

EVALUATION OF CONSTRUCTION WORKERS MENTAL HEALTH DURING COVID-19 PANDEMIC IN NIGERIA

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ABSTRACT

The need to ensure construction workers have good mental health is imperative because poor mental health has an economic cost that impacts individuals, companies, and nations. The aim of this study is to evaluate construction workers' mental health during the COVID-19 pandemic in Nigeria. To achieve this aim, a survey questionnaire was developed and administered online to building environment professionals working on construction sites. The results show that stress, feeling overwhelmed, feeling unusually confused, fatigue, being unpredictable and anxiety were the top mental health challenges during the COVID-19 pandemic. The result also revealed that training on mental health and the symptoms, awareness week activities, flexible working, and working from home policies were the top support provided by organisations for mental health wellbeing during COVID-19. The study concludes that difficulty in adapting to the challenges brought about by the deadly virus and its effect on the economy makes construction workers more susceptible to mental health challenges as it impaired their work life and thereby increasing their mental pressure.

Keywords: Accident; Fatigue; Stress; Suicide.

1. INTRODUCTION

Construction workers are subjected to strenuous physical and psychological pressures, which are linked to an increased risk of physical and mental illness. The construction industry's psychological anguish is not confined to labourers; a web-based study of construction managers in the United Kingdom found that 68.2 percent of construction professionals reported severe stress, anxiety, or depression connected to their employment (Campbell, 2006). Mental illness affects one in every three persons worldwide, accounting for 13% of disease, and affects 450 million people (World Health Organization, 2013, Mnookin, et al., 2016). Children and teenagers (20%) are also impacted by mental illness, resulting in human sorrow (Mnookin, 2016). According to Herrman and Jane-Llopis (2012) physical health, human behaviour, and quality of life are all linked to mental health. It is imperative to guarantee that mental health is addressed

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internationally, given the strong links between mental health and decreased harms, healthy relationships, and reduced use of alcohol and hard drugs.

Mental illness is a result of socioeconomic challenges in Nigeria, with worrisome figures (Oyewunmi et al., 2015). According to Oyewunmi et al. (2015), there is a need for cultural re-engineering in the Nigerian workplace regarding mental health and the promotion of the psychosocial environment. This necessitates research into workplace solutions, as Nigeria's growing economy relies largely on the engaged workforce to maintain growth and development. Nigeria, like other countries, requires a health and safety plan before construction projects may be approved. However, the strategy focuses on improving physical working conditions in order to prevent injury and accidents (Dodo, 2014), rather than laying out plans to address other mental distress risk factors (Ibem, et al., 2011; Ojo, et al., 2019). As a result, in Nigeria there has been a lack of strategic moves to emphasise mental health and well-being of construction professionals by implementing strategies to reduce work-related stress, resulting in reported feelings of melancholy, hopelessness, and anxiety (Oladinrin, et al., 2014). It is critical to maintain excellent mental health since illness has a financial cost to both businesses and individuals, and it has an impact on production, turnover, interpersonal relationships, physical health, and social living (liang et al, 2021).

COVID-19 has a massive, complicated, and sophisticated impact on the construction industry, just as it does on other important economic sectors. More than 80% of construction workers utilise hazardous materials and components on the job, are exposed to harsh weather, work at heights, move or transfer heavy materials and components, operate in unsanitary circumstances, and have poor health and safety standards. Construction projects were halted, with the exception of those deemed absolutely important for national security concerns, and construction site workers were directed to stay at home and work on stage. The worldwide construction industry faces a significant problem as a result of the lockout. Insufficient site labour, factory closures, low morale among site operatives, low productivity, shortages of materials, failure to handover projects on time, shortages of plants and materials, border closures, delays or inability to obtain required permits, and changes in the work culture on the sites were among the challenges faced by the global construction industry. All of COVID-19's negative effects on the construction industry have a direct influence on construction employees' mental health. In light of this, the purpose of this study is to assess the mental health of construction workers during COVID-19. In the context of this study construction workers is refer to as those who are directly involved in construction work from inception to completion stage.

2. LITERATURE REVIEW

Mental illness comes in a variety of forms and degrees of severity; the most prevalent (depression and anxiety) are known as common mental disorders (CMD) (World Health Organization, 2014). According to the World Health Organization (2017), CMD encompasses a wide spectrum of anxiety and depressive symptoms that result in significant health and functional impairments.

CMD is a collection of distressing moods that include sadness and anxiety (Risal, 2011). Depression and anxiety are the leading causes of disability worldwide (World Health Organization, 2017). Sadness, poor self-worth, guilt, sleep disturbances, loss of appetite,

and difficulties concentrating are all symptoms of depression. It also has an impact on a person's capacity to operate normally at work and cope with day-to-day life (Li, et al., 2017). Anxiety can be an emotional state or a personality feature, whereas dread disorder is a collective term for mental illness characterised by anxiety and fear (Saju, et al, 2019). Depression and anxiety affect roughly 20% of Americans, 10% to 20% of Europeans, 6.6 percent (3.9 percent depression, 2.7 percent anxiety) of Nigerians, and 7.3 percent (4.2 percent depression, 3.1 percent anxiety) of Chinese people (World Health Organization, 2017). Depression and anxiety can have a significant impact on one's health, work capability, and quality of life (Bar-Sela, et al., 2015; Saneei, et al., 2016). When depression and anxiety symptoms go untreated, they can lead to chronic physical illness, suicidality, and mortality (Li, et al., 2017, Pavičić Žeželj, et al., 2019).

Mental health is increasingly becoming an important concern in the workplace, according to Joyce et al. (2016). According to studies, occupational stress causes a significant prevalence of depression and anxiety among workers (Kamardeen and Sunindijo, 2017; Zhang, et al., 2018; Pavičić Žeželj, et al., 2019). Workplaces and labour have been highlighted as important socioeconomic determinants of health (Joyce, et al., 2016). In comparison to the general working population, construction workers had a higher risk of suicide. Construction workers, for example, have the second highest suicide rate of all major professional occupational groups in the United States, trailing only the hunting and fishing industry (Peterson, et al, 2018), and construction workers in England have a suicide rate three times the national average among males. Construction workers had higher rates of substance misuse and sleep issues than other occupational categories, in addition to disproportionately high rates of psychological anguish and suicide (Office for national statistics). At the workplace, risk factors and associated poor mental health contribute to absenteeism, presenteeism, low productivity, high safety claims, and employee turnover (Roche, et al, 2016; Milner, et al., 2017; Nwaogu, et al., 2019; Kotera, et al., 2020). Furthermore, poor mental health has an economic cost that impacts individuals, companies, and nations (Nwaogu, et al., 2019). Because the working population spends roughly two-thirds of their time at work, it is an excellent arena for mental health promotion (Joyce, et al., 2016).

Those who have been through traumatic circumstances due to COVID-19 are more likely to have psychological disorders and mental health concerns. Confusion, frustration, worry, anger, irritation, fatigue, and depression are common sentiments among construction workers (Ekpanyaskul and Padungtod, 2021). They may also feel defeated, have sleeplessness, have trouble concentrating, and/or be exhausted. If such stress is not managed properly, it might lead to alcoholism, smoking, as well as other drugs abuse (Karthick, et al., 2021). Salaries, working time, workload, psychological stress, interactions with coworkers and managers, even accessibility to periodic vacation have all been impacted by COVID-19, some of which may have a significant influence on the physiological as well as mental health of employees, their relations, and their societies (Jahan Nipa, et al., 2020). Social distance has compounded the issue since everyday meetings with colleagues and friends, which are a vital element of maintaining positive mental health, are lacking, and workers become socially alienated (Rouhanizadeh and Kermanshachi, 2021). Many individuals, whose employment had been terminated during COVID-19 are also dealing with mental health issues, as they are worried about finding another work and meeting their financial commitments (Woolley, et al., 2020). The outcomes of Pamidimukkala and Kermanshachi (2021) study demonstrated that an

absence of a secure environment at work, excessive workloads, family problems, and worries regarding job security frequently lead to stress, despair, and even suicide. According to Choudhari (2020), during India's lockdown, and other COVID-19 imposed measures left workers without the monetary capacity to cover daily food costs, and quarantine rules all contributed to extreme anxiety, which led to morally reckless actions and nervousness among internal migrant workers. Internal migrant workers are experiencing significant levels of anxiety and panic as a result of the COVID pandemic, and they require supportive care. The fast-expanding COVID 19 epidemic has elicited a slew of negative cognitive processes and emotions in the vulnerable populace. As a result, the COVID-19 pandemic has the potential to induce chronic psychological symptoms such as despair, anxiety, phobias, and psychosomatic symptoms, adding to the negative impacts on physical health (Qiu, et al., 2020; Tandon, 2020).

Mental illness affects everyone; therefore, it is critical to improve mental fitness in order to maintain mental health. Despite the high prevalence of psychological discomfort, substance abuse, and sleep issues among construction workers, their mental health is poorly studied.

3. METHODOLOGY

Although mental health has received considerable attention in the construction management literature, the literature on the construction workers mental health during COVID-19 is nascent globally. Therefore, this research is set to answer the following questions, How often do construction workers suffer different mental health challenges during COVID-19? What support does organization offer for mental health during COVID-19? To achieve this a cross-sectional survey research strategy was used to solve the research problem in order to attain the study's goal. According to Bryman (2016), this is a quantitative research technique in which a researcher distributes a survey to a representative sample or the entire population in order to identify the population's opinions, thoughts, behaviours, or characteristics. Convenience sampling was used to collect the primary data. When sufficient information on population size and sample frame is not available, the approach is appropriate. While the results may not be generalizable, the conclusion can be typical of a large group of people. This follows from the central limit theorem (CLT). According to the CLT principle, the distribution of sample means approaches a normal distribution as the sample size grows (Olanrewaju and Idrus, 2020). A sample size of 30 or more is statistically required for the CLT principle to be valid. This study adopted a convenient sampling method because information on the total number of construction workers in Nigeria is not readily available as there is no database capturing the number of construction workers. A well-structured, closed-ended questionnaire was prepared and distributed online to built-environment experts working on construction sites in order to collect data. The survey was open from November 15, 2021, through February 4, 2022. Respondents were asked to rate how often they suffered from mental health challenges before and during COVID-19 on a six-point scale, with "6" denoting "extremely often," "5" denoting "strongly often," "4" denoting "moderately often," "3" denoting "less often," "2" denoting "least often," and "1" denoting "not at all." During the COVID-19, they were also asked to rate the level of mental health support their organisation currently provides on a six-point scale, with "6" denoting "extremely frequent," "5" denoting "strongly frequent," "4" denoting "moderately frequent," "3" denoting "less frequent," "2" denoting "least frequent," and "1" denoting

"not at all." The acquired data was analysed using descriptive statistical tools such as means and standard deviation. For interpretation purpose a mean score of 5.01-6.0 indicates extremely frequent/often; 4.01-5.0 indicates strongly frequent/often; 3.01-4.0 indicates moderately frequent/often; 2.01-3.0 indicates less frequent/often; 1.01-2.0 indicates least frequent/often, and 0-1.0 indicates not at all. Statistical package for social science (SPSS) 23.0 was used for the analysis.

4. ANALYSIS AND DISCUSSION

Table 1 contains basic information about the respondents.

Table 1: Respondent profile

Position in the company	Frequency	Percent	Academic background	Frequency	Percent
Construction Manager	13	24.1	Architecture	4	7.4
Contractor's architect	3	5.6	Building Technology	14	25.9
Contractor's engineer	8	14.8	Civil Engineering	13	24.1
Contractor's quantity surveyor	5	9.3	Construction Management	3	5.6
Engineer	2	3.6	Electrical engineering	1	1.9
General worker	3	5.6	Mechanical Engineering	7	13.0
Safety Officer	2	3.7	Quantity Surveying	12	22.2
Site supervisor	18	33.3	Total	54	100
Construction Manager	13	24.1	Academic qualification		
Contractor's architect	3	5.6	Bachelor's degree	21	38.9
Total	54	100	Diploma	16	29.6
Years of experience			HND	1	1.9
11-15 years	16	29.6	Master's degree	13	24.1
16- 20 years	7	13.0	PGD	1	1.9
5-10 years	24	44.4	PhD	2	3.7
Less than 5 years	6	11.1	Bachelor's degree	21	38.9
More than 20 years	1	1.9	Total	54	100
Total	54	100	Type of organization		
Number of safety officers			Developers	8	14.8
1.00	25	46.3	Main Contractors	22	40.7
2.00	13	24.1	Sub-contractors	20	37.0
3.00	2	3.7	Suppliers	4	7.5
4.00	4	7.4	Total	54	100
5.00	1	1.9			
None	9	16.9			
Total	54	100			

Table 1 revealed that the respondents cut across different positions on the construction site. This implies that the results of the findings can be generalised for construction workers. It can also be deduced that 88.9% of the respondents have more than 5 years of experience in construction work.

This is an indication that their responses can be more reliable since they are based on their experience. Similarly, it can be deduced that 83.3% of the respondents have at least one safety officer on their construction site. This also indicates that the respondents have knowledge of mental health and hence can answer the questions correctly. The table also revealed that the respondents had their academic background across different professions in the built environment. This also allows the result to be more reliable as it represents the opinion of built environment professionals. Likewise, the table revealed that the respondents cut across different organizations. Finally, it was deduced from the table that the least academic qualification of the respondents was a diploma. This is also an indication that all the respondents were academically qualified to fill out the questionnaire correctly.

Figure 1 shows that 9.3% of the respondents indicated that compliance with health and safety standards of procedures SOPs due to the COVID-19 will reduce the progress/productivity of projects on sites by 30% or less, while the remaining 90.7% indicated that project progress/productivity will be reduced by over 30%. This is also in line with the findings of Olanrewaju et al. (2021), which revealed that, on average, site productivity had been reduced by about 50%.

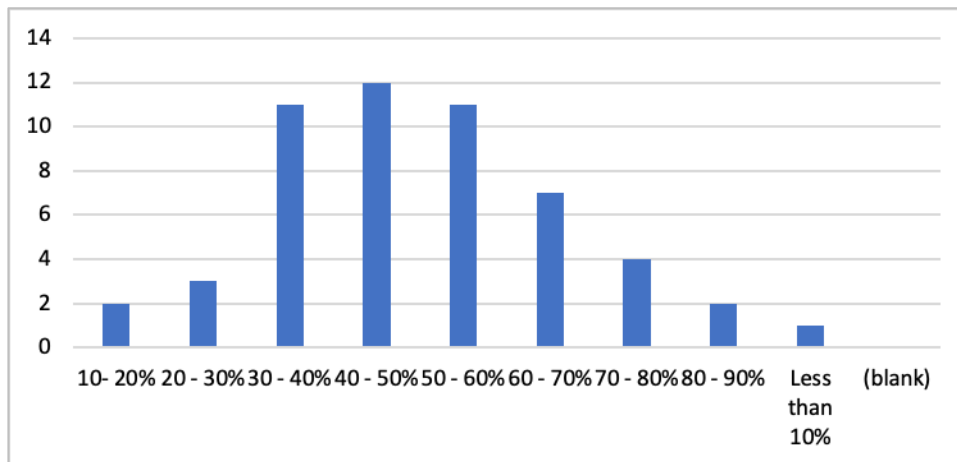


Figure 1: The extent to which compliance to health and safety standard of procedures SOPs due to COVID-19 reduces the progress/productivity of project on sites

Figure 2 shows that 6.1% of the respondents indicated that they suffer from mental health issues extremely often, while 31.3% indicated that they suffer from mental health issues strongly often.

Meanwhile, 28.6% indicated that they suffer from mental health moderately often. 12.9% indicated that they suffer from mental health less often, 7.5% indicated that they suffer from mental health least often, and the remaining 13.6% indicated that they do not suffer from mental health at all.

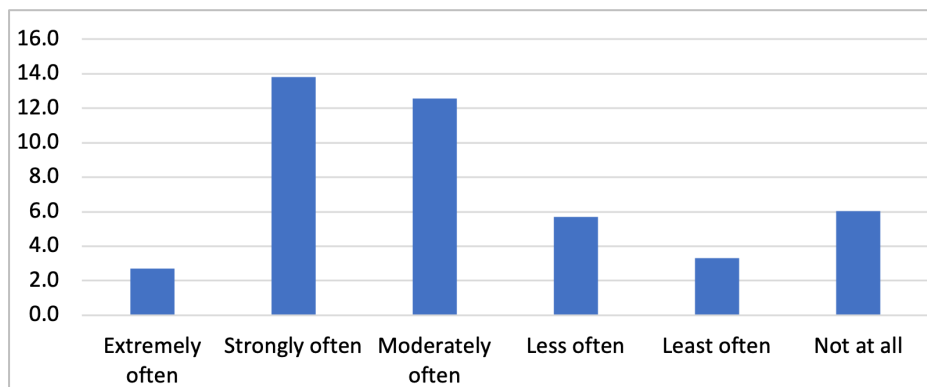


Figure 2: Summary of respondent's answers to all the identified mental health issues

It can be deduced from the figure that a higher percentage of the respondents suffer from mental health issues than average, which implies that mental health issues are prevalent among construction workers during COVID-19. Furthermore, Table 2 contains the mean and standard deviation of a respondent's opinion on the 35 identified mental health issues.

Table 2: Descriptive statistics of different mental health challenges

Factors	Mean	Std. Deviation	Rank
Stress	4.13	1.29	1
Feeling overwhelmed	4.09	1.31	2
Feeling unusually confused	4.05	1.51	3
Fatigue	4.04	1.33	4
Unpredictable	3.91	1.36	5
Anxiety	3.89	1.71	6
Persistent thoughts	3.86	1.53	7
Eating too much or too little	3.86	1.39	7
Having unexplained aches and pains	3.84	1.4	9
Depression	3.84	1.65	9
Feeling unusually worried	3.82	1.42	11
Poor concentration	3.82	1.42	11
High absenteeism	3.8	1.42	13
Inability to take care of family members	3.77	1.57	14
Inability to get to work on time	3.76	1.3	15
Experiencing severe mood swings that cause problems in relation	3.75	1.48	16
Feeling helpless or hopeless	3.73	1.5	17
Thinking of harming others	3.7	1.65	18
Feeling unusually forgetful	3.7	1.5	18
Feeling unusually upset	3.69	1.28	20
Sleeping too much or too little	3.68	1.34	21
Feeling unusually scared	3.68	1.41	21
Irritability	3.68	1.36	21

Factors	Mean	Std. Deviation	Rank
Inability to perform daily tasks	3.64	1.51	24
Hearing voices or believing things that are not true	3.64	1.42	24
Yelling at colleagues/others	3.64	1.48	24
Lack of self-confidence	3.63	1.59	27
Fighting with family and friends	3.61	1.6	28
Using drugs more than usual	3.61	1.63	28
Lack of emotion	3.61	1.53	28
Drinking more than usual	3.59	1.53	31
Violent	3.57	1.58	32
Having low or no energy	3.53	1.31	33
Smoking more than usual	3.47	1.5	34
Suicidal thoughts	3.43	1.65	35
Total	131.06	51.46	

Table 2 revealed that 11.4% of the variables have their mean within strongly often while the remaining 88.6% have their mean within moderately often as discussed in the methodology. This is also in line with the result shown in figure 3. The table also revealed that all the variables have a standard deviation that is not too high, which is an indication that the responses are clustered around the mean. The average of the total mean and standard deviation was 3.74 and 1.47, respectively. This implies that mental health problems were moderately common. Therefore, because of space constrains, only variables that have a mean above the average total mean will be discussed in this study.

Stress, which is the feeling of emotional or physical tension and also our body's response to pressure, was not surprised to be ranked first on the table. This is because construction work is characterised by numerous stressful activities coupled with the measures put in place to curb the spread of COVID-19 such as wearing nose masks in conducive and inconducive weather. This is also in line with the findings of Zhang, et al. (2018), which identified stress as the source of other prevalent mental health challenges among the working population. Next to this is feeling overwhelmed, which occurs when the intensity of one's feelings outmatches his or her ability to manage them. During this period, a worker will become temporarily unable to think clearly due to their emotional feelings, making them experience too much distraction. This may be as a result of sadness, anger, frustration, amazement, joy, shock, or a combination of these and other emotions and feelings which are all peculiar to construction work due to job insecurity and working away from home (Peterson, et al., 2018). Next on the table is feeling unusually confused. Confusion is when there is a change in mental status in which a person is not able to think with his or her usual level of clarity. Frequently, confusion leads to the loss of the ability to recognise people and or places, or tell time and the date. Feelings of disorientation are common in confusion, and decision-making ability is impaired. This is also common on construction sites, especially when a worker is faced with a daunting task. Next to this is fatigue. This is a feeling of constant tiredness or weakness and can be physical, mental, or a combination of both. The physical nature of construction work such as block setting, concreting, and plastering, coupled with a long working hour, also makes this common among construction workers. This is also in line with the findings of Oladinrin, et al.

(2014), which identified fatigue as a stressor on construction sites. Next is unpredictable. This means a person may likely change suddenly and without any reason and therefore cannot be predicted. This is particularly common among unskilled workers who are liable to drug abuse in order to relieve stress. Next is anxiety. This is the body's natural response to stress. It's a feeling of fear or apprehension about what's to come. It is also an uncomfortable feeling of nervousness or worry about something that is happening or might happen in the future. This is also common among construction workers due to the nature of construction work. For example, a worker tends to be anxious when he/she is approaching the deadline of a given task without any assurance of completing the task. This is also in line with WHO (2014), which identified anxiety as one of the most common mental health disorders. Next is persistent thought. These are thoughts that seem to become stuck in the mind. They can cause distress since the nature of the thought might be upsetting. They may also reoccur frequently, which can make the concern worse. Persistent thoughts may be violent or disturbing. This may also arise as a result of job insecurity, little or no social gathering as a measure to reduce COVID-19 spread on construction sites, among other things. Next is eating too much or too little. This can also be referred to as an eating disorder. It is characterised by a persistent disturbance of eating or eating-related behaviour that results in the altered consumption or absorption of food that significantly impairs physical health or psychosocial functioning. This may also be a result of stress or anxiety. When a worker is stressed or anxious, they may either lose their appetite for food or eat beyond their measure. Next is having unexplained aches and pains. This happens when the muscles, tendons, joints, and other connective tissues hurt. This ache can also be in the fascia, which is the soft tissue between the muscles, bones, and organs. This type of pain is usually experienced after a long working hour and as a result of stress and fatigue. Next is depression. This is a mood disorder that causes a persistent feeling of sadness and loss of interest and can interfere with your daily functioning. When depression and anxiety symptoms are not attended to promptly and adequately, they may lead to chronic physical illness, suicidality, and mortality (Li, et al., 2017; Pavičić Zeželj, et al., 2019). Next is feeling unusually worried. This can also be a major symptom of Generalized Anxiety Disorder, a common anxiety disorder that involves tension, nervousness, and a general feeling of unease that colours the whole life. This may also occur as a result of an inability to meet the target or a long time away from family and friends due to work or distance. Next is poor concentration. This is the inability to focus on a task. A person who is unable to concentrate easily is easily distracted. This may be due to depression or persistent thoughts. When a worker has many things going on in his/her mind, that worker may tend to lose focus on the task at hand and may eventually end up making a mistake. Next is high absenteeism. This is a habitual pattern of absence from work without good reason. Generally, absenteeism refers to unplanned absences. Absenteeism has been viewed as an indicator of poor individual performance as well as a breach of an implicit contract between employee and employer. When a worker is facing one or two mental health issues, that worker may not be coming to work regularly. Next is the inability to take care of family members. This is when a worker is no longer living up to his or her responsibility towards family. This may also be due to depression. When a worker is depressed, it will become difficult for such a worker to take care of family members. Next is the inability to get to work on time. This is when a worker is arriving after the planned, expected, usual, or necessary time. Last but not least, experiencing severe mood swings that cause problems in relationships, which is characterised by a sudden or intense change in emotional state. During a mood swing, a

person may quickly switch from feeling happy and upbeat to feeling sad, irritable, or angry.

Table 3 contains the mean and standard deviation of a respondent’s opinion on the identified mental health support provided by their organization. The table revealed that all the variables have their mean within strongly frequent as discussed in the methodology. The table also revealed that all the variables have a standard deviation that is not too high, which is an indication that the responses are clustered around the mean. The average of the total mean and standard deviation was 4.56 and 1.13, respectively. This implies that the frequency of mental health support provided by the organizations was strong.

Table 3: Descriptive statistics of different mental health supports

Factors	Mean	Std. Deviation	Rank
Training on mental health and the symptoms	4.8	1.06	1
Awareness week activities	4.65	0.96	2
Flexible working	4.62	1.18	3
Work from home policy	4.57	1.14	4
Additional external support - e.g. counsellors, occupational psychology	4.55	1.1	5
Mental Health First Aids	4.53	1.16	6
Fatigue management plans	4.47	1.04	7
Switch-off policy - e.g. Policy against checking your phone/emails	4.43	1.41	8
Scheduled meetings	4.43	1.14	8

The first place on the ranking table went to mental health and symptom training. This is a teaching and learning activities that are carried out with the primary goal of assisting members of an organisation in acquiring and applying the information, skills, abilities, and attitudes required for a certain job and organisation (Oni, et al, 2019). It's the method by which people acquire knowledge and/or skills for a specific purpose. The importance of training cannot be overstated, since it is beneficial not only now but also in the future. It is considered that if you are not informed, you will be deformed, thus training allows employees to learn more about their mental health and how to better manage it. Next is awareness week activities, awareness which is the state of being aware of something, or "the ability to immediately know and experience, to feel, or to be attentive of happenings." The goal of these programmes is for employees to learn more about mental health and how it affects them. The activities of awareness week assist in enlightening personnel, particularly those who are not captured during a formal training. Flexible working is the next, this refers to alternative arrangements or schedules to the typical working day and week. Employees have the option of working a modified schedule to accommodate personal or family obligations. Employers, on the other hand, may create a variety of timetables to satisfy the needs of their customers. This arrangement allows workers to better manage their time and complete their tasks at a more convenient time, which in turn helps them manage their stress and anxiety while also allowing them to have a work-life balance. This is also in line with the findings of Nwaogu, et al (2021), who identify flexible employment as a key component of improving construction worker mental

health. Then there's external help like counsellors, occupational psychologists, who are persons who have been trained to offer advice on personal or psychological issues. Allows workers to get care for their mental health needs as needed. This contradicts the findings of Roche, et al (2016), who found that mental illness is prevalent among construction workers because of the inability to get required support.

After that, there's mental health first aid. A person who is developing a mental health problem, suffering a worsening of an existing mental health condition, or in a mental health crisis receives mental health first aid. First aid is administered until expert assistance is obtained or the problem is resolved. It improves awareness of mental disorders and their treatments, as well as knowledge of proper first-aid procedures and confidence in administering first aid to people with mental illnesses. It's a skills-based training programme that teaches people about mental health and substance abuse. The next is creating a fatigue management plan, which identifies the fatigue hazards at work and specifies how they should be addressed. Depending on the project kind and size, developing a plan might be easy, complicated, or somewhere in between. For this plan to be effective, it must first be developed as a draught, then tested for a few weeks before being revised. This is followed by Switch-off policy e.g Policy against checking your phone/emails, this policy forbids worker from checking phones/emails during working hours. Studies have shown that the constant urge to check phones/emails is one of the most stressful daily activities for workers. Last on the table is scheduled meeting, this is a formal gathering between the workers and the management team, The essence of a meeting, in most cases, is to get feedback from workers; hence, in this case, it allows workers to table their challenges and also seek additional support where necessary.

5. CONCLUSION

The study evaluates the mental health of construction workers during COVID-19. The study revealed that construction workers suffer more mental health problems during COVID-19 due to the nature of construction work coupled with the challenges brought by the outbreak of the deadly virus such as total/partial lockdown, mandatory social distance, using hand sanitizer, using nose masks, among others, which are difficult for construction workers to adapt to as it impairs their usual work life, hence increasing their mental pressure. The study also revealed that efforts have been made by the organisations to put several measures in place to support construction workers' mental health during COVID-19 and that all of these supports have been offered frequently. The practical implication of this study is that it helps construction stakeholders to be more informed about mental health and the type of support required to improve or manage it. It is important to note that this study is an excerpt from comprehensive research that compare the mental health of construction workers before and during COVID-19 in Nigeria. Notwithstanding the result of this study, further research needs to be conducted on the mental health of unskilled/labourers on construction sites.

6. REFERENCES

- Bar-Sela, G., Danos, S., Visel, B., Mashiach, T. and Mitnik, I. 2015. The effect of complementary and alternative medicine on quality of life, depression, anxiety, and fatigue levels among cancer patients during active oncology treatment: phase II study. *Supportive Care in Cancer*, 23, pp. 1979-1985.
- Bryman, A., 2016. *Social research methods*. Oxford university press. Oxford, United Kingdom.

- Campbell, F. 2006 *Occupational stress in the construction industry*. Berkshire, UK: Chartered Institute of Building.
- Choudhari, R., 2020. COVID 19 pandemic: Mental health challenges of internal migrant workers of India. *Asian Journal of Psychiatry*, 54, p. 102254.
- Dodo, M., 2014. The application of health and safety plan in Nigerian construction firms. *Jordan Journal of Civil Engineering*, 8(1), pp. 81-87.
- Ekpanyaskul, C. and Padungtod, C., 2021. Occupational health problems and lifestyle changes among novice working-from-home workers amid the COVID-19 pandemic. *Safety and Health at Work*, 12(3), pp. 384-389.
- Herrman, H. and Jané-Llopis, E., 2012. The status of mental health promotion. *Public Health Reviews*, 34, 6.
- Ibem, E.O., Anosike, N., Azuh, D.E. and Mosaku, T.O. 2011. Work stress among professionals in the building construction industry in Nigeria. *Construction Economics and Building*, 11(3), pp. 45-57.
- Jahan Nipa, T., Kermanshachi, S. and Patel, R.K., 2020. Impact of family income on public's disaster preparedness and adoption of DRR Courses, Creative Construction E-Conference 2020. Budapest University of Technology and Economics, pp. 94-102.
- Joyce, S., Modini, M., Christensen, H., Mykletun, A., Bryant, R., Mitchell, P.B. and Harvey, S.B. 2016. Workplace interventions for common mental disorders: A systematic meta-review. *Psychological Medicine*, 46, pp. 683-697.
- Kamardeen, I. and Sunindijo, R.Y. 2017. Personal characteristics moderate work stress in construction professionals. *Journal of Construction Engineering and Management*, 143, p. 04017072.
- Karthick, S., Kermanshachi, S. and Rouhanizadeh, B., 2021. Short-and-long term health challenges of transportation workforce due to extreme weather conditions. *Transportation Consortium of South-Central States (Tran-SET) Conference*.
- Kotera, Y., Green, P. and Sheffield, D. 2020. Work-life balance of UK construction workers: relationship with mental health. *Construction Management and Economics*, 38, pp. 291-303.
- Li, H., Luo, X., Ke, X., Dai, Q., Zheng, W., Zhang, C., Cassidy, R.M., Soares, J.C., Zhang, X. and Ning, Y. 2017. Major depressive disorder and suicide risk among adult outpatients at several general hospitals in a Chinese Han population. *PloS one*, 12(10), p. e0186143.
- Liang, Q., Leung, M.Y. and Ahmed, K. 2021. How adoption of coping behaviors determines construction workers' safety: A quantitative and qualitative investigation. *Safety Science*, 133, p. 105035.
- Milner, A., Maheen, H., Currier, D. and Lamontagne, A.D. 2017. Male suicide among construction workers in Australia: a qualitative analysis of the major stressors precipitating death. *BMC public health*, 17(1), pp. 1-9
- Mnookin, S., Kleinman, A. and Evans, T. 2016. *Out of the shadows: Making mental health a global development priority*. Washington DC: World Bank Group.
- Nwaogu, J.M., Chan, A.P.C. and Tetteh, M.O. 2021. Staff resilience and coping behavior as protective factors for mental health among construction tradesmen. *Journal of Engineering, Design and Technology*. 20(3), pp. 671-695.
- Nwaogu, J.M., Chan, A.P.C., Hon, C.K.H. and Darko, A. 2019. Review of global mental health research in the construction industry - A science mapping approach. *Engineering, Construction and Architectural Management*. 27(2), pp. 385-410
- Office for National Statistics. Suicide by Occupation, England - Office for National Statistics. Office for National Statistics. [Online] Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/suicidebyoccupation/england2011to2015>. [Accessed February 5, 2021].
- Ojo, G.K., Adeyeye, G.M., Opawole, A. and Kajimo-Shakantu, K. 2019. Gender differences in workplace stress response strategies of quantity surveyors in Southwestern Nigeria. *International Journal of Building Pathology and Adaptation*, 37, pp. 718-732.
- Oladinrin, T., Adeniyi, O. and Udi, M. 2014. Analysis of stress management among professionals in the Nigerian construction industry. *International Journal of Multidisciplinary and Current Research*, 2, pp. 22-33.

- Olanrewaju, A.L. and Idrus, A., 2020. What is determining affordable housing shortages in the Greater Kuala Lumpur, Malaysia? *Property Management*, 38(1), pp. 52-81.
- Olanrewaju, A., AbdulAziz, A., Preece, C.N. and Shobowale, K., 2021. Evaluation of measures to prevent the spread of COVID-19 on the construction sites. *Cleaner Engineering and Technology*, 5, pp 1-18.
- Oni O.Z, Amusan L.M, Akinbile B.F, Owolabi J.D and Ajao A.M, 2019. Relevance of construction site operative training in reducing accidents on construction sites in Nigeria. *International Journal of Civil Engineering and Technology*, 10(5), pp. 979-990.
- Oyewunmi, A.E., Oyewunmi, O. A., Iyiola, O.O. and Ojo, A.Y. 2015. Mental health and the Nigerian workplace: Fallacies, facts and the way forward. *International Journal of Psychology*, 7, pp. 106-111.
- Pamidimukkala, A. and Kermanshachi, S., 2021. Impact of Covid-19 on field and office workforce in construction industry. *Project Leadership and Society*, 2, p.100018.
- Pavičić Žeželj, S., Cvijanović Pelozo, O., Mika, F., Stamenković, S., Mahmutović Vranić, S. and Šabanagić Hajrić, S. 2019. Anxiety and depression symptoms among gas and oil industry workers. *Occupational Medicine*, 69, pp. 22-27.
- Peterson C, Stone DM, Marsh SM, (2018) Suicide rates by major occupational group: 17 states, 2012 and 2015. *MMWR Morbidity and Mortality Weekly Report*, 67, pp. 1253-1260.
- Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B. and Xu, Y., 2020. A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *General Psychiatry*, 33(2), p. e100213.
- Risal, A., 2011. Common mental disorders. *Kathmandu University Medical Journal*, 9, pp. 213-217.
- Roche, A. M., Pidd, K., Fischer, J. A., Lee, N., Scarfe, A. and Kostadinov, V., 2016. Men, work, and mental health: a systematic review of depression in male-dominated industries and occupations. *Safety and Health at Work*, 7, pp. 268-283.
- Rouhanizadeh, B. and Kermanshachi, S., 2021. Causes of the Mental Health Challenges in Construction Workers and Their Impact on Labor Productivity. In *Tran-SET 2021*, pp. 16-26. Reston, VA: American Society of Civil Engineers.
- Saju, M., Rajeev, S., Scaria, L., Benny, A.M. and Anjana, N. 2019. Mental health intervention at the workplace: A psychosocial care model. *Cogent Psychology*, 6, p. 1601606.
- Saneei, P., Esmailzadeh, A., Keshteli, A.H., Roohafza, H.R., Afshar, H., Feizi, A. and Adibi, P., 2016. Combined healthy lifestyle is inversely associated with psychological disorders among adults. *PLoS one*, 11, p. e0146888.
- Tandon, R., 2020. The COVID-19 pandemic, personal reflections on editorial responsibility. *Asian Journal of Psychiatry*, 50, p. 102100.
- Woolley, M., Goode, N., Salmon, P. and Read, G., 2020. Who is responsible for construction safety in Australia? A STAMP analysis. *Safety Science*, 132, p. 104984.
- World Health Organization, 2013. *Investing in mental health: evidence for action*. Geneva: World Health Organization.
- World Health Organization, 2014. *Global status report on alcohol and health*. In: Management of Substance Abuse Unit (ed.). Geneva: World Health Organization.
- World Health Organization, 2017. *Depression and other common mental disorders: Global health estimates*. Geneva: World Health Organization.
- Zhang, Z., Li, R. and Li, D., 2018. Anxiety and depression status of coal miners and related influencing factors. *Chinese Journal of Industrial Hygiene and Occupational Diseases*, 36, pp. 860-863.