



ISSN 2278 – 0211 (Online)

Factors and Coping Strategies for Workplace Stress among Construction Workers in Dar es Salaam Tanzania

Valentine G. M. Luvara

Assistant Lecturer, Department of Building Economics, Ardhi University, Dar es Salaam, Tanzania

Abstract:

This study examined factors which cause stress at workplaces and coping strategies of the stresses facing construction workers who work in the construction sites including construction managers, engineers, quantity surveyors, technicians and casual workers in Dar es Salaam, Tanzania. A cross-sectional descriptive study, whose sample was made up of 31 building projects and selected construction workers with different skills levels as classified by International Standard Classification of Occupations (ISCO) were used. The findings revealed most-mentioned factors which cause stress to be: tight deadline, dangerous environment, unclear job description, poor working environment, work-over load, low payment as well as poor support from organization. It was generally recommended that actions to reduce stress at workplaces should be given first priority by every stakeholder, every construction firm should make provision for the management of stress of construction workers and organizations in the construction industry should arrange for regular training of coping strategies of stress to construction workers as well as discouraging workers to use negative coping strategies to deal with their stresses which may harm their health and working performance

Keywords: Workplace stress, coping strategies, construction workers, Tanzania

1. Introduction

In response to economic and market globalization, technological advancement and changing consumer preferences, the building construction industry has witnessed tremendous institutional and organizational transformation in many countries around the world. Rapid changes within the construction industry in general are due to dynamic and complex nature of construction works, technological advancement and the hostile attitudes of participants (Wong *et al.*, 2010). The construction process requires a lot of physical activities that are stressful to workers. Construction activities are indeed an inherently dangerous occupation and highly prone to stressful environment (Linda *et al.*, 2003).

Workplace stress is the harmful physical and emotional responses that can happen when there is a conflict between job demand on the employee and the control an employee has in meeting these demands (Melanie, 2005). Work stress is a term that has become associated with many things. Our understanding of stress has come a long way in the last seven or more decades, while previously Occupational stress was perceived to be a problem only in jobs with high pressure and low pay, such as teaching and social services, today it has become an epidemic spreading like wildfire across occupations and industries. Organizations lose so much money in stress related accidents, loss of productivity, absenteeism, and medical insurance costs (Jovanovic, *et al.*, 2006).

Additionally, stress at work was thought to occur only to workers who work in senior positions, but now it is acknowledged that occupational stress can be experienced by employees at every level (Williams, 2003). In fact, stress is much more common in employees at lower levels of workplace hierarchies, where they have low control over their working environment (Beheshtifar and Nazarian, 2013). Occupational stress has become one of the most serious health issues in the modern world, and in recent years, occupational stress has become one of the most popular topics for applied research in psychology, and in the broader areas of social and medical sciences (Lu, 2003).

Various empirical studies on workplace stress in the construction industry have been conducted. Enshassi and Alswaity, (2015) on his study to identify key stressors which cause stresses to construction professional in Gaza strip recommended that there is a need for research to identify relevant coping strategies that can address stresses facing construction workers so as to improve workers' productivity. Wahab (2010) conducted study on Stress Management among Artisans in Construction Industry in Nigeria and the results of the study shows that most artisans experienced much stress at their work place than at home, and the stress had negative effects on their productivity at work, and at the same time caused medical problems in their body systems. Hamid and Hisammuddin, (2008) examined the level and extent of work-related stress and the prevalence of health problem among contractor management team at construction sites in the Johor Bahru district, Malaysia. The findings show some respondents suffered from some illness, disability or other physical or mental problem that was caused or made worse by job or work done in the past. Affum-Osei (2014) investigated

the level of occupational stress in Small and Medium Enterprise and the impact of occupational stress on employees' job performance in the Western Region of Ghana. The results showed inverse relationship between occupational stress and employees' job performance and that occupational stress significantly predicted job performance.

A study by Love *et al.*, (2010) investigated the nature of self and social supports and mental health among construction professionals in Australia using exploratory study design. Analysis revealed that those working for a contracting organization on-site reported higher levels of poor mental health and greater work stress than consultants. Those working on-site also experienced greater levels of self-stress, whereas consultants reported higher levels of self and work support. Another study by Ibem (2011) was undertaken to identify key stress factors among professionals in the building construction industry in Nigeria. Findings show that the principal sources of stress were high volume of work, uncomfortable site offices, lack of feedback on previous and ongoing building projects, and variations in the scope of work in ongoing building projects.

Issues concerning stress at workplaces have not been discussed extensively in Tanzania especially in construction Industry though most of the attempts from outside Tanzania like of Enshassi and Alswaity, (2015) which attempted to deal with stress have not explained on ways that can help construction workers in Tanzania to deal with stress. The study has thus ascertained context, relevancy and gap that need to be filled. In Tanzania construction industry workers experience stresses at their workplaces that make them to have poor concentration at work, working half-minded and working without following construction procedures and which finally lead to poor performance, increased minor and major accidents, job dissatisfaction and poor health (Hamoud, 2016). Therefore, this study aimed at finding factors causing stress to construction workers in Tanzania and proposes possible coping strategies to deal with stress in order to improve workers' performance.

2. Methodology

2.1. Area of Study

Any research should have a limited area to work on; otherwise the study may not end (Makoba, 2008 p.52). The study has been carried out in Dar es Salaam. The region is located at the Eastern part of Tanzania and lies in coordinate 6°17' East. As far as the official 2012 census results the region had a population of 3,464,541 and covered a total area of 1,379 square kilometres. The scope of this study was limited to construction workers in Dar es Salaam, Tanzania's economic and commercial capital city due to prevalence of many different types of construction activities and a large population of large and small construction operations. Dar es Salaam was considered information rich and a good representative of construction activities in Tanzania.

2.2. Unit of Study

Unit of analysis of data (respondents) and reporting of results are the construction workers in the sampled construction sites. Whereby construction workers with different skills level was drawn from 31 registered building constructions sites with value greater than 5 Billion Tanzania shillings. In this study, workers were categorised into four skill levels as per International Standard Classification of Occupations ISCO-08 (ILO, 2012). Under classification by *ibid* workers are in four skill levels. Occupations at skills level 1 are those who are involved the performance of simple and routine physical or manual tasks. Occupations at skills level 2 are those who are involved in performance of tasks like operating simple machines and electronics equipment, the level of education required is vocational training education. Occupations at skills level 3 are those who are involved in performance of complex technical and practical task that require extensive body of factual, technical and procedural knowledge in a specialized field, these include those with full technician certificates. Occupations at skills level 4 are those who are involved in performance of task that require complex problem solving, decision making and creativity based on an extensive theoretical and factual knowledge in a specialized field, at this level one is required to have at least first degree. Occupations under this level are Quantity surveyors, Civil Engineers, Architects, and the like.

2.3. Sample Size and Sampling Technique

A list of forty-one (41) registered building construction projects in Dar es Salaam was obtained from the Architects and Quantity Surveyors Registration Board (AQRB) office. Criteria that were used for obtaining the projects for primary data collection from AQRB were as follows; Active construction sites, sites with enough number of workers (minimum 30 construction workers) and construction site with value greater than 5 Billion Tanzanian Shillings; because it was assumed that project with high value have large number of workers and high stress levels among workers. The respondents for the study were drawn from the sample size made up with 31 registered building construction sites out of 41 sites registered by AQRB in the year 2015/2016 that were falling under the set criteria. The sample was calculated by using the formula below (Hamoud, 2016):

$$n = \frac{z^2 \cdot p(1-p) / e^2}{1 + (z^2 \cdot \frac{p(1-p)}{e^2} \cdot N)}$$

Where by "n" is sample size, "N" is population size, "e" is margin of error, "z" is the value of standard variate at the given confidence level and "p" is sample proportion.

Questionnaires were purposely administered to site offices of 55 workers with skills level 3 and 4, twenty-one (21) construction workers with skills level 2 were purposely selected for interviews, while by convenient method of sampling, 9 groups of workers (63 in total) with skill level 1 were selected for focused group discussions due of their large numbers and nomadic nature.

2.4. Data Collection

This is first hand data that the researcher collected from the field during the period of research by using questionnaires, Focused group discussion and interview. A pilot test was done in order to ensure reliability of questionnaires. Questionnaires were administered to intended persons for confirmation of clarity and detection of ambiguity as well as time to be spent in filling the questionnaire. Primary data collected in this research related to specific study objectives of causes of stress, coping strategies used by sites workers and associated effects and provide the basis for the recommendations on better strategies to overcome stresses at construction sites. In this research, secondary data that was used include journals, books, previous researches and web resource on stress, its causes, effects, tolerance, coping strategies and the like. The secondary data was also used to evaluate the primary data collected.

3. Findings and Discussion

Here the findings of the study are discussed and interpreted based on the results obtained after analysing data collected from field. This section also provides a more descriptive form to the tabulated data and figures.

3.1. Findings from Workers with Skills Level 3 and 4

3.1.1. Characteristics of Respondents

The general description of the construction workers who took part in this study has important implications. This study considered age, gender and working experience as an important factor to determine maturity of the respondents, mobility of workers, physical strength and dependency ratio. The study had a total of 55 participants, whom were construction workers from various construction sites in Dar es Salaam. About seventy two percent were age between 25 to 34 years and 61.8% were male. Forty seven percent reported to work for four years or less as summarised by Table 1 below.

The ages of the respondents suggest that all respondents were sensible and matured enough to provide required information for the study.

Character	Frequency (n)	Percentage (%)
Age group (Years)		
24 and below	4	7.3
25 to 34	40	72.7
35 and above	11	20
Sex		
Male	34	61.8
Female	21	38.2
Duration at work (Years)		
4 or below	26	47.3
5 to 9	17	30.9
10 or more	12	21.8

Table 1: The Socio-demographic characteristics of the studied population (N=55)

3.1.2. Prevalence of Stress

The findings show that workplace stress is very common in the construction sites and majority of the construction workers (respondents) about seventy six percent reported to experience workplace stress as shown by figure 4.1 below

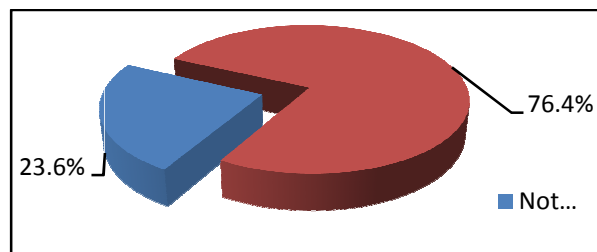


Figure 1: Prevalence of workplace stress

3.1.3. Relationship between Stress and Demographic Factors

All respondents who were age 24 years or less reported to experience workplace stress while 54.5% of the respondents who were age 35 years or more reported to experience stress (p -value 0.109). Findings show that stress decreases with the increase of age; age determine maturity, stress tolerance and handling methods of stress. About ninety percent of the female participants reported to experience workplace stress compared to sixty seven percent of male participants. Findings show that female workers suffer more from stress due to the nature of the site works and environment. There is no statistical significant association between sex of the respondent and experiencing workplace stress (p -value 0.053).

All respondents who reported to work four years or less reported to experience workplace stress compared to forty one percent of those reported to work for ten years or more, who experienced workplace stress. Findings shows that stress decrease as working experience increase, construction workers tend to adopt site environment and coping strategy of stress. There is highly statistical significance association between duration at work and workplace stress. Table 2 below summarises the findings.

Character	WORKPLACE STRESS		Total	p-value
	Experienced (n, %)	Not experienced (n, %)		
Age group (Years)				
24 and below	4 (100)	0 (0)	4	0.109
25 to 34	32 (80)	8 (20)	40	
35 and above	6 (54.5)	5 (45.5)	11	
Sex				
Male	23 (67.6)	11 (32.4)	34	0.053
Female	19 (90.5)	2 (9.5)	21	
Duration at work (Years)				
4 or below	26 (100)	0 (0)	26	<0.001
5 to 9	11 (64.7)	6 (35.3)	17	
10 or more	5 (41.7)	7 (58.3)	12	
TOTAL	42 (76.4)	13 (23.6)	55	

Table 2: Association between prevalence of workplace stress and socio-demographic characteristics of the respondents

3.1.4. Factors Which Cause Workplace Stress

Dangerous working environment, inflexible deadlines, and work over-load were the leading mentioned factors causing workplace stress each with the mode of 70.91%, 69.09% and 60.00% and mean score of 2.90, 2.88 and 2.81 respectively. This is in line with a study by Ibem (2011) which portrayed similar results where it was found that uncomfortable construction site offices led to stress among workers. Personality-home-work conflict at work (45.45%), poor relationship with others at work (41.82%) and work under-load (34.55%) were the least mentioned factors causing workplace stress with the modes of 45.45%, 41.82% and mean scores of 2.48, 2.26 and 2.21 as portrayed in Table 3.

Factor	Frequency (n)	Mode	Mean	SD	Rank
Inflexible deadline	38	69.09	2.88	1.20	2
Dangerous working environment	39	70.91	2.9	1.25	1
Work over-load	33	60.00	2.81	1.13	3
Poor organisation structure	28	50.91	2.7	1.35	4
Poor working environment	28	50.91	2.62	1.22	5
Unclear job description	28	50.91	2.62	1.22	5
Distrust at work	26	47.27	2.62	1.22	5
Personality-home-work conflict	25	45.45	2.26	0.99	9
Relationship with others at work	23	41.82	2.48	1.33	8
Work-under load	19	34.55	2.21	1.27	10

Table 3: Factors causing workplace stress (N=55)

In the course of administering questionnaires the respondents were able to complement their answers on the factors by claiming further that the nature of the job itself is dangerous and most of the time they work with harmful materials like paints, asbestos, cements and other chemicals which affects their health. They also added that majority of the construction sites are not well planned which attracts accidents and at the same time safety gears are not given to them and where given are not sufficient to protect them. Respondents further explained that the tasks that they have to work on are often urgent and have tight deadlines, there is always pressure to work every minute with a little opportunity to relax and often required to work on multiple tasks at the same time. All this brings about so much workplaces stress and its impacts affects the general workers' performance as well as their social lives.

Stress due to work overload is caused by having so many responsibilities at workplace and handling complicated tasks which demand long working hours. Guiding other workers and/or subordinates in their tasks is also stressful. Poor working environment makes workers uncomfortable and may reduce their performance efficiency. Workers from different construction sites in Dar es Salaam claimed that they work under abnormal noise and crowded environment. More further to supervise illiterates who perform manual tasks is a very stressful job. If a job description is not clearly defined workers become stressed as they do not know what is to be done or for what task he/she will be held accountable. Some construction workers claimed that job responsibilities are vague, unclear and inconsistent and even the explanations of what has to be done is also unclear, and sometimes it reaches a point where they forget what they have been employed for.

3.1.5. Coping Strategies of Workplace Stress

Figure 2 portrays the findings on the coping strategies used by workers to deal with workplace stress. The figure also shows which strategy is most helpful when adopted. Praying, avoiding stressor and sleeping were found to be the most frequent coping method used by the respondents when experience workplace stress with the modes of 82.8%, 72.4% and 69% respectively while strategies like striking, others and over-eating were the least to use in dealing with workplace stress with the modes of 10%, 17.5% and 22% respectively. Praying (73.8%), Ignoring of the stressor (61.9%) and sleeping (61.9%) were the most helpfully method mentioned when workers experience workplace stress. This assertion is in support with the work of Harris (2012). In her work prayer/meditation *inter alia* was the most commonly used strategies to cope with stress at workplaces.

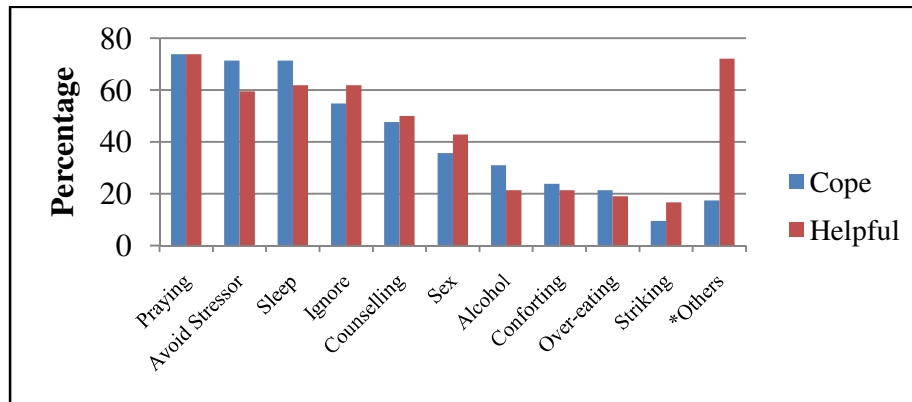


Figure 2: Ways construction workers cope with workplace stress
*Others include eating too much, ignore, tool box meeting and change working place.

3.2. Findings from Workers with Skills Level One

Focused group discussion was conducted on various construction sites in Dar es Salaam where the majority of members in the group did not have formal educational background and the rest learned construction works from experienced workers on sites. They are grouped as workers with skill level one by International Standard Classification of Occupations (ISCO). The members on focused group discussion are those who are participating directly and physically in the construction activities and most of them are temporarily employed and their payment is usually made on a daily or weekly basis. Nine groups with seven members each (63 workers) participated in the focused group discussion during the lunch time breaks.

3.2.1. Factors Causing Workplace Stress

Through the focus group discussion, the followings are the claimed factors causing stress at construction workplaces;

Working under harsh environment like; working under a burning sun, dusty environment, noise and so many hazards which endanger their health and safety. Also, working under high height with no safety gears leaves workers with so much stress which leads to poor quality of the work.

Long working hours and sometimes commuting that lead to misunderstanding with their families. Also, payments are delayed and for some reasons the organization does not allow any payments to workers who are out of the job including those on medical treatment. Manual handlings and tough works like lifting reinforcement bars, concrete above floors make them exhausted and consequently resort to taking marijuana.

Since construction sites are prone to danger then safety gears should be provided so as to protect the workers, in most of the construction sites visited in Dar es Salaam their workers claimed that unfortunately safety gears are not given to every worker, only to few engineers and bosses who are fully equipped with PPE. In some of the sites visited, workers were required to come with their own safety gears.

Frequency of accidents at sites, number of unreported minor and major accidents occurring in the construction sites worries and stresses the worker since the same can happen to them. Above all that; first aid kits are not equipped with enough medicine and other equipments needed for first aid. Workers claimed that at some point they were instructed to work under their own risks, this shows that contractors are trying to escape from their liabilities towards healthy and safety of workers at site.

Lack of support from the organizations they work with, construction workers have claimed about their employer's behaviour of not taking into consideration their well-being. Since they work under harsh environment with harmful materials which can affect their health, employees did offer them with either health insurance or contract/legal agreement for the work.

No contracts/working agreements, this seemed like employers were trying to escape from their liability upon their employees, because some kind of works may have future impact on healthy, which will leave workers with no legal right to claim for compensation nor treatment.

3.2.2. Coping Strategies of Workplace Stress

Workers in skill level 1 were asked during focus group discussion to state the coping strategies which they used in the course of experiencing workplace stress in the course of their daily activities at the construction sites. The discussion was summarized into the following strategies;

Striking was named by most workers to be a relief strategy to dealing with stress at workplace especially when stress is associated with problems with management. The researcher observed workers striking in one of the visited construction sites because they were not paid as per their agreement. One of the workers in the discussion argued that those who were striking had no formal (written and signed) agreement with regard to their wages and the situation lead them to be stressful thus striking was not only a way to claim their rights but also among the coping strategies for them to their stress. Sometimes they know their problems won't be solved but the act of striking itself gives relief to them.

Smoking bangi (cannabis sativa) or also known as marijuana, other psychoactive drugs and cigarettes was pointed out to be an effective coping strategy. Some workers asserted that since some other type or causes of stress are out of their control and are part and parcel of their job they opt to smoke marijuana and cigarettes to feel better although the coping strategies give a short relief. Additionally, drinking alcohol was apparent to some of construction workers in skill level 1. When construction workers got tired of the tough works with no motivation at the evening hours they visit bars and clubs to have alcoholic drinking for their relaxation. But the majority drink cheap alcoholic drinks like locally made brewery which even further ruin their health.

Comforting themselves with girls after work was found to be an interesting coping strategy. Most of construction workers at site especially those who are not married get engaged with sexual activities to release tension. Most of them claimed that playing sex is the most enjoyable act that could easily recover them from stress resulted from their workplace. One of those who use playing sex as a strategy narrated as follows; "*Njia rahisi ni moja tuu! Kuchapa mpaka kieleweke, bila hivyo msongo wa mawazo hautoki ng'oo!*" meaning that the easier way is only one! Just to play sex, otherwise stress will never be released. Only few claimed not to use sexing as a strategy to cope with stress because it does not work. One of the workers was noted saying (using street Swahili language) that; "*Ninapokuwa na msongo wa mawazo, ngono haiwezekaniki kabisa*" meaning that when he is in stressful environment he would never feel at all like having sex.

The last coping strategy obtained from workers in skill level 1 is releasing anger (which in turn brings stress) by the use of abusive words. Because majority of them seemed to be uncivilized and less educated, they just use abusive words to each other to make their heart at peace and releasing tensions and problems bothering them. This coping strategy is one of the negative ways not to be emulated, and for a reasonable person this strategy can never release tension or any stressful situation.

Apart from the above-mentioned strategies that are used by workers in dealing with stress at workplace, several suggestions were pointed out by the workers on other possible coping strategies which they think could be adopted when dealing with stress at workplace. These are provision of formal working contracts/ agreement to workers which will add benefit of health insurance with social security funds, increasing day rates/ wages, appreciating their hard work by giving out bonus payments and equipping workers with adequate safety gears.

3.3. Findings from Workers with Skills Level Two

The interview was conducted with 21 construction workers with skills level two and some few workers with skill level three and four (respondents who filled questionnaires) as they have missed a chance to explain important issues related to the topic which was not included in the questionnaires.

3.3.1. Factors Which Cause Workplace Stress

The majority of the construction workers with skills level two claimed that among the factors which cause stress at workplaces are as follows;

Low payments, this is the major factor that cause stress to them as they claimed that the salaries and wages are not sufficient to meet basic needs. They also added that the payment they receive does not match with what they produce or the level of their education and working experience in the field.

Managing resources for the project is also stressful for example equipments where breakdown affects budget and completion time; to manage disloyal and incompetent workers; unavailability of materials affects budget and completion time.

Lack of insurances such as healthy services insurance, the organization that they work with does not provide medical insurance to the workers and at the same time medical cost have increased tremendously. Some of them failed to afford medical cost and decide to go for traditional medicine which is cost effective.

Overworking, regardless of the low payment they receive workers are given so many responsibilities to do under time limit, which make them feel stressed.

Unsafe working practice, those who perform physical activities claimed that sometimes they work under high height with neither safety equipments nor platform to stand; they work uncomfortably worrying for their safety while organization maximising profits.

Having dangerous jobs like underpinning, demolition and working on high height without being equipped with safety gears like scaffolding when working over high height.

Commuting and long working hours, as they do not have much time to spend with their families and attending social events like weddings and funerals. The stress from home due to conflict with their families affects their working performance and morale.

3.3.2. Coping Strategies of Workplace Stress

One of the respondents acknowledged the fact that working in the construction brought so much stress in his life and the major causes of his stress at workplace is work overload. He has suffered so much from stress and he mentioned the solution that he used; now he suffers no more from stress due to work load. He shared with the researcher the ABCD approach that he has learned in OSHA seminar in America. The followings are procedures in using the ABCD approach to deal with stress due to work overload;

Arrange or group tasks into ABCD, Where by

- A- Important and urgent, things only you can do and when done well will have maximum impact to the organization. In other words, this is what you have been employed for
- B- Important but not urgent. Only you can do them but they are not required immediately. These you put in your plans showing deadlines but only do them after completing (A) activities.
- C- These are neither important nor urgent. These you kick out of your to-do list. Like chatting, reading newspaper. They have no impact to your work.
- D- These are things which are important but can be effectively done by others. These you delegate to your subordinates.
- ✓ Tasks should be prioritized when dealing with A and B tasks/activities
- ✓ Do not jump to another task if the task in hand is not fully completed, this will make worker focused on one item at a time and productivity will increase tremendously.

Others construction workers are trying to like their job and site, sharing stress issues with management, clients and co-workers, inviting families at distance sites, drinking alcohol after work, praying, ignoring some stress issues and looking elsewhere for better job with few stress.

Generally; this study found that majority of the employees uses fewer problem-focused than emotion-focused strategies in dealing with stress issue. Also, workers with skills level one and two seem to favour emotion focused coping strategy than problem-focused coping strategy. The more adoption of problem focused coping strategy the less health symptoms, the higher employee wellbeing and vice versa.

4. Conclusions

In assessing the factors which cause workplace stress among construction workers in Tanzania, the study concludes that; the majority of the construction workers with skill level 1 and 2 suffer more from physical stress due to the fact that they are involved directly to the dangerous and tough jobs with many manual handlings works. The major factors which cause stress to them are risks involved in their jobs, poor working environment, poor payments, lack of permanent employment and working contracts, poor support from the organization they are working with include lack health insurance, the transport problems and safety gears.

While construction workers with skill level 3 and 4 suffers from stress mostly due to tight deadlines, dangerous environment, unclear job description, lack of appreciation from the organizations, low payment and work overload. Coping with Stress

In examining how construction workers cope with their stresses the response shows that the majority of the construction workers adopt negative coping strategies in dealing with their stresses which can be of great effects on their health, where workers with skill level 1 and 2 smoke marijuana while giving excuses that the nature of the work and the working environment influence them to do so, others drink cheap alcohol, striking, use abusive language and engage in risk stress relievers by exposing themselves to risks of contracting HIV Aids and other sexual transmitted diseases.

Workers with skill level 3 and 4, do engage in prayers and spiritual activity while others avoid sources of stress by planning job, delegating some duties to subordinates, sometimes they ask for day off to sleep, ignoring some stressful issues as they cannot consider every single one, seeking for counselling from expertise for solution of the stressful situation, Physical training (gym), eating balanced diet, drinking expensive alcohol as well as changing job place.

There are several coping strategies provided by respondents to address workplace stress facing construction workers, hence the objective has been achieved. The suggested coping strategies of workplace stress are as follows;

Improvement of working environment by doing proper Site planning, reducing manual handlings, providing safety gears, food and drinking water, equipping first aid kit with enough medicines as well making arrangement of transport to workers to and from home and site

Provision of working contact to all construction workers with adequate salaries and allowances and other incentives like healthy insurances, holidays and vacations, registering workers to the social security funds etc.

Increase the number of workers to reduce work overload and the government to ensure that workers are being paid as per labour charges in the contract and or government minimum amount. Also, it is recommended to have provision of training to construction workers.

Generally, the stressors identified are mainly related to organizational aspects and work conditions, and the coping strategies chosen are aimed at resolving problems and improving the workers' well-being. A significant percentage of the construction workers presents high levels of pressure and depressed emotions. The results presented corroborate with previous studies which warn of the importance of developing strategies for preventing workplace stress.

In sum; work related stress is a serious matter of growing concern as it will inevitably have future negative consequences for the health, safety and well-being of the workers and the productivity and cost-effectiveness of the companies they work for. If employers, workers and government department do all they can to minimize work-related stress and work together towards an improved 'quality of working life', this will not only ensure a healthy and productive workforce, but it will also ensure sustainable economic benefits for the company and the nation as a whole.

5. Recommendations

In this study, several issues need special attention regarding to the workplace stress facing construction workers in Tanzania; Actions to reduce stress at workplaces should be given first priority by every stakeholder. Also, every construction firm should make provision for the management of stress of construction workers especially those who work on site through proactive strategy, non-specialist and specialist assistance measures, restructuring of social-physical environment, and social activities measures while workers should adhere to their chosen ways of managing stress as these would help to achieve optimal performance at work.

The management of construction firms should take measures like to ensuring that the workload is in line with workers capabilities and resources, clearly defining workers' roles and responsibilities, giving workers opportunities to participate in decision making and actions affecting their jobs, improve communication, and finally provide opportunities for social interaction among workers as well as providing a yardstick by which organizations can gauge their performance in tackling the key causes of stress.

Organization in the construction industry should arrange for regular training of coping strategies of stress to construction workers as well as discouraging workers to use negative coping strategies to deal with their stresses which may harm their health and working performance.

6. References

- i. Affum-Osei, E.(2014).Occupational Stress and Job Performance in Small and Medium Scale Enterprises, International Journal of Economics, Commerce and Management, 2, 1-17.
- ii. Beheshtifar M. and Nazarian. R. (2013). Role of Occupational Stress in organizations, Interdisciplinary Journal Of Contemporary Research in Business, 4, 648-657.
- iii. Enshassi, A. and Alswaity, E. (2015).Key Stressors Leading to Construction Professionals' Stress in the Gaza Strip, Palestine.Journal of Construction in Developing Countries, 20, 53-79.
- iv. Hamid, A.R.A. and Hisammuddin, I. (2008).Work Related Stress Among Contractor Management Team at Construction Site. Department of Structures and Materials, Faculty of Civil Engineering, University Teknologi Malaysia, Johor Bahru, Malaysia.
- v. Hamoud, S., (2016). Coping strategies of workplace stress among construction workers in Tanzania (The Case of Dar es Salaam City), Master's Dissertation, Ardhi University., Dar es Salaam.
- vi. Harris, L.J.M. (2012). Ways of Coping, Understanding Workplace Stress and Coping Mechanism for Hospice Nurses. Ph.D. Dissertation, University of Pittsburgh, USA.
- vii. Ibem, E.O. (2011). 'Work stress among professionals in the building construction industry in Nigeria', Australasian Journal of Construction Economics and Building.
- viii. International Labour Office (ILO). (2012).International Standard Classification of Occupations, ISCO-08., Vol.1., Geneva
- ix. Jovanovic, J., Lazaridis, K. and Stefanovic, V. (2006). Theoretical Approaches to Problem of Occupational Stress,Professional Article, 23, 163-169.
- x. Linda, M., Goldenhar, L., Williams, J., and Naomi, G. S. (2003).Modelling Relationships between Job Stressors and Injury and Near-His Outcomes for Construction Labourers, Journal of Work and Stress, 17, 218-240
- xi. Love, P.E.D., Edwards, D.J. and Irani, Z. (2010). Work stress, support, and mental health in construction, Article in Journal of Construction Engineering and Management, 136, 650-658.
- xii. Lu, L., Cooper, C.L., Kao, S & Zhou, Y. (2003). Work stress, control beliefs and well-being in Greater China – An exploration of sub-cultural differences between the PRC and Taiwan: Journal of Managerial Psychology, 18, 479-510.
- xiii. Makoba, N.D. (2008). Enabling Affordable Housing; For Low-Income Households in Tanzania: An Integrated Cost Modelling Approach. Thesis for the degree of Doctorate in Applied Sciences: Architecture, Kasteelpark Arenberg 1, B-3001 Heverlee (Belgium).
- xiv. Melanie, B. (2005). Stress in the Workplaces, A General Overview of the causes, the effects and the solutions: Canadian Mental Health Association, Newsfoundland and Labrador Division.
- xv. Wahab, A. B. (2010). Stress Management among Artisans in Construction Industry in Nigeria. Global Journal of Researches in Engineering, 10, 93-103
- xvi. Williams, N. (2003).Occupational stress. Practice Nurse, 26, 21-26
- xvii. Wong, J., Toe, M and Cheng, Y. K. (2010). 'Cultural determinants of stress in the construction industry' in Proceedings of 2010 International Conference on Construction and Real Estate Management, 1st -3rd December 2010, Brisbane, Queensland.