

Project Manager Ways in Handling Work Related Stress

A. R. Abdul Hamid^{*}, A. Arzmi^a, B. Singh^b, S. A. Mansur^c and S. R. Mohandes^d

Department of Structures and Materials, Faculty of Civil Engineering, University Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia

^{*}rahimhamid@utm.my, ^aalynarz@yahoo.com, ^bbachans@utm.my, ^cshaifulamri@utm.my,

^drezamohandes1986@gmail.com

Abstract - *The aim of this research is to examine the project manager ways in coping with workplace stress in the construction industry and the objectives of this study are to identify the project manager related experience of stress at the workplace, the factor which influence stress and practices by project managers in coping with stress at the workplace. Health and safety issues at workplaces need to be addressed in ensuring the construction sector is free from health and safety problems. Safety issues are often being trumpeted however health issues have been less emphasized even though these issues actually are more significant and could have a large impact on the construction industry. Only a handful of workers know that health issues could result in various negative effects to themselves and the organization. One of the health issues that can result in various problems is stress at workplace. Stress could result in various health problems and if being kept long enough it could cause death. The primary data had been collected from the questionnaire surveys on the project managers within the construction industry. The data then were analyzed using the percentage score, average index analysis and the diagram such as bar chart had been used to visualize the results from the analysis. From the findings, many project managers thought stress at workplace exist, however, this issue is being marginalized and only 30% of respondents acknowledged experience stress in their workplace. This problem existed in the Malaysian construction industry, however, lack of awareness on this issue has resulted in no action taken. Organizational factor was the main factor that causes these problems in our construction industry. Weakness in planning within the organization was the sub factor that triggers the stress problem among project manager. Finally, the survey indicated that there were three ways, often being practiced by the project manager to handle stress, which were good planning in organization, effective communication between employee and always thinking positively. Copyright © 2016 Penerbit Akademia Baru - All rights reserved.*

Keywords: workplace stress, stress factor, construction, project manager, contractor

1.0 INTRODUCTION

Stress is defined as a physical and emotional reaction which occurs when a job necessity doesn't equal the source or worker's needs [1]. Work stress is an important issue in occupational safety and health at workplaces [2]. Stress at workplace refers to the employee's perception on surrounding requirements that transcends the available sources [3]. Stress is also construed as external power or pressure, which influenced individual physical aspects and material force [4]. Stress at workplace is also referred to imbalance in adaptation between surrounding demand with the individual ability or capability [5]. Stress in the workplace is found to be

increasing from one day to another. For example, a survey performed by the National Institute of Occupational Safety and Health (NIOSH), the percentage of part-time and full-time workers, which experience stress at workplace increases to 45% in 2002 compared to only 37% in 2001. This problem will continue to increase if it is not dealt accordingly. It will not only cause a problem to the organization, but would invite a variety of illnesses to the individual involved [6].

Related knowledge on stress is essential for the project manager, so that the problem can be prevented before becoming a pandemic to the subordinate workers [7,8]. Apart from that, the management or employer of a construction organization can also benefit from this study. This is because when the employer has a considerable knowledge on stress at workplaces and strives to handle them, it will simultaneously reduce the employee rate of absenteeism and sick leave, as a consequence of stress [9]. It also could help employers to reduce medical cost if the percentage of sick leave among employees is decreased.

In Malaysia, health issues at workplaces are considered as trivial compared to safety [10]. The study on health issue in the workplace is seldom carried out and not deeply emphasized. Based on query made to the responsible party, such as Social Security Organisation (SOCSO), Malaysia Health Ministry and Department of Safety and Health (DOSH), very minimum related report on health issues at workplaces were being reported. Feedbacks obtained also indicated that no statistics related to occupational stress issue were filed. This shows that in Malaysia, this issue is taken for granted, although it is known to be substantial in other country. Apart from that, the agency that is accountable for the employee's welfare is not proactive in dealing with health issues at workplaces. Lack of emphasis on description of the significance of this aspect could result to various problems in the construction industry in this country. Hence, this study was carried out to demonstrate to the construction industry workers in Malaysia to be attentive and prevent this problem from being rampant.

The aim of this study was to examine the project manager ways in coping with workplace stress in the construction industry. To achieve the aim of this study, several objectives had been identified as follows:

- i. To identify the project manager related experience of stress at workplace
- ii. To identify the factor which influences stress at workplace
- iii. To identify practices by the project manager in coping with stress at the workplace

1.1 Literature Review

There are many definitions of stress suggested by researchers, according to their research findings. The Health and Safety Executive (HSE) defines stress as the adverse reaction people have to excessive pressure or other types of demand placed on them. From the perspective of workplace, stress can be defined as a state of anxiety produced when events and responsibilities exceed one's coping abilities [11]. However, NIOSH [12] has defined the job stress as harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the workers.

Stress that is spreading among workers, especially in the construction sector would generate problems associated with employee absenteeism. This is due to the fact that employees, whom experience stress, will generally feel lethargic to go to a workplace and performing everyday tasks. According to Huseman et al. 1977 [13], employees who are unable to fulfil other person request will definitely make the problems of absenteeism to increase. In Great Britain, stress at the workplace had caused a loss in working days as much as 13.7 million days a year due to

the absence of an employee who is experiencing stress [14]. Study in United States also shows that a number amounting to one million employees is absent from work on any day of the year due to stress at workplaces [15].

Based on studies done by the Health and Safety Executive [16], a major number of employees took medical leave and could not perform their task appropriately as a consequence of stress. Apart from that, HSE study also showed more than half a million of workers reported to have experienced problems related to stress and resulting in illnesses. Stress will surely affect health, causes disease and can be fatal [17].

According to studies done by the Chartered Institute of Building (CIOB) [6], the stress level of the construction industry will continue to increase in the period of five (5) coming year. Four major factors that are obtained from the survey done by CIOB [6] would be work overload (64.1%), pressure (59.9%), conflict of demand (52.2%) and a short constraint of time to accomplish tasks (59.7%).

Every worker must know the effective way to reduce stress. There are several ways to reduce workplace stress for examples change the factor may cause stress, try to avoid stress and improved self-motivated [18]. Thinking positive is the best way that can reduce stress. Based on surveys, meditation is also one of the ways to reduce stress [13].

There are four major parties involved in coping with stress, which are employer, employee, government and family. Based on Occupational Safety and Health Act 1994, Section 15, the employer must prepare a safe and healthy workplace for their employee. Other than that, employee must be realistic towards their work [19] and government must make sure the Acts are strong and can protect every employee. Motivation from own family members are effective in reducing workplace stress [13].

2.0 METHODOLOGY

The methodology used in this study as shown in Figure 1 is through the distribution of a questionnaire survey. Meanwhile, the secondary data were gathered from several sources such as journals, articles, books, previous researches and electronic resources like websites and online material.

The questionnaires were distributed in order to meet all the three objectives of the study. One hundred of questionnaires were distributed to the project manager within the construction industry. Construction organizations being chosen does not focus on certain types of construction only and were chosen randomly. The questionnaire consists of four sections. Section A is the general information on the respondent background. Section B is to identify the project manager related experience of stress at workplace, section C is to identify the factor which influence stress at the workplace and section D is identify practices by the project manager in coping with stress at the workplace. The distribution of the questionnaire was conducted by hand. After the compilation of data generated from questionnaire, data analysis was carried out with the help of computer software such as Microsoft Office Excel. The data were analyzed using the percentage score and average index analysis and then the diagram such as bar and pie charts were used to visualize the result from the analysis. The average index formula is shown below.

Average Index = $\Sigma a_i x_i / \Sigma x_i$, whereas, a_i = constant which represent the weight for i , x_i = variable that represent the frequency of respondents to the i ($i = 1, 2, 3, 4, 5$) [20]. The classifications for the rating scale are: $1.00 \leq \text{Average Index} < 1.50$ (Least Practice), $1.50 \leq \text{Average Index} < 2.50$ (Less Practice), $2.50 \leq \text{Average Index} < 3.50$ (Moderately Practice), $3.50 \leq \text{Average Index} < 4.50$ (Practice) and $4.50 \leq \text{Average Index} \leq 5.0$ (Mostly Practice) [21].

Then, all the results were discussed in detail and the conclusions were derived accordingly.

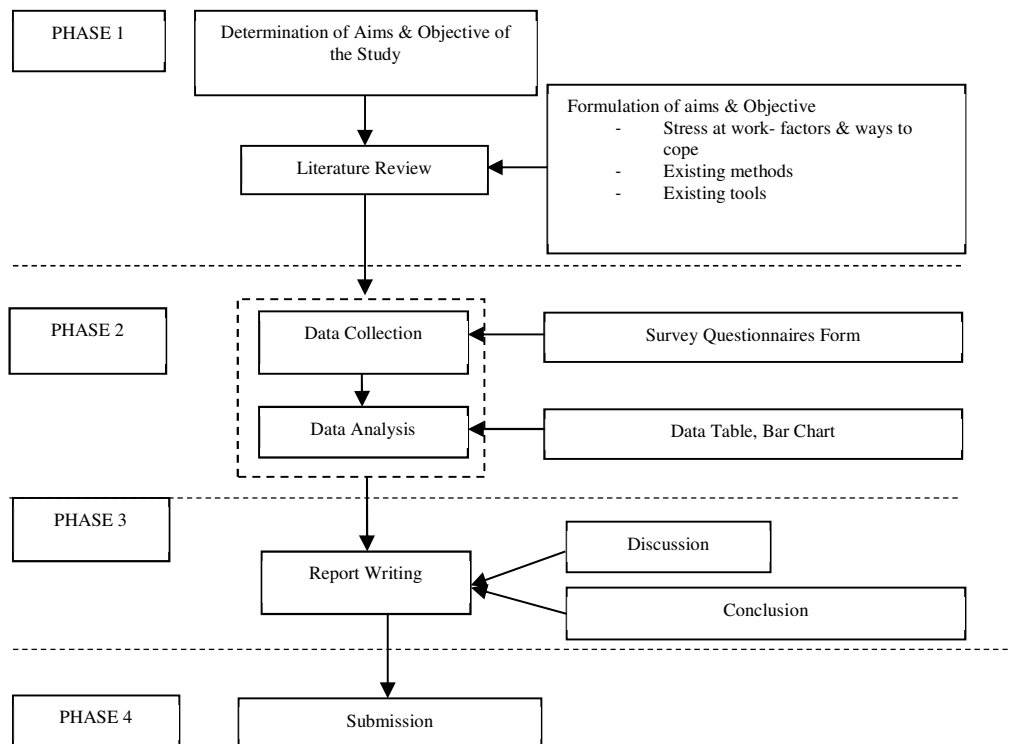


Figure 1: Methodology of the study

3.0 RESULTS AND DISCUSSION

The results presented below were based on the objectives of the study. A total of 100 set of questionnaire forms were distributed to the project manager in the construction industry. However, only 23 respondents gave the feedback, which was equal to 23% of the total rate of responses.

3.1 Experiences of stress

These surveys had identified the experiences of stress among construction project manager in order to know whether their work give them stress or not. From the analysis, many project managers thought stress at workplace existed and only 30% respondents acknowledged experiencing stress at their workplace. Figure 2 shown the experiences related to stress at workplace among the project manager.

Stress problem is often associated with an employee leave and absences. This is because most construction organizations in Malaysia do not allocate holidays for workers who suffer from this problem. Stress related illness that struck the employee will lead to workers feeling lazy

and not motivated to carry out the work. The results of the Health and Safety Executive (HSE) research in the Great Britain and the United States revealed that stress leads to loss working days as a result of employee absenteeism [14]. Based on the feedback received, not many respondents are sure that the leave taken is due to stress. The result shows that 70% of respondents had never taken leave due to stress. The following respondents were not sure that they are on vacation because of the problems caused by stress or common health problems. They do not know that stress is one of the causes that lead to the occurrence of health problems and chronic illness such as heart problems and so on.

This feedback results showed a significant difference between workers in the construction industry in Malaysia and overseas. Overseas workers when they are exposed to this problem, they normally get the attention of their superiors. They also provided the special leave to workers who suffer from this stress. A total of seven or 30% of respondents admitted to having been on leave due to stress. The respondents are sure that they experience stress and cause them to take time off to unwind from stress related problems. The amount of leave taken ranging from 1 to 5 days is based on the level of stress experienced by the busy work. Construction organization in Malaysia does not provide a period of leave for employees who suffer from stress.

When an employee is not clear with their work schedule, it will invite the occurrence of stress-induced problems. Employees should at least know the work to be carried out a month in advance so that they are more willing to carry out assigned responsibilities. This problem will hit workers' stress as the task should be carried out at the last minute. The result shows 26% of respondents did not know their work schedule a month earlier than they need to carry out the task. The respondent felt stress caused by this situation because they had to work out their plans and had to prepare for work in the last minute. However, 74% of respondents knew that their task would schedule a month in advance so that they are better prepared to face the work and prevent them from getting stressed out.

Organizations that have a temporary worker has a low percentage of the stress being developed. This is because temporary workers can assist in completing the work and can avoid permanent workers in the organization from experiencing excessive workloads. Temporary workers are taken at certain times such as when tendering for a project. The result shows that as many as 52.2% of respondents said that temporary workers are not used within their organizations. More work will be borne by the organization's own employees. This is one of the factors that may lead to stress related problems and could depress employees with excessive workload. In contrast, 47.8% of respondents said that their organizations hire workers temporarily to prevent the occurrence of excessive workload among employees and to prevent stress related problems from hitting the workers.

Vacancies in the organization can also lead to workers experiencing excessive workloads. This is because the work that was left of the vacant posts were to be borne by the other employees. The result shows that there are vacancies in the organization of respondents. However, 57 % of respondents admitted that their organizations quickly fill vacancies that exist to prevent the occurrence of many problems and cannot be resolved in a timely manner. This is also to ensure their organizations remain in good standing and have the confidence to incurring a project. In addition, as many as 43 % of respondents said their organizations will not fill vacancies quickly. This is to ensure that workers are quality workers and can perform well.

Employees who are sick need to be replaced by another employee so that the problem does not delayed work and the work could be completed within the stipulated time. The work will be

handed over to another employee so that the work can be done according to a predetermined flow. This will cause problems for the other workers because they had to prepare their own work and the work of a sick friend. The feedback received showed a total of 52.2 % of respondents said their organizations will replace sick workers with other workers and the remaining 47.8 % of respondents admitted that their organizations will not replace sick workers. The employees in the organization are carrying out their duties to prevent employees work overload.

The problem of overtime is often hit employees who work in the construction industry. This is because working in the construction sector requires commitment and responsibility to realize the need to have perfect outcome. Overtime often occurs when the tendering process was conducted. In addition, more time is also needed during the structural construction which require considerable concreting works. Based on the feedback, a total of 73.9% of respondents admitted to having overtime. This is due to the work being undertaken should be completed as soon as possible or should be completed within the stipulated time. This will cause the respondent had to allocate more time at work and this will actually cause people to feel stress. A total of 26.1% of respondents said that they do not face the problem of overtime. They do not have to work overtime because their organizations have sufficient staff to carry out the work and the work undertaken is in accordance with the schedule set.

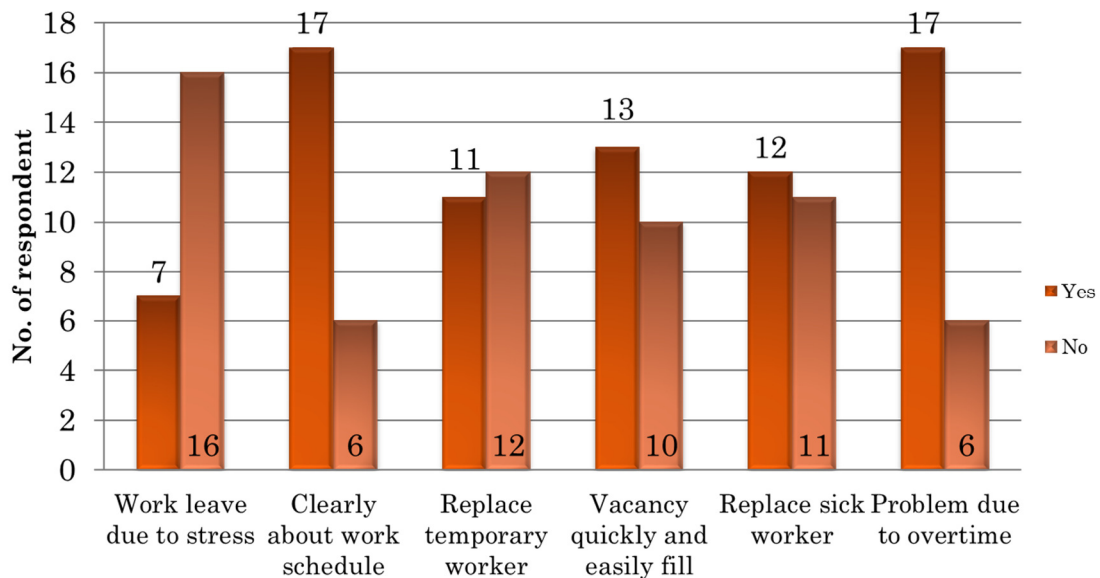


Figure 2: Experience of stress in workplace

Figure 3 shows level of stress in the construction industry compared to 5 years ago. In the next five (5) years, the construction industry in Malaysia is seen as one of the sectors of the causes of stress in the workplace. According to a study conducted by the CIOB in 2006 found that the level of stress in the construction industry will continue to increase due to the occurrence of high demand in the industry [6]. The result shows the percentage of the level of stress in this industry in the next five (5) years, it showed that 31% of respondents believe that the level of stress will be in the same position. This may be because they consider the country's development will still be at the same level and stress problems will also be at the same level without any changes. On the contrary, only a total of 17% thought that the level of stress will be less in the next five (5) years. This is due to the presence of high technology that can help employees perform work perfectly and quickly and work can be completed in a timely manner.

Technology could help in reducing the stress problems that hit the construction industry in Malaysia. About 52% of respondents agreed that the industry will be more stress in the future because of the occurrence of a lot of development and a high demand in this industry. The development process will result in employees working in the construction industry will be under pressure to complete the work in accordance with customer requirements and the need to do many things at one time. In addition, the increasing technology can also cause a project manager to feel depressed as they need to learn something new.

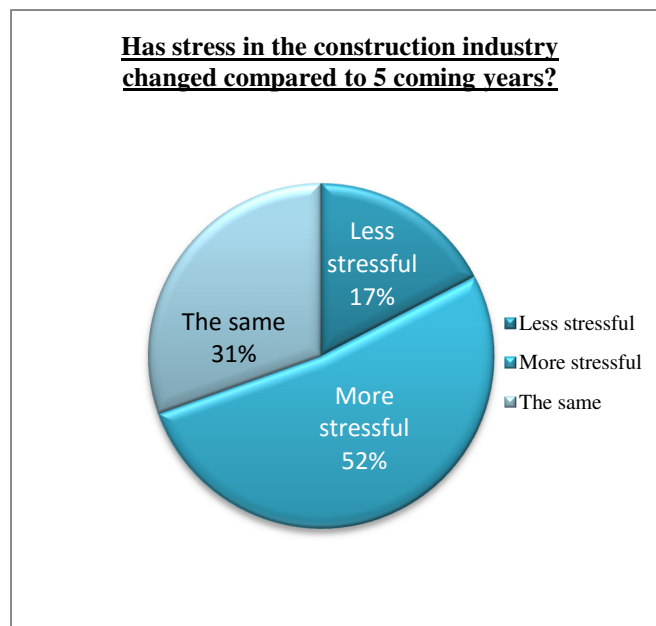


Figure 3: Level of stress in construction

3.2 Factor affecting stress at workplace

These surveys have identified the factors affecting stress at workplace among the construction project manager which will give some indication of factors always affecting stress at the workplace. Figure 4 shows the result of factors affecting stress at workplace referring the experiences of the project manager. From the survey, the main factors occur stress at the workplace was the organization factor. Weakness in planning within the organization was the sub factor contributed stress problem among the construction project manager. The survey, conducted for this study indicated that 24.1% of respondents agreed that the weakness of planning come from an organizational factor that cause stress problems at work. This is because good planning on making things work is important so that the work can be done as soon as possible without any pressure from any party. A total of 18.1% respondent indicated that labour shortages are the factors that cause stress and became the second highest responder. Weakness in communication support third highest of respondents who say it is a cause of stress, namely by 15.7% when compared to a survey conducted by the CIOB i.e. 472 out of 534 respondents admitted weakness in communication is the cause of stress [6]. A total of 12 respondents admitted that internal conflict and crisis management invites the problem of stress at work, namely by 14.5% and 13.3%, representing a total of feedback regarding inadequate training that causes stress.

A total of 25% of respondents who answered this questionnaire agreed that they had to adapt to the construction sites situation as the largest factor in causing stress in the workplace. Level

of noise and inadequate temperature control are the same percentage share of 22.7%. A previous survey conducted by the CIOB [6] indicates the level of noise reaching the percentage of 30.8%. Construction site dirty environment represented by 20.5 % when compared to surveys by CIOB of 16.9 % only. Only 9.1 % of the respondents chose the less ventilation as a physical factor that invites to the problem of stress in the workplace. Based on the selection of respondents indicated that too much work (24.6%) and heavy workload are the main factors causing stress in the job demand category. But based on the feedback of the respondents, lack of skills and work too little is a less prominent factor in causing stress problem is that only about 3.5 % only. Working time and working time limits also have their respective percentage of 21.1 % and 22.8 %.

Figure 4 shows the percentage of the feedback received by the respondents related job roles that cause stress in the workplace. A total of 53.3 % of respondents agreed conflicts demand was the main contributor to job roles that resulted in stress in the workplace. Lack of career progression gets a percentage of 20%. This may be because a respondent only has to do the same job over the years in the organization and there is no change in his career. This resulted in the respondents feel bored and demotivated as a factor that contributed to the problem of stress in the workplace. Respondents also chose the unclear responsibility and the shaky employment as factors causing stress in the workplace is only 13.3 % only. Fig. 4 also indicates that other factors causing stress in the workplace. About 50 % of respondents choose the inadequate equipment as the other factors that lead to stress in the workplace. Inadequate equipment will make work more difficult to run on time. The site safety gets a percentage of 33% respondents who chose it as the cause of the stress in the workplace. Situation at construction sites that are unsafe can cause an employee feels threatened and afraid to carry out the work.

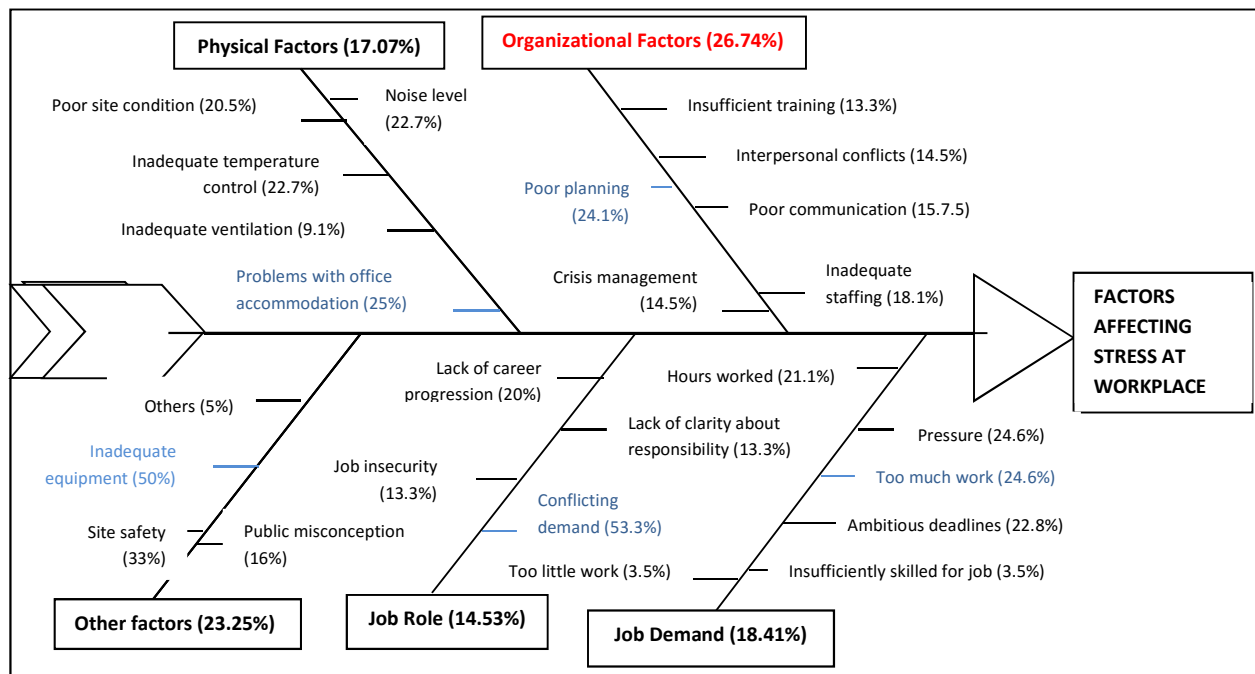


Figure 4: Factors affecting stress at workplace

3.3 Project Manager ways in coping with stress at the workplace

Figure 5 shown the ways always being used by the construction project manager to cope with stress at the workplace. Almost all project manager chose to change the factor affecting workplace stress is the best way to cope with the stress. There are a variety of ways being practiced to deal with stress related problems. To handle this stress, three categories are identified as the best and effective way to ensure that these problems can be overcome, namely to modify the source of stress, avoid stress and improves endurance. Based on the feedback received, most respondents practice an effective way to deal with stress in the workplace. Most of the project manager manages the level of stress by customizing the cause of stress and improves endurance. Only some project managers curb stress by trying to avoid the issues.

The highest mean index gained in the category are changing factor of stress and increase endurance. In the category of changing factors of stress, respondents chose to practice effective communication and a good working plan, which has an index of 4.35. Planning a good job will make the work being carried out in a systematic and orderly manner. Effective communication is also being practiced to deal with stress. This is because of good communication between all parties will lead to better understandings that occur between employees and it will reduce the stress caused by communication problems. Project managers who participated in the study also chose to think positively as one of the best ways to deal with stress. Thinking positively can control or prevent themselves from the face of stress. This method can make a person feel more confident with the work carried out and the problem no longer restrains themselves. Most respondents handle the stress by effectively practice meeting, good work planning, manage time wisely and practice of effective communication. In addition, respondents also practiced how to deal with stress by determining the ability of themselves, work for consensus, think positively, being able to accept criticism and adopt a healthy lifestyle or practice meditation. However, respondents were moderately practice to avoid excessive workload as one way to deal with stress problems plaguing themselves.

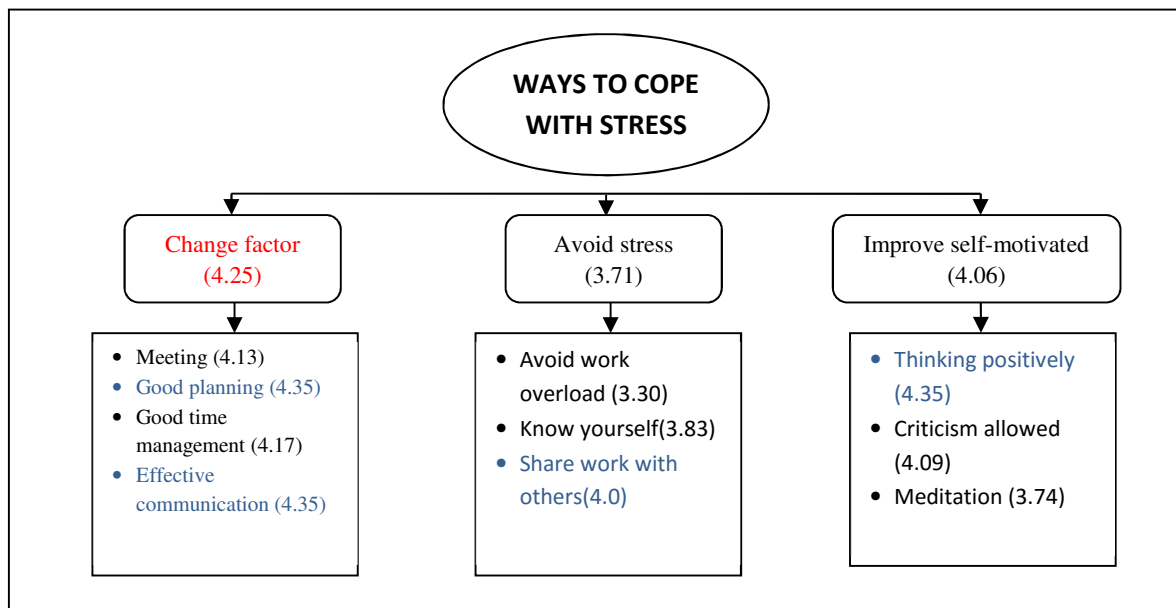


Figure 5: Ways to cope with stress

4.0 CONCLUSION

The conclusions that can be drawn from this study based on the three objectives are as follows:

- i. This study had been conducted to identify the experiences of stress among the construction project manager. From the finding, the majority of construction project manager in Malaysia admitted having a stress problem in the workplace, but they just thought this issue is a small problem in the construction industry. It was notable that only 30% of those admitted who had experienced stress. So, for the conclusion, there was less awareness about the problem related to stress at workplace among the construction project manager in Malaysia.
- ii. The second objective was to study the factors that influenced stress at the workplace. From the finding it can be concluded that an organizational factor is the major factor that stress occur in the workplace. Based on statistical percentage, organizational factor obtained 26.74% agreement. This result also shows that poor planning in an organization is the sub factor which influenced stress at workplace among the construction project manager in Malaysia.
- iii. The third objective in this study was to identify the ways normally being practiced by a project manager to handle stress at workplace. From the finding it can be concluded that good planning in work, effective communication and positive thinking were the ways normally being practiced by a construction project manager in Malaysia. Based on the mean index classification, the three ways obtained a high score of 4.35 respectively.

REFERENCES

- [1] Cooper, Cary L., and Philip J. Dewe. *Stress: A brief history*. John Wiley & Sons, 1984.
- [2] Cox, Tom, Amanda Griffiths, and Eusebio Rial-González. *Research on work-related stress*. European Communities, 2000.
- [3] Di Martino, Vittorio, and Mohtar Musri. "Guidance for the Prevention of Stress and Violence at the Workplace." Ministry of Human Resources Malaysia and International Labour Organization, Kuala Lumpur (2001).
- [4] Di Martino, Victorio. "Introduction to the Preparation of Manuals on Occupational Stress." *Safe Work, InFocus Programme on Safety and Health at Work and the Environment*, ILO. On-line: www.ilo.org. Accessed March 8 (2000): 2002.
- [5] Spielberger, Charles D., and Irwin G. Sarason, eds. *Stress and emotion: Anxiety, anger, & curiosity*. Taylor & Francis, 2013.
- [6] Campbell, Fiona. "Occupational stress in the construction industry." Berkshire, UK: Chartered Institute of Building (2006).
- [7] Hamid, Abdul Rahim Abdul, Khairulzan Yahya, and Lim Wei Han. "Management Competencies for Preventing and Reducing Stress at Construction Site." *Built Environment Journal (UiTM)* 7, no. 2 (2010): 32-37.

- [8] Hamid, A.R.A., Clarence Botiti, D.M., and Mohandes, S.R. "Managing the Delayed Completion on Construction Project. " *Journal of Advanced Research in Business and Management Studies* 1, no. 1 (2015): 14-24.
- [9] MacKay*, Colin J., Rosanna Cousins, Peter J. Kelly, Steve Lee, and RON H. McCAIG. "'Management Standards' and work-related stress in the UK: Policy background and science." *Work & Stress* 18, no. 2 (2004): 91-112.
- [10] Social Security Organisation (SOCSO), Annual Report, Retrived April 5, 2009, from <http://www.perkeso.gov.my>.
- [11] Seaward, Brian Luke. *Managing stress: Principles and strategies for health and wellbeing*. Jones & Bartlett Pub, 2004.
- [12] National Institute of Occupational Safety and Health (NIOSH), *Stress at work*. Retrieved February 25, 2009, from <http://www.cdc.gov/niosh/stresswk.html>
- [13] Brief, Arthur P., Randall S. Schuler, and Mary Van Sell. *Managing job stress*. Little, Brown, 1981.
- [14] Beswick, Johanna, Kirsten Rogers, Edward Corbett, Sarah Binch, and Kay Jackson. "An analysis of the prevalence and distribution of stress in the construction industry." *Health and Safety Executive* (2007): 1-81.
- [15] McHugh, Marie, and Shirley Brennan. "Managing the stress of change in the public sector." *International Journal of Public Sector Management* 7, no. 5 (1994): 29-41.
- [16] Health and Safety Executive (HSE), *Survey of self-reported work related illness and workplace injuries in 2005/2006*. National Statistics, 2005.
- [17] Mattenson, M. T., and J. M. Ivancevish. "Managing Job Stress and Health-The Intelligent Person's Guide: A Division of Macmillan Publishing Co." (1982).
- [18] Murphy, Lawrence R. "Managing job stress: An employee assistance/human resource management partnership." *Personnel Review* 24, no. 1 (1995): 41-50.
- [19] Matteson, Michael T., and John M. Ivancevich. "Organizational stressors and heart disease: A research model." *Academy of Management Review* 4, no. 3 (1979): 347-357.
- [20] Al-Hammad, Abdul-mohsen, and Sadi Assaf. "Assessment of work performance of maintenance contractors in Saudi Arabia." *Journal of Management in Engineering* 12, no. 2 (1996): 44-49.
- [21] Majid, MZ Abd, and R. McCaffer. "Assessment of work performance of maintenance contractors in Saudi Arabia." *Journal of management in Engineering* 13, no. 5 (1997): 91-91.