approach particularly during the period of school closures. A particularly alarming observation, according to ONS data, is that men working in construction were among those most likely to die of the virus².

1.1 The study

The aim of this project has been to provide evidence-based recommendations for practical tools which can be used to support self-employed construction workers who need mental health support. There have been four stages to the project:

- **A rapid evidence review.** A desk-based exercise looking at recent literature on the mental health needs of the self-employed, examples of successful interventions to engage self-employed people in construction and other sectors, and data to inform the development of a short online questionnaire.
- **Survey of self-employed construction workers.** The design of an accessible questionnaire which identifies levels of mental health using a validated scale (eg GAD7). It aimed to collect data on sources of stress and anxiety, identify the sources of support and advice already used by these workers and capture data on their preferences for information support, education, and other resources (and their likelihood of using them).
- **Qualitative interviews.** A small number of follow-up interviews with survey respondents to explore the drivers of mental health, sources of work pressure, distress and anxiety, their coping mechanisms and factors which trigger help-seeking behaviour. We also explored the best ways to provide support for those experiencing mental health problems.
- **Analysis and reporting.** Presentation of the survey and interview findings in a written report, a webinar and a conference presentation to summarise the nature of the mental health problems faced by self-employed construction workers.

This report brings together the results of this project and sets out some practical recommendations for action for a number of stakeholders.

² <https://www.insidehousing.co.uk/news/news/care-workers-and-construction-workers-among-professions-with-highest-covid-19-death-rates-66382>

2 Rapid evidence review

If we are to examine the factors which contribute to poor mental health among self-employed construction workers (and to identify the kinds of support which they may use) it is important to understand more about the nature of the work in this sector, and the ways in which it may affect psychological wellbeing. We conducted a rapid evidence review to identify previous research which can illuminate these questions. We used online searches via university databases and accessed both published and unpublished (grey) literature from the UK and, where relevant, internationally. The review identified several studies conducted mostly in the last 10 to 15 years and, for the purposes of this report, we have grouped the literature into three main categories:

- Papers which explore the nature of self-employment in construction and whether this exposes construction workers to particular stressors not found so frequently in other settings.
- Papers which examine some of the barriers to ‘help-seeking’ in construction work or among construction workers.
- Papers which offer insights into the interventions which might successfully offer mental health support to self-employed construction workers or, at least, the criteria such interventions would need to satisfy to be successful.

Below is a short summary of the headline findings from our evidence review. A full list of references to the papers cited appears in Appendix 1.

2.1 How healthy is self-employment?

The entrepreneurial aspects of self-employment and freelance working are often thought of as major contributors to positive motivation and wellbeing. To a large extent, this assumption is supported by some empirical evidence, showing that many self-employed people experience more autonomy, control, self-determination, discretion and freedom in their jobs (Nordenmark et al., 2012; Stephan & Roesler, 2010). Several studies show that the self-employed can appear to be more motivated and engaged with their work (Dijkhuizen, Gorgievski, van Veldhoven & Schalk, 2016), which could account for common findings of higher job satisfaction (Binder & Coad, 2013; Meager, 2015), life satisfaction (Andersson, 2008) and mental wellbeing (Crum & Chen, 2015; Stephan & Roesler, 2010), compared to some other groups of workers.

Other studies show, however, that healthier people are more likely to choose to go into self-employment, while being self-employed by itself is not particularly beneficial for health (Rietveld, Van Kippersluis, & Thurik, 2015). High economic insecurity (Annink, Gorgievski, & Den Dulk, 2016), low support, high workloads and long working hours (Hyytinen &

Ruuskanen, 2007; Nordenmark et al., 2012) may all have negative consequences for the mental wellbeing of self-employed workers. In addition, very high (perhaps excessive?) work-commitment may also lead to insufficient energy or attention being devoted to other important domains of life (eg family), which can affect mental wellbeing negatively (Binder & Coad, 2013).

Some have argued that the core features of construction work, which can offer rewards but can also be damaging to mental health, are structural and hard to change (Sherratt, 2018). For example, hours on UK construction sites can often be excessively long, the process of competitive tendering for winning projects can create an unstable work environment reliant on subcontracting and (as we have seen during the Covid-19 pandemic) long and unpredictable supply chains, and a transient and fragmented workforce, all managed through bonus and payment schemes that encourage intensive work practices to incentivise project completion. For many in the construction workforce, not being able to look much beyond the next job or project, the potential for employment uncertainty to negatively influence worker health is clear (Eaves, 2019). Taken together these factors can create multiple, often cumulative stressors within construction work (Beswick et al 2007; Cunradi et al 2009; Gevaert et al, 2018). This has led some to conclude that the nature of work in the UK construction industry is almost inevitably to the detriment of construction worker health, especially when other factors are taken into account. For example, the need to be responsible for the safety of others; working in dangerous conditions (Beswick et al 2007); managing rapidly changing tasks; high physical demands; managing or mitigating the effects of cost pressures; shortages of materials; the need to make difficult decisions without sufficient information; low job control and the low levels of social support frequently found on construction sites (Boschman et al 2011). That said, there have also been some innovative initiatives to shape the design of work, in particular working patterns, which have proved to have beneficial impacts in terms of reducing the amount of working beyond contracted hours and having the time available to manage one's own wellbeing (Timewise, 2021).

2.2 Help-seeking in the construction industry and its barriers

One significant challenge which has been recognised in a more enlightened era of mental health literacy is that, even when support and resources are available to workers, many appear reluctant to access them. Unsurprisingly, the male-dominated nature of the construction industry has guided research interest towards the effect of masculinity on help-seeking behaviour in the sector (Courtney, 2000; Du Plessis et al, 2009; Seidler et al., 2016). Prior to the Covid-19 pandemic, the ONS (2019) found that 82 per cent of the UK construction workforce were male. Several studies have found that men in male-dominated workplaces are also more likely to endorse restrictive masculine norms associated with more negative attitudes toward help-seeking (Houle et al., 2015, cited in Mahalik and Dagirmanjian, 2019; Stergiou-Kita et al, 2015; Vogel et al, 2016) and more likely to view asking for help for emotional problems as a sign of weakness or failure (Clement et al, 2015). Traditionally male attitudes to help-seeking has been found to impact worker coping strategies in male dominated industries such as construction

because 'traditional notions of masculinity means that men believe it is necessary to endure pain and conceal mental health issues to display 'toughness', reliability and 'prove' their worth' (Wong et al., 2016 cited in Powell et al, 2018, p.323; Iaccone, 2005; Ankrah et al 2009). As a consequence, some construction workers 'accept risks and endure pain without complaint in the workplace' which may influence help seeking behaviour and negatively impact wellbeing (Stergiou-Kita et al., 2015).

Asking for help and receiving suitable support or treatment for mental health conditions is crucial to the prognosis of such a disorder, and despite the seriousness of mental illness and suicide, common barriers to seeking mental health through the lens of masculinised behavioural standards are still tangible (Lighthouse Club, 2021). The Mind Matters campaign launched in 2017 by Construction News, reported the following: '30 per cent of construction workers have taken time off from work due to mental health problems', yet '60 per cent did not tell their boss that the reason for absence was due to those mental health problems' (Alderson, 2017, cited in Kotera, Green and Sheffield, 2019) A quarter of the construction workers in this study had considered suicide; 90 per cent of the construction workers who have considered suicide or have known someone who committed suicide, did not ask for support. Further, the majority also reported the 'reason for not turning to their employer was shame' (Alderson, 2017, cited in Kotera, Green and Sheffield, 2019). Therefore, the cultural prevalence of the 'masculine' character appears to offer a direct link to poor mental wellbeing and mental ill-health in the industry and contributes to apparently widespread reluctance to engage in help-seeking behaviour (Carmichael, Fenton, Roncancio, Sing, M & Sadhra, 2016). In a culture of self-stigma and negative attitudes toward men's help-seeking and engagement with employers' mental health frameworks, encouraging take up of mental health services in larger employers remains a difficulty. This challenge is amplified when self-employed construction workers, or those working in small partnerships or 'micro' firms are considered.

2.3 Useful interventions: responding to the crisis

Understanding factors that inhibit help-seeking behaviour in construction workers is fundamental when developing and implementing interventions, aimed at improving mental health and wellbeing of construction workers in the UK. Therefore, the desire to improve employee wellbeing has become the basis of many organisational interventions and in the last few years, the construction industry has seen a surge in workplace wellbeing interventions. The HSE (cited in Campbell and Gunning, 2020) have argued that principal contractors and larger employers are responsible for giving more priority to the prevention and assessment of psychosocial risks at work, ensuring that adequate support and welfare facilities are available. High-quality, stable and supportive relationships between all colleagues are vital to creating an environment where employees can thrive and where mental health literacy is high and help seeking behaviour is safe and encouraged (King and Lamontagne, 2021).

Whilst there has been an attempt to improve employee wellbeing, the success of these strategies is limited to an organisational level, as no workforce is identical, a one-size-fits-

all approach for support infrastructure for employed and self-employed construction workers is unlikely to yield the desired outcomes. As for sole traders and those working in smaller firms, strategies to improve mental health and wellbeing have proven difficult to implement. Findings from The Construction Industry Training Board (2021) Mental Health and Wellbeing Research found smaller companies may find it more difficult to support the mental health and wellbeing of employees as they are less likely to have the structures and policies in place to address these issues. The 2019 CIOB survey (cited in CIOB, 2021) found the majority of the 56 per cent of survey respondents, who said that their business had a policy in place for mental health, came from larger businesses. In contrast to this finding, 49 per cent of employees from microbusinesses (with fewer than 10 employees) and 40 per cent of employees from small-sized businesses (10–49 employees) reported that their business did not have a mental health policy. It is evident that there is a growing need to recognise that some groups in the construction industry are more at risk: the self-employed and smaller construction companies who currently slip through the safety net of workplace mental health policies. According to ONS data, self-employment jobs by industry, sourced from the Labour Force Survey (cited in ONS, 2021) there was a decrease of 92,000 (11.2%) self-employed construction workers compared with 2019. It is likely that a proportion of this reduction can be accounted for by 'high stress, work uncertainty, long hours and financial pressures more commonly than larger companies', yet with reduced access to workplace mental health policies (CIOB, 2021, p.19)

In order to tackle mental health and wellbeing within the construction industry, there is a growing census for increased wellbeing provisions being made available for construction workers. Investment in wellbeing strategies such as 'Help inside the hard hat' (2021) campaign provides proactive support to the construction community including a 24/7 Construction Industry helpline. This growing availability of online or telehealth services offers an opportunity to engage in ways that minimise stigma and other barriers such as hard to reach self-employed construction workers with reduced workplace support services. That said, though their impact and uptake remains uncertain as awareness of these services is still relatively unknown. In our own survey, conducted as part of this research, a free and confidential helpline was one of the least preferred choices for accessing help (see Chapter 4).

Mates in Mind helps target self-employed construction workers directly by initiating contact with employers, small companies and sole construction workers, and by delivering support and better mental health literacy, which meets the needs of the UK's diverse construction community (where current mental health services fail to deliver).

An important issue highlighted by some papers (Powell et al, 2018) is that the construction sector has historically (and for legitimate reasons) focused on occupational safety to protect workers from physical harm, accidents and exposure to dangerous substances or machinery. These are all tangible risks with clear consequences. With this emphasis on preventing physical harm, it has been difficult to persuade either employers or workers that the risks of psychosocial harm are given equivalent emphasis, with poor mental health often downplayed. In addition, Powell et al, 2018 also argue that interventions to support either physical or mental health too often rely on individuals taking more personal responsibility for their wellbeing, lifestyle choices or habits and place

less emphasis on workplaces to identify, assess and mitigate risks, which are inherent in the work itself. They suggest that effective interventions should strike a balance between empowering and educating individuals to take action and requiring employers or workplaces to safeguard construction workers from psychosocial risks. Additionally, to make preventative or mitigating support readily accessible and non-stigmatising to those who need it.

3 Survey design and launch

Designing and administering a survey in this population involved a number of methodological challenges. Self-employed construction workers are known to be a ‘hard to reach’ population for research purposes. They are often ‘time poor’, are less likely to access and complete lengthy questionnaires, even if available online or via smartphones, and their general reluctance to discuss their own health means that they are less likely to feel comfortable completing a survey on the topic – even if it is anonymous. In planning the survey, we had in mind a number of considerations:

1. The questionnaire needed to be very short – we decided that it should take no more than 7-8 minutes to complete, with questions phrased in accessible language and simple, pre-coded, response categories.
2. The questions needed to address potentially sensitive questions on mental health in a non-clinical and non-stigmatising way and which explicitly asked respondents to give their informed consent to participate in the research
3. The questionnaire needed to include a short-form, validated and widely used measure of mental wellbeing to allow respondents with different levels of anxiety to be compared.
4. We needed to publicise the survey using media and partners which had direct access to our target population of potential respondents, to optimise response rates.
5. We needed to give those respondents who wished to opt into the interview phase of the research the opportunity to indicate their willingness to do so.
6. We needed to provide all respondents with information and signposts to third party sources of information and support about mental health issues.

Using data and insights from our rapid review of previous research and the collective experiences of IES and Mates in Mind, in conducting research on these topics, we produced an online questionnaire which embedded the General Anxiety Disorder Assessment (GAD7) scale and also asked questions on the following topics:

- main (self-reported) causes of stress and anxiety – on a scale measuring the frequency with which these feelings were experienced (eg never, quite frequently, always);
- the actions respondents took when experiencing low mood (eg talking to family, seeking GP help);
- questions about the ease with which respondents feel able to speak to others about their mental health;
- the likelihood of respondents seeking mental health support from a range of sources;
- physical health symptoms experienced in the last two weeks (eg poor sleep, back pain); and

- demographic data on age, employment status, trade/skill, family, accommodation etc.

In October 2021 the questionnaire was uploaded to both the IES and Mates in Mind websites using the Snap survey tool. Snap is a commercially available platform which does not retain the IPS address of respondents (maintaining anonymity) and whose output can be read directly by survey analysis software packages such as SPSS, which IES uses to analyse survey data. The URL of the survey website was promoted via social media platforms, industry connections of Mates in Mind and its affiliates and via a number of trade bodies and trade retailers.

3.1 Responses

A total of 310 useable responses were received by the end of November 2021. The profile of the respondents was as follows:

- just over 85 per cent were male, with an average age of 47 years;
- over 50 per cent (53%) were self-employed and the most of remainder worked in 'micro-firms' (fewer than 10 people);
- a range of trades and skills were represented in the responses (50% were surveyors, builders, electricians or joiners) and the rest were divided between groundworkers, painters/decorators, plumbers, carpenters, plasterers, bricklayers and landscapers;
- over three-quarters were married/cohabiting and 37 per cent had dependent children. One in five reported having eldercare responsibilities;
- over two-thirds (68%) reported living in a home with a mortgage or which they owned outright. One in five were renting; and
- 96 per cent of respondents were UK national and 94 per cent categorised themselves as 'White British'.

Results from the survey are presented in the next section of the report.

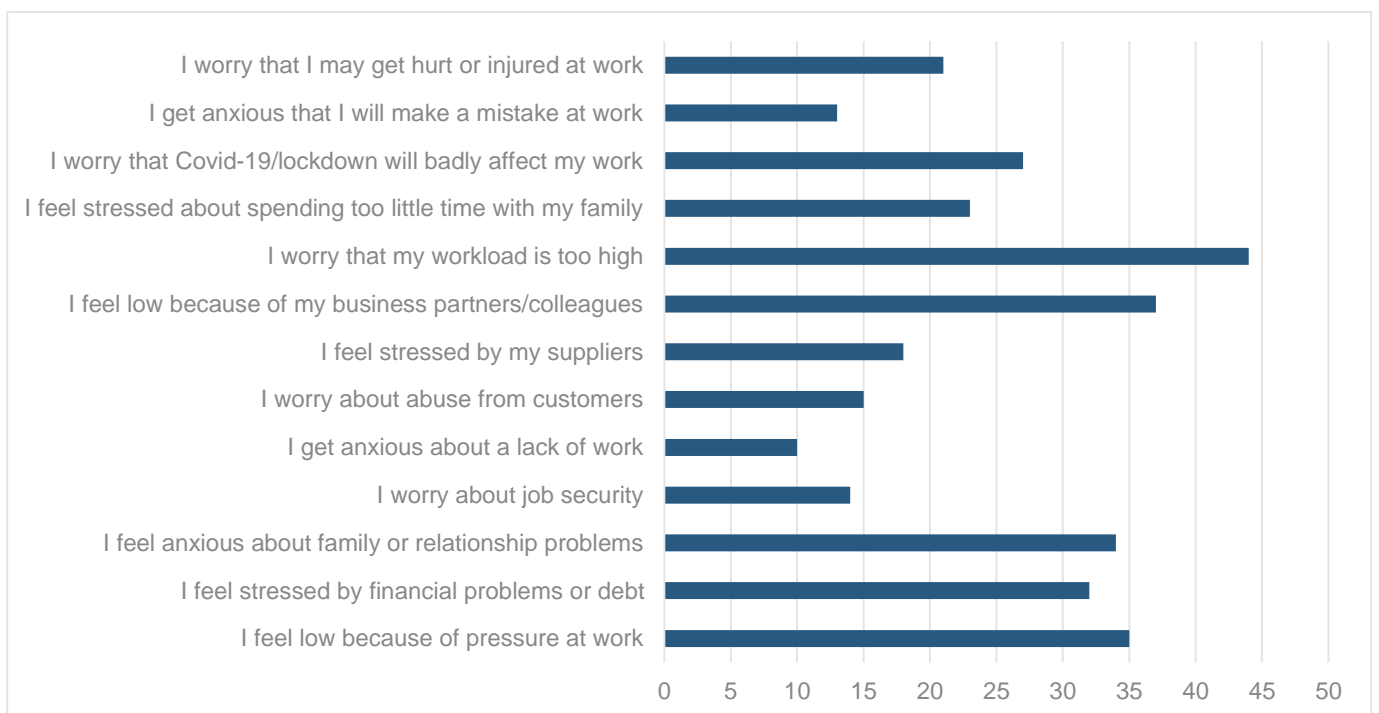
4 Main findings

In this section we present the findings from the survey. The data are organised by the main headings in the questionnaire and our charts show the responses for all respondents. Our commentary highlights where specific groups of construction workers have notably different or divergent responses, including anxiety as measured by the GAD7 tool. Overall, almost a third of our respondents had a GAD7 anxiety score which signifies ‘severe’ anxiety, with a further third in the ‘moderate’ anxiety category and the remainder in the ‘mild’ anxiety group. In addition to these data, we have included anonymised quotations from our follow-up interviews with a small number of respondents where these amplify themes from the survey findings.

4.1 Causes of stress and anxiety

We were interested to learn about the main causes of any stress or anxiety which respondents had experienced. We gave them a list of possible challenges and asked them to indicate how frequently they had experienced them. The data in Figure 4.1 below shows the challenges which were experienced by respondents ‘quite frequently’, ‘most days’ or ‘always’.

Figure 4.1 Causes of stress and anxiety



There are five areas which respondents reported were contributing relatively frequently to feelings of stress, anxiety or low mood. These were:

- I worry that my workload is too high (42% experiencing this frequently);
- I feel low because of my business partners/colleagues (37%);
- I feel low because of pressure at work (35%);
- I feel anxious about family or relationship problems (33%); and
- I feel stressed by financial problems or debt (32%).

Other issues were also of concern, though not so frequently experienced, including worries about the impact of Covid-19 on their work, the impact that work has on family life and worries about being hurt or injured at work. Overall, there were few differences in respondent's experiences of these causes of stress or anxiety by trade (although those in surveying roles were slightly more concerned about the impact of Covid-19 and potential problems with suppliers).

Anxiety scores using the GAD7 measure, very strongly differentiated between our respondents, however. Those with 'severe' anxiety were significantly more likely to report being frequently concerned by the five challenges set out above, for example.

A joiner told us in an interview about the ways that his workload was affecting his home life and his mood:

I feel really bad that I seem to be spending so little time at home recently, either because I have to work late – again – to finish a job or if I'm working more Saturdays than I'd like. We've got young kids and my wife finds it tough when I'm late and not there to take the pressure off her. When we're both tired we end up having silly arguments because we both have short fuses sometimes. It's not good for the kids.

Joiner

4.2 Actions when experiencing low mood

We were interested in the consequences of feeling low or anxious on the behaviour of our respondents because previous research has shown that experiencing even mild mental health challenges can increase the risk of engaging in unhealthy behaviour. Others can try to ignore their problems and others can seek help or support if they find coping difficult.

We asked our respondents what they did as a result of experiencing low mood or anxiety in the last 6 months. The results are presented in Figure 4.2, below.

Figure 4.2 Action taken when experiencing low mood



Source: *Mates in Mind/IES Survey 2022*

There are two responses which our respondents indicate were the most frequent when they had experienced low mood. The first (42% of respondents) was ‘*Considered quitting or changing your job*’ and the second was ‘*Found yourself drinking more alcohol than usual*’ (35%). Of course, neither of these are ‘help-seeking’ behaviours as they involve different ways of avoiding the causes and effects of a number of stressors (as may absence from work – 16% of our respondents). As a groundworker told us in one of our interviews:

I started drinking more because the pressure of work was really getting to me. We also had a bloke on site who had a nasty accident which a few of us saw, and that really got to me – I never normally worry about that kind of thing but seeing it brought home to me how dangerous our jobs can be. It freaked me out a bit, I suppose.

Groundworker

A significant minority of respondents reported that they had taken non-prescription drugs as a result of their anxiety (16%) (Minchin et al, 2006) and 13 per cent told us that they had considered self-harm.

One concern from our data is that only a minority of respondents had sought help from their GP (18%) and only 13 per cent had received counselling or therapy.

Once again, those with ‘severe’ anxiety as identified through the GAD7 scores were more likely than those with ‘moderate’ or ‘mild’ anxiety to report an increase in alcohol and drug use. They were even less likely to seek help from their GP than other groups.

4.3 Speaking to others about mental health

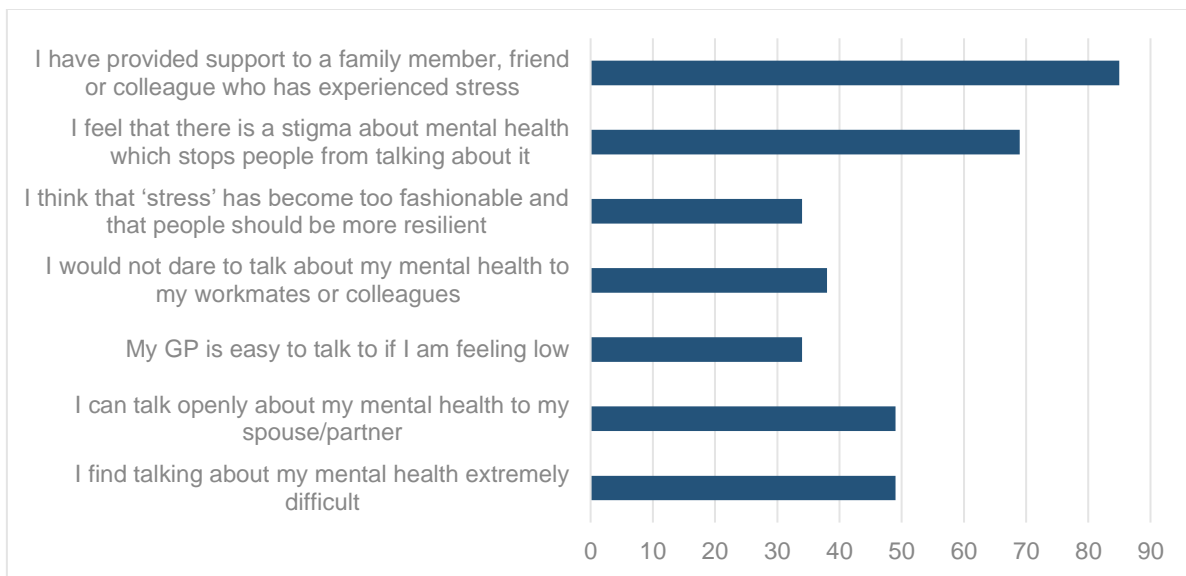
Our rapid review of the research evidence showed us that there are numerous barriers to ‘help-seeking’ among some construction workers, and that these barriers can prevent those in most urgent need of help from seeking or accessing either useful information or practical or clinical support. Some of this can result from a feeling of embarrassment or a lack of confidence. One of our interviewees told us:

I’ve always thought that, even though this job is hard, you had to show that you can cope with the pressure and never admit that you’re struggling a bit. You don’t want people to think you’re a bit ‘flaky’ or that you can’t be relied on. So you keep quiet and soldier on, don’t you?

Interviewee

The survey asked respondents to tell us about where, if at all, they went for support or guidance about their mental health. The results, showing the percentage of respondents who either ‘agreed’ or ‘strongly agreed’ with a list of statements, appear in Figure 4.3, below.

Figure 4.3 Speaking to others about mental health



Source: *Mates in Mind/IES Survey 2022*

Almost half of our respondents reported that they found ‘talking about my mental health extremely difficult’ and almost 70 per cent agreed that ‘that there is a stigma about mental health which stops people from talking about it’.

Perhaps unsurprisingly, most respondents were happier to talk to family members or friends about their mental health, compared with either colleagues or GPs, for example.

A significant minority appeared less sympathetic to the idea that support may be needed, with a third saying that they thought that ‘stress’ has become too fashionable and that

people should be more resilient'. By contrast, over 80 per cent of our respondents reported that they had 'provided support to a family member, friend or colleague who has experienced stress', suggesting that this population has at least had some lived experience of the benefits of speaking to others for support.

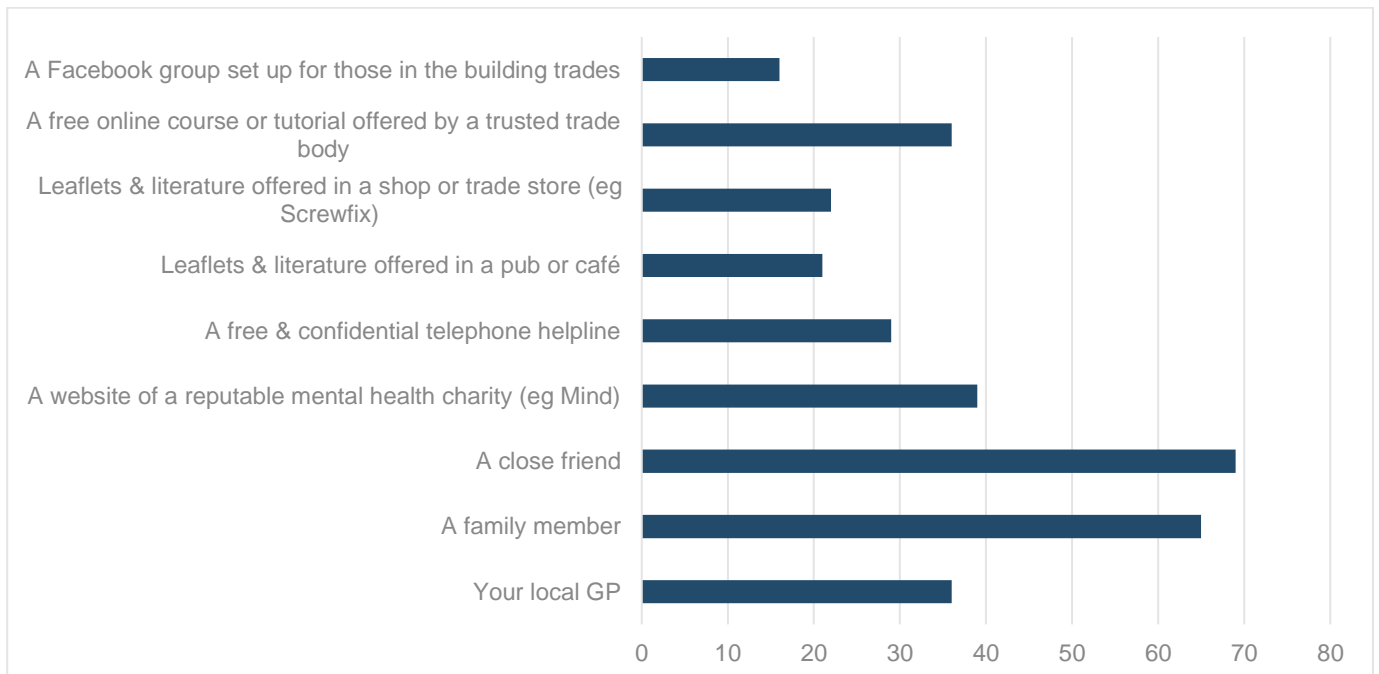
Interestingly, those respondents with 'severe' anxiety also reported a significantly lower willingness to both seek help and to provide it to others.

4.4 Likelihood of speaking to sources of support and guidance

We asked respondents to tell us how likely they would be in the future to use any of a range of sources of information, support or guidance if they were feeling stressed, anxious or low. Given that self-employed construction workers, or those working in partnerships or micro-firms, are much less likely to have formal access to support provided by an employer, this section of the questionnaire gave us the chance to get some insight into the ways which organisations such as Mates in Mind might target this somewhat elusive group with tailored resources, signposting and support.

The results, indicating which sources respondents said they would be 'likely' or 'very likely' to use appear in Figure 4.4, below.

Figure 4.4 Likelihood of speaking to sources of support and guidance



Source: Mates in Mind/IES Survey 2022

As suggested by the responses to previous questions, the sources of support most favoured by our respondents were close friends and family members. Over two-thirds told

us that they would be likely or very likely to access these sources if they were troubled by low mood or anxiety.

Three further sources were favoured by around a third of our respondents:

- A website of a reputable mental health charity (eg Mind) (39%).
- A free online course or tutorial offered by a trusted trade body (36%).
- The local GP (36%).

It should be noted that these three sources of support were only half as likely to be used by our respondents as close family and friends.

Those sources of support or guidance least likely to be used by our survey respondents were:

- A free & confidential telephone helpline (29%).
- Leaflets & literature offered in a shop or trade store (eg Screwfix) (22%).
- Leaflets & literature offered in a pub or café (21%).
- A Facebook group set up for those in the building trades (16%).

As one of our interviewees, a joiner, told us:

I sometimes see leaflets or adverts about mental health, but I always think that they're for other people and not me. It's taken me a while to accept that I sometimes struggle with my anxiety, but I don't think of myself as ill enough to need help from a doctor or whatever. I was brought up not to make a fuss and to just get on with things, which is probably not the right thing to do nowadays, is it?

Joiner

We found that, across the trades represented in our sample, builders and electricians were slightly more likely to favour leaflets and literature but, in general, there were no other differences by trade. Those who worked in small and medium-sized businesses were slightly more positive towards seeking help more generally, compared to sole traders.

Among those reporting more 'severe' anxiety on the GAD7 measure, the tendency to rely on close family and friends was, if anything, more pronounced – with a greater reluctance to use online material, charities or GPs than those with 'moderate' or 'mild' anxiety. In short, those likely to be in most need of mental health support (and, in many cases, most likely to benefit from this support), seem most resolute in their unwillingness to make use of it.

4.5 Physical symptoms experienced

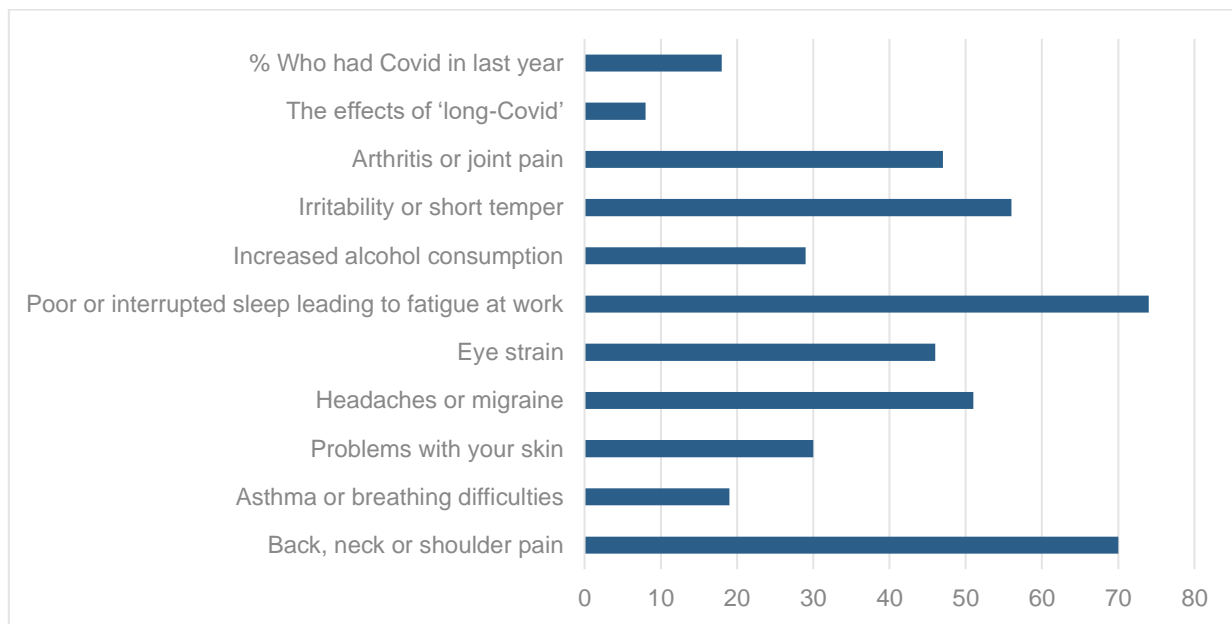
The interplay between physical and mental health is often underemphasised by clinicians where people of working age are concerned. When focusing on an individuals' mental health, prevention activities often centre on reducing the risk factors and increasing the

protective factors associated with it. But we know that individuals with chronic physical health conditions are often at higher risk of having a mental health condition. Therefore, offering them support to adjust to their condition and diagnosing and treating mental health conditions in a timely manner are important priorities in reducing the impact of 'co-morbidity' and improving an individual's ability to stay in or return sustainably to work (McGee and Ashby, 2010).

Our survey wanted to explore the extent to which self-employed construction workers were experiencing both mental and physical health challenges in parallel. Those who have multiple health problems are, perhaps, likely to need different types of support and might have more complex journeys back into work, if their health has caused them to be absent from work.

We asked respondents to tell us which physical health symptoms or conditions they had experienced in the two weeks prior to the survey. The results appear in Figure 4.5, below.

Figure 4.5 Physical symptoms experienced in last two weeks



Source: *Mates in Mind/IES Survey 2022*

The two conditions reported by the largest proportion of our respondents were:

- poor or interrupted sleep leading to fatigue at work (74%); and
- back, neck or shoulder pain (70%).

Both of these sets of conditions might reasonably be thought of as common and even inevitable consequences of many kinds of construction work. Work which requires physical exertion, intense working, long hours, frequent stretching, reaching, lifting and so on is likely to elevate the risk of both fatigue and musculoskeletal (MSK) strain. However, we also know that there is a more complex relationship between physical and mental health which goes beyond the obvious risk that, for example, chronic low back pain or fatigue caused by poor sleep might eventually result in low mood. Several studies show

that the interaction between physical and mental health at work can be more complex. Studies in other occupations, such as nursing (Yokota et al 2019) have found that aspects of psychosocial health – such as time management, job satisfaction, social support at work or line manager quality can elevate the risk of developing MSK pain or strain. As one of our interviewees (a carpenter) told us:

I've found that I've been more likely to hurt myself at work, or over-stretch or make a silly mistake when I've been measuring something or cutting something out when I've been tired and rushing to get things finished at the end of the day. It sometimes happens when you're anxious about a deadline, or worried about not getting home too late (again).

Carpenter

There were several other health issues reported by over 45 per cent of our respondents, including:

- irritability or short temper (56%);
- headaches or migraines (51%);
- arthritis or joint pain (48%); and
- eye strain (46%).

Of course, many of these health conditions can contribute to an elevated risk of workplace accidents if they affect mood, concentration, coordination or vigilance. While many of these risks may be picked up among those working on a large site, they are more likely to be seen as 'par for the course' where a carpenter and an electrician are rushing to finish a loft conversion in a private property. Indeed, it could be argued that there is little incentive to stop work to resolve any health issues if it means missing a deadline and upsetting a customer.

Almost a third of respondents reported increased alcohol intake in the two weeks prior to the survey. Indeed, builders compared with other trades, were most likely to report this response to intense working or anxiety. This is a tendency which has been studied previously in construction, though primarily in relation to safety (Biggs et al, 2012).

As before, those with 'severe' anxiety were more likely to report each of these physical health problems than those with 'moderate' or 'mild' anxiety.

Finally, almost one in five of our respondents had been infected with Covid-19 in the last year and about 8 per cent reported having symptoms of long Covid. These, of course, include a combination of physical and psychological symptoms.

4.6 Summary

The survey highlighted both the high prevalence of 'severe' and 'moderate' anxiety in this population of self-employed construction workers and the multiple barriers they face in speaking about and seeking support for their wellbeing. Underpinning these findings are a

number of sub-themes which need to be acknowledged and addressed by those working to improve mental health outcomes for these workers:

1. The most trusted and frequently accessed sources of support are family and friends, with significantly less trust being placed in formal and expert sources of advice, guidance or treatment.
2. A significant minority appear to be routinely engaging in unhealthy behaviours which are, at least, in part attributable to poor mental health (eg alcohol consumption, non-prescription drug use and consideration of self-harm).
3. Stigma and self-stigma relating to mental illness is strong in this group, as is the notion that improving resilience and coping, is preferable to treatment or support.
4. GPs are not favoured as a source of support by this population. This could be a reflection of the challenges being experienced in primary care as a result of Covid-19 and other factors, or it could be that this cohort of predominantly male construction workers are reluctant to talk to medical professionals about issues about which they are sensitive or even ashamed.

Those with the most severe anxiety seem to have more extreme experiences and most acute physical and psychological symptoms yet are clearly more distant from (and reluctant to access) most of the formal sources of support beyond close family and friends. This is, perhaps, the most complex conundrum which providers of wellbeing support to this hard-to-reach population of construction workers need to overcome.

In the final section of the report, we set out some suggestions for action which our research has identified.

5 Recommendations

The challenges of supporting the mental wellbeing of self-employed construction workers highlighted by this study are not easy to address. It is an area in which several others have sought to introduce innovative and successful solutions, but with only limited success. The findings of our survey illustrate why this may be, because while there is a clear need to find ways of reducing the burden of stress, anxiety and depression in this group of workers, their reluctance to access support and the difficulties of raising awareness and reaching them in sufficient numbers through either national or local networks mean that future initiatives need to operate on several fronts.

In this section, we describe six areas for action which build upon what is being done already and suggest a number of ways that content and delivery might be enhanced, targeted and evaluated. The six components of our ‘agenda for action’ are set out in Figure 5.1, below.

Figure 5.1 An agenda for action



5.1 Peer support

Peer support for the self-employed or sole traders has the potential to connect people in construction on a range of issues, including mental wellbeing. In what is often felt to be a lonely place – being an owner of a smaller business or a sole trader going from site to site with uncertainty around the next job, challenges with supplies and a sometimes precarious financial position – the opportunity to connect with others in a similar position can be vital. The shared experiences of peers who are experiencing similar issues has an authenticity and credibility which is not often found in literature or on websites. Peer support is increasingly being used in larger organisations to support employees who have common issues such as chronic illness, mental health problems, childcare or bereavement and they can provide timely support among people with shared experiences. A model of peer support for the self-employed or sole traders is more difficult to deliver, but the core principles are the same.

Mates in Mind will be introducing an innovative new way to engage with this group of construction workers by creating a community where practical advice and trusted signposting is available.

5.2 Smart supply chains

As we have noted in this report, many larger construction companies have been increasingly active in the mental health domain and have embraced many of the principles and frameworks provided by, for example, the Health & Safety Executive and other expert bodies. Some have begun to extend the 'reach' of these initiatives to companies in their immediate supply chain; especially small and medium-sized businesses, which may not have the resources or expertise to offer mental health support and occupational health or counselling expertise.

Sadly, it remains very difficult to ensure that, further down the supply chain, the self-employed, who may be contracted to carry out work on larger sites or in specialist areas, are frequently excluded from wellbeing programmes or get missed when their scope is being broadened.

There may be specific interventions which larger employers might trial with self-employed contractors to assess whether greater engagement could be achieved. One may be to extend the reach of Employee Assistance Programmes (EAP's) to sub-contracted workers, emphasising the range of information and support they offer on financial, family and wellbeing matters. Another may be the extension of psychosocial risk assessments carried out on sites to include sole trader or self-employed contractors.

While the proportion of self-employed construction workers which could be covered by such initiatives will still be limited, any successes which reinforce the message that talking about mental health is a good thing and that support from peers and others is available, can only be beneficial.

5.3 Bursary fund

Mates in Mind will be growing its bursary fund through donations and fundraising to provide *pro bono* support to be able to help SMEs and sole traders in their path to creating supportive and proactive workplaces, where mental health is openly discussed and not feared. Its aim is to ensure workplaces are an arena where conversations are entered into out of care and concern and where a positive environment is embraced by all, regardless of their position or employment status. Part of this support will include access to independent counsellors and entry to an SME specific resource area on the Mates in Mind website, covering a range of topics that the survey respondents felt were key areas of stress and providing practical advice on where changes could be considered.

5.4 Financial wellbeing

As we have seen in our survey, the stigma and sensitivity which surrounds mental health among self-employed construction workers represents a serious barrier to help-seeking and the take-up of measures to provide mental health education, guidance, support and, ultimately, treatment. We have also seen that, for many construction workers, the wider heading of 'financial wellbeing' also presents challenges including:

- debt;
- cashflow;
- late payments;
- disrupted supply of materials; and
- disputes or problems with business partners.

It may be that expecting self-employed construction workers to engage with initiatives which focus explicitly on mental health, may deter more from participating and engaging than they attract. Campaigns of support which focus more on the tangible, difficult and operational problems of being a sole trader in a difficult economic environment – for example, managing the financial wellbeing or effectiveness of the business – may be a less threatening way of 'nudging' those who need it, towards associated material about mental wellbeing.

Again, support from larger construction businesses may play a part here and it could be that devising a small number of resources to pilot and evaluate in a specific location, or with a cluster of sites, might offer the chance to road-test whether take-up and engagement are improved.

5.5 Trade partners

We believe that more might be done to engage some of the national trade suppliers, builders merchants and others to act as a 'channel' to reach self-employed construction workers and sole traders. Our survey suggested that passive approaches to outreach,

such as leaflets, are not well-regarded by this group. However, as a way of communicating and engaging participation in initiatives such as financial wellbeing (see above), peer support, workshops, free advice, credible case studies and expert 'surgeries', more progress may be made.

This kind of intervention may also need to be piloted and a business case for support made to some of the larger materials suppliers. However, as an idea which helps these businesses to burnish their 'social responsibility' credentials, and as an act of enlightened self-interest, this may be something which could be trialled with support from industry funding and the expertise of Mates in Mind.

Appendix 1 Bibliography

- Alderson, L. (2017). Uncovered: The truth behind construction's mental health. *Construction News*. Retrieved from <https://www.constructionnews.co.uk/10019419.article>
- Andersson, P. (2008). Happiness and health: Wellbeing among the self-employed. *The Journal of Socio-Economics*, 37(1), 213–236.
- Ankrah, N., Proverbs, D. and Debrah, Y., 2009. Factors influencing the culture of a construction project organisation. *Engineering, Construction and Architectural Management*. 16 (1), 26-47.
- Annink, A., Gorgievski, M., & Den Dulk, L. (2016). Financial hardship and wellbeing: A cross-national comparison among the European self-employed. *European Journal of Work and Organizational Psychology*, 25(5), pp 645–657.
- Beswick, J., Rogers, K., Corbett, E., Binch, S. and Jackson, K., 2007. An Analysis of the Prevalence and Distribution of Stress in the Construction Industry. Norwich: Health and Safety Executive.
- Biggs, H. and Williamson, A.R., 2012. Safety impacts of alcohol and other drugs in construction: development of an industry policy and cultural change management program. In: Smith, S.D (Ed.), *Proceedings 28th Annual ARCOM Conference*, 3-5 September 2012, Edinburgh, UK. Association of Researchers in Construction Management, 445–54.
- Binder, M., & Coad, A. (2013). Life satisfaction and self-employment: A matching approach. *Small Business Economics*, 40(4), 1009–1033.
- Boschman, J. S., van der Molen, H. F., Sluiter, J. K., & Frings-Dresen, M. H. W. (2013). Psychosocial work environment and mental health among construction workers. *Applied Ergonomics*, 44(5), 748–755.
- Boschman, J.S., van der Molen, H.F., Sluiter, J.K., and Frings-Dresen, M.H.W., 2011. Occupational Demands and Health Effects for Bricklayers and Construction Supervisors: A Systematic Review. *American Journal of Industrial Medicine*, 54, 55-77.
- Campbell MA and Gunning JG .(2020) Strategies to improve mental health and wellbeing within the UK construction industry. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* 173(2): 64–74, <https://doi.org/10.1680/jmapl.19.00020>

- Carmichael, Fiona; Fenton, S-J.; Pinilla Roncancio, M.; Sadhra, S.; Sing, M. (2016) Workplace wellbeing programmes and their impact on employees and their employing organisations: A scoping review of the evidence base, Birmingham Business School Discussion Paper Series, No. 2016-04, University of Birmingham, Birmingham Business School, Birmingham, <http://epapers.bham.ac.uk/2103/>
- CIOB, (2020) Understanding Mental Health in the Built Environment. Retrieved from <https://www.ciob.org/industry/research/Understanding-Mental-Health-Built-Environment>
- CITB, (2021) Mental health and wellbeing research: final report". [Peterborough]. Online. Internet. 02 Mar 2022. Available: <https://www.citb.co.uk/about-citb/construction-industry-research-reports/search-our-construction-industry-research-reports/mental-health-and-wellbeing-research/>
- Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., ... Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, 45(1), 11–27.
- Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's wellbeing: a theory of gender and health. *Social Science & Medicine* (1982), 50(10), 1385–1401.
- Crum, M., & Chen, Y. (2015). Self-employment and subjective wellbeing: A multi-country analysis. *International Journal of Entrepreneurship*, 19, 15–29.
- Cunradi, C.B., Todd, M., Duke, M., and Ames, G., 2009. Problem Drinking, Unemployment, and Intimate Partner Violence among a Sample of Construction Industry Workers and their Partners, *Journal of Family Violence*, 24, 63-74.
- Dijkhuizen, J., Gorgievski, M., van Veldhoven, M., & Schalk, R. (2016). Feeling successful as an entrepreneur: A job demands — resources approach. *International Entrepreneurship and Management Journal*, 12(2), 555–573.
- Du Plessis, K., Hoiles, L., Field, D., Corney, T., & Napthine, M. (2009). "I can cope": Young men's strengths and barriers to seeking help. *Counselling Australia*, 9(4), 93–99.
- Eaves, S. (2016) Building and maintaining healthy construction workers for longer working lives through better workplace design. Loughborough University. Available at: <https://hdl.handle.net/2134/21185> (accessed 18 February 2022).
- Gevaert J, De Moortel D, Wilkens M, Vanroelen C, (2018), What's up with the self-employed? A cross-national perspective on the self-employed's work-related mental wellbeing, *SSM - Population Health*, 4, pp 317-326.
- Houle, J., Meunier, S., Coulombe, S., Tremblay, G., Gaboury, I., De Montigny, F., ... Lavoie, B. (2015). Masculinity ideology among male workers and its relationship to self-reported health behaviors. *International Journal of Men's Health*, 14, 163–182.

- Hyytinen, A., & Ruuskanen, O. P. (2007). Time use of the self-employed. *Kyklos*, 60(1), pp105–122.
- Iacuone, D. (2005) 'Real men are tough guys': hegemonic masculinity and safety in the construction industry', *The Journal of Men's Studies*, 13(2), 247+, available: <https://link.gale.com/apps/doc/A131132222/AONE?u=anon~cc9a3857&sid=googleScholar&xid=cd20a1a3> [accessed 27 Feb 2022].
- King, T. L. and Lamontagne, A. D. (2021) 'COVID-19 and suicide risk in the construction sector: preparing for a perfect storm', *Scandinavian Journal of Public Health*, 49(7), pp. 774–778. doi: [10.1177/1403494821993707](https://doi.org/10.1177/1403494821993707).
- Kotera, Y., Green, P., and Sheffield, D. (2019). Mental health shame of UK Construction Workers: Relationship with Masculinity, Work Motivation, and Self-Compassion. *Journal of Work and Organizational Psychology*, 35, 135 - 143. <https://doi.org/10.5093/jwop2019a15>
- Lighthouse Club, (2021). Construction Suicide Rates on the Increase. Retrieved from: <https://www.lighthouseclub.org/construction-suicide-rates-on-the-increase/>
- McGee R and Ashby K (2010), *Body and Soul: Exploring the connection between physical and mental health conditions*, Lancaster: The Work Foundation.
- Mahalik, J. R., & Dagirmanjian, F. R. (2019). Working-Class Men's Constructions of Help-Seeking When Feeling Depressed or Sad. *American journal of men's health*, 13(3), 1557988319850052. <https://doi.org/10.1177/1557988319850052>
- Meager, N. (2015). Job quality and the self-employed: Is it (still) better to work for yourself? *International Review of Entrepreneurship*, 13(1), pp 35–46.
- Minchin, R., Jr., Glagola, C., Guo, K., and Languell, J., 2006. Case for Drug Testing of Construction Workers. *Journal of Management in Engineering*. 22(1), 43-50.
- Nordenmark, M., Vinberg, S., & Strandh, M. (2012). Job control and demands, work-life balance and wellbeing among self- employed men and women in Europe. *Vulnerable Groups Inclusion*, 3(1).
- Office for National Statistics, (2021). Construction Statistics, Great Britain: 2020. Retrieved from <https://www.ons.gov.uk/businessindustryandtrade/constructionindustry/articles/constructionstatistics/2020>
- Office for National Statistics. (2019). *Employment in the UK: July 2019*. Retrieved from <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/employmentintheuk/july2019>
- Powell, A., Galea, N., Salignac, F., Loosemore, M., & Chappell, L. (2018). *Masculinity and Workplace Wellbeing in the Australian Construction Industry*. 1(1), 321–330. Queens University, Belfast, UK. Retrieved from http://handle.unsw.edu.au/1959.4/unsworks_52529

- Rietveld, C. A., Van Kippersluis, H., & Thurik, A. R. (2015). Self-employment and health: Barriers or benefits? *Health Economics*, 24, 1302–1313.
- Seidler, Z., Dawes, A., Rice, S. M., Oliffe, J. L., Seidler, Z. E., Dawes, A. J., & Dhillon, H. M. (2016). The role of masculinity in men's help-seeking for depression: A systematic review. *Clinical Psychology Review*, 49, 106–118.
- Sherratt F, (2018) Shaping the discourse of worker health in the UK construction industry, *Construction Management and Economics*, 36:3, 141-152.
- Stephan, U., & Roesler, U. (2010). Health of entrepreneurs versus employees in a national representative sample. *Journal of Occupational and Organizational Psychology*, 83(3), pp 717–738
- Stergiou-Kita, M., Mansfield, E., Bezo, R., Colantonio, A., Garritano, E., Lafrance, M., Lewko, J., Mantis, S., Moody, J., Power, N. and Theberge, N., 2015. Danger zone: Men, masculinity and occupational health and safety in high-risk occupations. *Safety science*, 80, pp.213-220.
- Timewise (2021) Making Construction A Great Place To Work : Can Flexible Working Help? Insights from 4 pilot studies.
- Vogel, D. L., Heimerdinger-Edwards, S. R., Hammer, J. H., & Hubbard, A. (2011). "Boys don't cry": Examination of the links between endorsement of masculine norms, self-stigma, and help-seeking attitudes for men from diverse backgrounds. *Journal of Counseling Psychology*, 58(3), 368–382.
- Wong, Y, Ho, J, Mon-Ho, R, Wang, S and Miller, I S K ,(2016), Meta-analyses of the relationship between conformity to masculine norms and mental health-related outcomes. *Journal of Counseling Psychology*, 64(1) 80-93.
- Yokota J, Fukutani N, Nin K, et al. (2019), Association of low back pain with presenteeism in hospital nursing staff. *Journal of Occupational Health*; 61(3):pp 219-226.