SCHOOL OF ENVIRONMENTAL TECHNOLOGY,
FEDERAL UNIVERSITY OF TECHNOLOGY
MINNA, NIGER STATE, NIGERIA

4th INTERNATIONAL CONFERENCE (SETIC2022)

BOOK OF PROCEEDINGS

MAIN THEME:

SUSTAINABLE DEVELOPMENT AND RESILIENCE OF THE BUILT ENVIRONMENT IN THE ERA OF PANDEMIC

6th - 8th February, 2023

VENUE: NITDA Centre,
Federal University of Technology,
Minna, Niger State, Nigeria

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School of Environmental Technology International Conference (SETIC 2022)

6th – 8th Februay, 2023

Federal University of Technology Minna, Niger State, Nigeria

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EDITOR IN CHIEF
B. J. Olawuyi

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PREFACE

The 4th edition of School of Environmental Technology International Conference (SETIC2022) is organised by School of Environmental Technology, Federal University of Technology Minna, Nigeria. In collaboration with Massey University New Zealand, University of Namibia, Namibia, Department of Architectural Technology, Najran University, Saudi Arabia, Deapartment of Civil Engineering, Stellenbosch University, Stellenbosch, South Africa and the Global Sustainable Futures, UK.

The main theme for this year conference is "**Sustainable Development and Resilience of the Built Environment in the Era of Pandemic**" and is of interest to everyone going by the fact that housing is a necessity following only after food and clothing while living in crowded places and poor sanitation is a concern and possible cause of spread of diseases and occurrence of epidemic/pandemic. This promotes and encourage innovative and novelty for emerging property management strategies in a pandemic era; modern geospatial tools for epidemiology; architecture, resilience and healthy buildings in pandemic era; planning for sustainable resilient neighbourhoods and cities in COVID-19 era; sustainable and resilient cities; sustainable cost management of built environment projects in the era of covid-19; wellbeing and resilience of the built environment.

The responses from participants for this conference are overwhelming, well attended, and successful. The operation mode was virtual for all participants with presentations in mode Our participants are from various Universities and other sector across the globe, from countries like United Kingdom, New Zealand, Saudi Arabia, South Africa, Namibia, Ethiopia and Nigeria just to mention a few. Hence, this conference provides a good platform for professionals, academicians and researchers to widen their knowledge and approach on latest advances in research and innovation. Papers presented in this conference cover a wide spectrum of science, engineering and social sciences.

Finally, a note of thanks must go to SETIC 2022 Local Organizing Committee (LOC) for their remarkable dedication in making this conference a success. We hope the event will prove to be an inspiring experience to all committee members and participants.

ACKNOWLEDGEMENTS

The effort put together in achieving the success of SETIC 2022 is predicated on the feat of the previous three edition of School of Environmental Technology International Conference held in 2016, 2018 and 2021, respectively. The support and goodwill from Vice-Chancellor of Federal University of Technology, Dean School of Environmental Technology, Dr. Renuka Thakore, Dr Dodo Y. A., Prof. James O.B. Rotimi and many other highly motivated people are highly appreciated.
It is also my privilege and honour to welcome you all, on behalf of the Local Organizing Committee (LOC) to the 4th edition of the Biennial School of Environmental International Conference (SETIC2022). This Conference which was earlier schedule for April, 2022 is holding now (6th to 8th th February, 2023) due to the prolonged ASUU-FGN crisis which made our public Universities in Nigeria to be closed for over Eight Months. Our experience in the 3rd edition held in 2021 after the COVID-19 Pandemic has thought us on new ways of doing things with the Virtual Conferencing offering us a wider coverage, it is our hope that SETIC2022 will be an improvement on the Participants experience of opportunity available for global networking and interaction at Conferences via the Virtual mode of presentation.

The conference provides an international forum for researchers and professionals in the built environment and allied professions to address fundamental problems, challenges and prospects of **Sustainable Development and Resilience of the Built Environment in the Era of Pandemic**. The conference is a platform where recognized best practices, theories and concepts are shared and discussed amongst academics, practitioners and researchers. This 2022 edition of SETIC has listed in the program a Round Table Talk on on Housing Affordability Beyond COVID-19 with selected Speakers from across the globe available to do justice on the topic of discussion. Distinguished Conference participants, permit me to warmly welcome our Keynote:

- Dr. Ibrahim Idris, *Director Public health, State Ministry of Health, Niger State, Nigeria;*
- Dr. A.A. Bilau, *Lecturer and expert in Disaster Risk Management, Department of Building, Federal University of Technology, Minna, Nigeria and;*
- Dr. Yakubu Aminu Dodo, *Ass. Prof. Architecture Engineering Department, Faculty of Engineering, Najran University, Najran, Saudi Arabia;*

And the lead Discussants for the Round Table Talk:

- Prof. James O.B. Rotimi, *Professor of Construction Economics & Management, School of Built Environment, College of Sciences, Massey University of New Zealand;*
- Prof. O.A. Kemiki, *Professor of Estate Management and Valuation, Federal University of Technology, Minna, Nigeria;*
- Dr. Renuka Thakore, *Founder, Institute for Global Sustainable Futures, Progress through Partnership, UK;*
- Dr. Guillermo Delgado, *Senior Lecturer, Architecture and Acting Director, Institute of Land, Livelihoods and Housing (ILlH), Namibia University of Science and Technology, Namibia;*
- Prof. Adewumi John Babafemi, *Associate Professor and Head of Construction Materials and Unit; Stellenbosch University, Stellenbosch, South Africa*;
- Dr. Yakubu Aminu Dodo, *Ass. Prof. Architecture Engineering Department, Faculty of Engineering, Najran University, Najran, Saudi Arabia.*

for accepting to share from their knowledge, wealth of experience and be available to interact with participants on varied issues on "**Sustainable Development and Resilience of the Built Environment in the Era of Pandemic**".
As reflected on the Conference program, the Conference activities will be Virtual for all presenters to run in four parallel sessions on the Zoon platform. With a total of Seventy (70) articles captured in the Conference Proceedings covering the six subthemes of the Conference, I have no doubt that we are all in for an impactful experience at SETIC2022 as we brainstorm, exchange ideas, share knowledge and participate in evolving more approach to sustainable housing and land management drives.

I implore us all to enjoy every moment of the deliberations and ensure we maximize the great opportunity offered by the Conference to network for better research and career development as we also make new friends.

I also on behalf of myself and the LOC express our appreciation to the Dean, School of Environmental Technology and the entire Staff of the School for giving us the opportunity to steer the ship for SETIC2022. To the Reviewers and various Committees that served with us, I say thank you for helping us through despite the pressure of work.

Thanks, and God bless you all.

Olawuyi, B.J. (PhD)
Chairman, LOC
SETIC2022

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6th February, 2023

TO WHOM IT MAY CONCERN

I wish to state that all the papers published in SETIC2022 Conference Proceedings have passed through the peer review process which involved an initial review of abstracts, review of full papers by minimum of two referees, forwarding of reviewers' comments to authors, submission of revised papers by authors and subsequent evaluation of submitted papers by the Scientific Committee to determine content quality.

It is the policy of the School of Environmental Technology International Conference (SETIC) that for papers to be accepted for inclusion in the conference proceedings it must have undergone the review process and passed the academic integrity test. All papers are only published based on the recommendation of the Reviewers and the Scientific Committee of SETIC

Babatunde James OLAWUYI
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Acknowledgement To Keynote Speakers and Lead Discussants

SETIC 2022 organisers wishes to thank our keynote speakers, and Guest speakers for accepting to create time to share from their rich wealth of knowledge and interact with delegates and participants on varied issues being examined at this year's conference. A brief profile of each keynote speaker is provided here, this would allow for future interaction and networking with them.

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Factors Contributing to Stress Among Construction Practitioners in Kaduna

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Abstract:

Stress at the workplace has become one of the main problems in the modern world and is one of the world's most common health concerns. Workplace stress affecting the success of construction firms because it affects the productivity and efficiency of employees. In view of this, the study factors contributing to stress among construction practitioners with a view to suggesting strategies for effective management of stress. This study was quantitatively conducted via questionnaire survey. The research instrument was administered to construction practitioners in the study area. The respondents were selected using simple random sampling technique. Data was analysed using descriptive statistic such as mean item score. The study identified the major three (3) most prevalent factors contributing to stress among construction practitioners' as Poor working conditions (MIS = 3.72), Work overload (MIS = 3.72), and financial problem (MIS=3.64). Findings from the study also revealed that task performance (MIS = 3.80) and technical performance (MIS = 3.76) are the most commonly used performance measures for construction practitioners. While reduced job satisfaction (MIS = 3.90) is the most significant impact stress has on construction practitioners' performance The study also found that work stress has a significant positive and slightly strong relationship with performance of construction practitioners with a value of 0.393. Therefore, Stress has both positive and negative impacts on the performance of professionals in construction. The major recommendations from the study were that management to ensure a sound working environment, and also implement flexible working hours (hybrid).

Keywords: Stress, Construction Practitioner, Performance.

Introduction

The building construction industry as witness transformations across the globe in the last few decades. Continuous changes in the development of building process, pace and complexity of work and increasing demand for higher productivity have become common features of the construction industry (Wong *et al.,* 2010). In addition, practitioners and other work force in the industry operate in an extremely competitive environment where projects are designed, constructed and delivered within tight budgets and a short duration. The whole processes have made works in the industry mentally and emotionally demanding and stressful (Wahab, 2010).

According to Daniel (2019), an average employee in the construction industry spends almost one third of his life on work, and sometimes has to face a lot of stress during his/her job. Daniel (2019) further lamented that stress in a workplace has touched almost all professions, from executive to workers who are directly engaged in the production. Job stress ultimately affects the physical as well as mental health. Stress has impact considerable impact on the lives of individuals. Although stress is a common concept, it is often misunderstood by many individuals. Stress is the way in which an individual respond to a range of environmental stressors. It is individualistic in nature and affects different people in different ways. Thus, what affects one person may not affect another (Blonna, 2012).

Lath (2010) asserted that although every person including a child, an adult, employed or unemployed faces stress in his/her everyday life. He defined stress as any challenge that exceeds the coping abilities of the individual. According to Patching and Best (2014), stresses a manifestation of different psychological factors such as an individual's personality type, their

ability to be flexible, their understanding and use of avoidance and/or coping mechanisms, an individual's sleep and behaviour patterns, as well as their cognitive style, and how they learn. Lath (2010) asserted that although every person including a child, an adult, employed or unemployed faces stress in his/her everyday life. He defined stress as any challenge that exceeds the coping abilities of the individual. The causes and effects of psychological and occupational stress varies across different sectors of the economy. In the construction industry, professionals are exposed to stressful working conditions (Edwards and Irani, 2010). Sommovigo *et al.* (2019) added that construction related jobs are complicated, dynamic, crisis-ridden and involves high speed. These make construction employees vulnerable to occupational and psychological disorders and this has effects on themselves and the industry.

In education sector, Yusoff and Khan (2013) emphasized that stress is due to imbalance between job demands and their ability to respond. Employees are under pressure due to heavy workload, job demands and publication efforts given rise to tiredness, sleeping problem and concentration which are more visible when more workload is expected to attract external research funds. Similarly, Nithyajothi (2019) said that work life in the telecom industry is both challenging and stressful. Furthermore, Farber (2012) believes that we cannot eliminate stress but we can try to manage or cope with it at an optimal level. As such, understanding the causes is important in order to manage it. In developed economies, people are becoming more familiar with what work-related stress is and how to manage it. However, in developing countries like Nigeria. Since the human resource is an important resource to construction related organizations, efforts must be made to guard against any threats to this resource. It is important to understand the stress factors and make an effort to reduce those stressors in order to make effective and efficient use from of human resource (Sharma and Devi, 2011), and for them to be retained within the organization. Therefore, this study assessed the factors contributing to stress among of construction practitioners with a view to suggest strategies for effective management of stress.

The following objectives were formulated in order to minimise stress within the construction sector in the study area:

i. To assess factors contributing to stress among practitioners;

ii. To investigate the impact stress factor on construction practitioners' performance.

Literature Review

Factors Contributing to Stress among Construction Practitioners

Employees experience and feel stressed due to a set of various reasons and therefore the reactions to stress at the workplace are not a separate aspect (Fairbrother, and Warn, 2003). Increasingly, the stress level is changing rapidly among the employees due to various reasons, such as work overload, over crowdedness at the workplace, of loud noises generated by machines and arousal of conflicts among the employees and the employer due to poor or inadequate decisions (Richardson, 2014). Stress can arise because of transitions made in our personal lives. Personal issues that contribute to stress are domestic problems in the house, like losing loved ones, financial problems and divorce. These could be categorized as individual causes that lead to stress. On the other hand, there is also stress that is caused by organizational factors; these factors are those faced by the employees at the workplace. Issues such as role uncertainty; that is not being able to know exactly what one is supposed to do and what others expect from us and also having too much work at hand with little time to accomplish it, can cause stress at the work place. Further, organizational factors that causes stress are poor working conditions where the employee is often too distracted, where there is noise, where it is chilly or too hot and where the workplace is often filled with people running here and there. Whereas issues that contribute to stress are lack of control, suddenness, and ambiguity; especially role ambiguity is the foremost reason of stress at work (Richardson, 2014). Some organizational factors that can be considered as stressors mostly depend on the types of job and

specification of works. These play important role regarding the issues related to stress, for instance, if the job is high-stress prone. High stress jobs are the kind of jobs that require plenty of time, and put the employees under the pressure of work. It is also notable that, often the employees suffer from poor working situation, if the work is performed in an unpleasant environment (Bloisi *et al.,* 2007).

Scholars have stated that a large number of features of occupational life, is connected to stress. Okeke *et al*. (2016), concluded their study by conducting a sample study of 7,099 employees from 13 different companies and occupations. They reported that a significant statistical relationship between workplace factor and negative symptoms of health or disorder of mental situation such as, anxiety, depression and irritation. Employees usually feel stress at their jobs due to the following reasons (Okeke *et al*., 2016);

a) Work overload; b) Misuse of power; c) Inadequate decisions or leader behaviour and d) Overcrowd and noise.

Work and workplace in them are stressful phenomenon and therefore, various aspects of work situations are connected to stress (De Silva *et al.,* 2017). According to Boschman *et al*. (2013), the factors related to roles in a work environment are namely existence of low-level power, role indefiniteness or role dispute. They added that increase in physical conditions at the workplace such as concurrent permanent noise, overcrowding and lack of secrecy, are associated to stress. The behaviour of the leader or chief can also affect the level of stress (Fairbrother, and Warn, 2003).

Impact of Work Stress Factors on Construction Practitioner's Performance

The findings of the investigation regarding the consequences of work stress experienced by employees at Khairun University showed a negative and significant effect on employee performance (Nur, 2013), Similarly Ramli (2017) and Yang and Hwang (2014) have tested the impact of work stress on employee performance their findings showed that organizational performance is based on collectively efforts of employees. According to Barlian (2016) if we can find out the causal relationship between the achievement of employee performance with organizational performance, it will be able to assist managers in directing the limited organizational resources in the right direction, which is the cause of improved employee performance, so that Organizations with workforce will be more satisfied and more efficient. Basri (2012) explained job stress as a negative feeling that due to individual's inability to face the weight of a workload or an inappropriate capacity or pressure at work. Productivity is considered to be at the peak with moderate level of work stress, but as it goes beyond that certain level, the productivity starts decreasing (Kakkos & Trivellas, 2011). Job stress can be viewed as an individual's reactions to characteristics of work environment that are perceived to be emotionally and physically threatening to the individual (Shahriari et al*.,* 2013). It points to a poor fit between the individual's capabilities and his work environment, in which excessive demands are made of the individual or the individual is not fully prepared to handle the situation (Shahriari *et al.,* 2013). In general, the higher the imbalance between the demands and the individuals' abilities, the higher will be experienced job stress (Jamal, 2007).

Job performance can be viewed as an activity in which an individual is able to accomplish successfully the task assigned to him, subject to the normal constraints of the reasonable utilization of available resources (Shahriari *et al.,* 2013).

Job stress is often described as closely associated with performance and have serious implications on individual and organizational performance. Too much stress is clearly evidenced by a substantial decline in performance and organizational effectiveness (Manderson, 2014).

Measures of Performance of construction practitioners in the construction industry

A systematic literature review of 213 studies published in reputed journals or a period of only three years (2006-09) revealed 207 different measures used for assessing performance. There are various ways of assessing performance in construction sector, few of these ways are discussed below:

Technical Performance

Technical Performance Measurement is a process by which project management can measure the risks inherent in a given project. Technical Performance Measurements provide insight as to the parameters of the specific design elements of the system. Technical Performance Measurement is used by project management to define the measures of performance and acceptable variables during project implementation (Ahmad *et al.,* 2016). Use of Technical Performance Measurement benchmarks should be limited to factors which negatively affect the primary measures of performance, which are schedule and budget. Project management should not use Technical Performance Measurement to measure typical project goals, but strictly as a preventative measure to ensure that the project is delivered on time, and for the targeted budgetary goals. Studying these technical performance measurements provides the opportunity for management to develop tolerable risk ranges to evaluate the parameters of the project (Dziekonski *et al.,* 2018).

Social Performance

Social performance of construction projects reflects the extent to which the lifecycle of construction projects meets the demands of anticipated or existing social demands. Therefore, social performance of construction projects could be obtained by analyzing social impacts of construction projects and the requirements for social sustainability by diverse stakeholders. Shen *et al.* (2007) explored the indicators for social sustainability performance evaluation of different stages. Valdes-Vasquez *et al.* (2012) identified 50 processes for social sustainability consideration during planning and design phase of construction projects, and these processes were categorized into six categories, namely stakeholder engagement, user considerations, team formation, management considerations, impact assessment, and place context. Zuo *et al*. (2012) interviewed domain experts and 26 criteria of social sustainability were identified, which were further discussed from three dimensions, i.e., macro level, external stakeholders, and internal stakeholders. Liu et al. (2018), studied social impacts of an affordable housing project and indicators reflecting social impacts were discussed from three aspects as socio-economic effects, adaptabilities, and social risks. Wang *et al.* (2016); Shi *et al.* (2015), and Liu *et al.* (2016) also addressed the social risks of the construction projects. They suggested that the projects should not only be compliant with the regulations but also meet the requirements of diverse stakeholders, especially the end-users, which will improve project social flexibility and thereby contribute to project social sustainability.

Personal Performance

Personal Performance means each employee's work performance during the performance period which may be assessed by the administrator based on one or more criteria, including, but not limited to: personal or team performance and measures such as teamwork, interpersonal skills, communication skills, employee development, project management skills, and leadership, or individual or team business objectives such as performance versus budget and attainment of safety, operational incident and environmental standards (Jin *et al.,* 2013).

Organizational performance

There are possibly many interpretations of the term organizational performance. Luo *et al.* (2012) who conducted a meta-analysis of organizational performance suggested that it should be measured in economic and operational terms: The economic performance looks at financial

and market outcomes which assess the profits, sales, return on investment for shareholders, and other financial metrices. The operational performance, on the other hand, focuses on the observable indices like customer satisfaction and loyalty, the firm's social capital, and competitive edge derived from capabilities and resources. Organizational performance is measured for different levels of hierarchy and can be assessed for individuals, groups, and the entire organization as a whole (Knies, Jacobsen and Tummers, 2016). The researchers settled on a multi-dimensional construct of organizational performance with financial performance, product market performance, and shareholder return forming three crucial aspects.

Research Methodology

This study adopted quantitative research design via questionnaire survey administered on construction practitioners in Kaduna State. Questionnaire survey adopted allows large coverage since there are various professional in the construction sector, it is also convenient and relatively inexpensive. Kaduna is selected because is one of the epicenters of construction activities in North West, Nigeria with high population of construction practitioners. The population of these professionals in Kaduna State is 429 based on summation of values gotten from each professional bodies in the State (such as Nigerian Institute of Architects (NIA), Nigerian Institute of Quantity Surveyors (NIQS), Nigerian Institute of Building (NIOB) and Nigerian Society of Engineers (NSE). Those that are financially up to date in their various professional bodies as at 2021 constituted the population, based on the information gotten from the record of each institution desk officers.

A sample is a small proportion of a population selected for observation and analysis. The sample size for this study was calculated using a formula as illustrated by Glenn (2013).

$$n = \frac{N}{1+N\,(e)2} \quad (1)$$

Where;

n = Sample size

N = Population size in the sample unit

e = Level of precision which is + 5% (0.05)

$$n = \frac{429}{1 + 429\,(0.05)2} = 201 \quad (2)$$

n= 201

To arrive at a sample size that served as a representative of the entire population in the study area equation 1 was used and an estimated sample size in which of 201 was gotten.

The analysis of the data was carried out using descriptive and inferential statistic such as mean item score, and Pearson product correlation respectively. A simple random sampling technique was adopted for the study. The questionnaire was designed on a five-point Likert scale format to address issues relating to the research objectives set.

Results and Discussion

Factors Contributing to Stress Among Practitioners in the Construction Industry

A total of thirteen (13) stress factors were identified from literature, and respondents were asked to rank these factors as contributing to stress among practitioners based on their impact. Table 1 shows the factors contributing to stress among practitioners. The top three (3) are poor working conditions, work overload, and financial problems, with MIS values of 3.72, 3.72, and 3.64 ranked 1st, 1st, and 3rd, respectively. At the bottom were the domestic problems in the home, overcrowding at work, and divorce are the least prevalent (3) factors, with MIS values

of 2.62, 2.44, and 2.36 ranking 10th, 11th, and 12th, respectively. However, a close look at the results in Table 1 shows that all the identified factors contributing to stress among practitioners had an average MIS value of 3.11. This implies that, to a considerable extent, all the 13 factors contributing to stress among practitioners have the tendency to positively affect employee productivity and building projects. The finding of this study here agrees with Okeke *et al.* (2016) and De Silva *et al.* (2017), where it was established that employees usually feel stressed at their jobs due to work overload, misuse of power, and loud noises generated by machines.

Table 1: Factors contributing to stress among practitioners in the construction industry

S/N	Factors	MIS	Rank
g)	poor working conditions	3.72	1
h)	work overload	3.72	1
i)	financial problems	3.64	3
j)	Ambiguity of tasks	3.36	4
k)	behaviour of the leader	3.36	4
l)	Economic uncertainties such as redundancy and downsizings.	3.26	6
m)	Misuse of power	3.18	7
n)	loud noises generated by machines	3.12	8
o)	Role uncertainty by the employee	3.00	9
p)	Advancement in technology	2.62	10
q)	domestic problems in the house	2.62	10
r)	over crowdedness at the workplace	2.44	12
s)	Divorce	2.36	13
	General Average	*3.11*	

Source: Author 's Survey (2021)

Measures of Performance of Construction Practitioners in the construction industry

Five (5) measures of performance were identified from literature, and respondents were asked to rank their level of agreement with the identified measures. Table 2 shows the result of the analysis of the measures of performance of construction professional practitioners. Task performance and technical performance are the most commonly used measures of performance for construction professional practitioners in all types of workplaces, with MIS values of 3.80 and 3.76 ranking first and second, respectively. The least used measures of performance are personal performance and social performance, with MIS values of 3.62 and 3.30, ranked 4th and 5th, respectively. Table 2 shows that all the measures of performance of construction professional practitioners had an average MIS value of 3.63. This implies that, to a considerable extent, all 5 identified types of stress were experienced by the respondents.

Table 2: Measures of Performance of Construction Professional Practitioners in the construction industry.

S/N	Measures of Performance	MIS	Rank
1.	Task performance	3.80	1
2.	Technical Performance	3.76	2
3.	organizational performance	3.68	3
4.	personal performance	3.62	4
5.	Social Performance	3.30	5
	General Average	*3.63*	

Source: Author 's Survey (2021)

Impact factor of stress on construction practitioner's performance

In determine the impact of stress on construction practitioner's performance a null hypothesis was formulated:

H_0: There is no significant relationship between work stress and Performance of construction practitioners.

H_1: There is a significant relationship between work stress and performance of construction Practitioners'

The stress factors influence on construction practitioner's performance were correlated with the most significant measures of performance of construction professional practitioners (task performance). The analysis of the relationship between work stress and the performance of construction practitioners revealed that there exists a positive, slightly strong, and significant relationship between work stress and task performance. The result of the Pearson product moment correlation analysis is presented in Table 4. The correlation value was positive and slightly strong (0.393). The correlation was therefore found to be significant at a 1% (0.01) level of significance (p = 0.00). Therefore, the alternate hypothesis that states there is a significant relationship between work stress and the performance of construction practitioners was accepted. The relationship between stress and job performance or the impact of occupational stress on performance has been a topic of academic interest over the years. The findings of this study on correlation analysis agree with the findings of other studies where a relation between stress and performance has been proved in various sectors of society, such as the banking industry (Shaik *et al.,* 2013), hospital industry (Nabirye, 2010), hotel industry (Olaniyi, 2013), high-tech industries (Hsieh, Huang, & Su, 2004), business (Dar, Akmal, Naseem, & Khan, 2011) and the educational sector (Riyadi, 2015; Suandi, Ismail, & Othman, 2014).

Table 3: Results of Pearson Product Correlation Analysis

Correlations		Work stress	Task performance
Work stress	Pearson Correlation	1	.393**
	Sig. (2-tailed)		.000
	N	200	200
Task performance	Pearson Correlation	.393**	1
	Sig. (2-tailed)	.000	
	N	200	200

**. Correlation is significant at the 0.01 level (2-tailed).

Conclusions and Recommendations

The results of the analysis carried out led to the conclusions of this study. The study identified the major three (3) most prevalent factors contributing to stress among construction practitioners' as Poor working conditions (MIS = 3.72), Work overload (MIS = 3.72), and financial problem (MIS=3.64). Findings from the study also revealed that construction workers performance is measured based on task performance (MIS = 3.80) and technical performance (MIS = 3.76). The most significant ways stress impacted on construction practitioner's performance is reduced job satisfaction. The most effective strategies for mitigating the effects of stress among practitioners in the construction industry are: to understand when there is a decrease in performance and absenteeism. Stress usually builds up gradually in a normal situation and more stress causes more problems. There is a significant relationship between work stress and the performance of construction practitioners Stress has both positive and negative impacts on the performance of professionals in construction. The major

recommendations from the study were that management to ensure a sound working environment, and also implement flexible working hours (hybrid).

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