

THE PREVALENCE OF STRESS AMONG PROJECT MANAGERS AT
CONSTRUCTION SITE

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To my beloved mother, father, sister

and

Bikhli

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At the end of my report I would like to thank all those people who made this report possible and an unforgettable experience for me.

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ABSTRACT

As the business environment is increasingly subjected to fast changing forces which include increased competition, the pressure for quality and advanced technology, innovation, and an increase in the pace of doing business, the demands on managers have grown equally dramatically. It is therefore essential to develop strategies for managing stress to give managers the required additional energy to handle particularly difficult and stressful work situations. It is important that organizations provide the assistance and support on the issue of stress as part of their proactive approach to managing managers' health and safety, by drawing up contingency plans, and to have the necessary infrastructure to deal with such problems. This study investigates the strategies that can be implemented in organizations to reduce stressful situations affecting managers. The main objectives of this study are to identify the source of stress for project manager at workplace, to explore the consequence of stress to the project manager at workplace and to examine the project manager coping ability from stress at workplace. The methodology of this study includes literature reviews, data collection and data analysis. Data is collected by questionnaire in Malaysia. The data is analyzed using the average index. From the study, some of the factors for source of stress are work environment, colleagues conflict, work cope ability and individualism. The consequences of stress are blood pressure, headache, unusual tiredness, work accident, work pressure, smoking, alcoholic drinks, memory loss and sick leave. Whereas, some copying abilities of managers are teamwork, strategic relationship, work-life balances negotiation, exercise and refreshing.

ABSTRAK

Perkembangan pesat persekitaran perniagaan memaksa perubahan pantas termasuk peningkatan persaingan, tekanan untuk meningkatkan kualiti dan teknologi canggih, inovasi, dan peningkatan dalam skala menjalankan perniagaan yang turut menyebabkan permintaan mendadak terhadap pengurus. Oleh itu, menjadi keperluan untuk membangunkan strategi pengurusan tekanan dalam memberikan nilai tambah kepada pengurus untuk mengatasi situasi permasalahan dan tekanan di tempat kerja. Adalah penting untuk organisasi menyediakan bantuan dan sokongan mengenai isu tekanan ditempat kerja sebagai langkah proaktif untuk memastikan kesihatan dan keselamatan pengurus dengan merangka pelan kontingensi, dan mempunyai infrastruktur yang diperlukan untuk berurusan dengan masalah tersebut. Kajian ini menyiasat strategi yang boleh dilaksanakan dalam organisasi untuk mengurangkan keadaan tertekan yang mempengaruhi pengurus. Objektif utama kajian ini adalah untuk mengenal pasti punca tekanan untuk pengurus projek di tempat kerja, untuk meneroka akibat tekanan kepada pengurus projek di tempat kerja dan memeriksa keupayaan pengurus projek menangani dari tekanan di tempat kerja. Metodologi kajian ini termasuk ulasan literatur, pengumpulan data dan analisis data. Data yang dikumpul oleh soal selidik di Malaysia. Data yang diperolehi dianalisis menggunakan indeks purata. Dari kajian tersebut, beberapa faktor punca tekanan persekitaran kerja, konflik rakan sekerja, bekerja menangani keupayaan dan individualisme. Akibat tekanan adalah tekanan darah, sakit kepala, keletihan yang luar biasa, kemalangan kerja, tekanan kerja, merokok, minuman beralkohol, kehilangan ingatan dan cuti sakit. Manakala, beberapa persamaan kebolehan pengurus adalah kerja berpasukan, hubungan strategik, keseimbangan kerja-kehidupan, perundingan, latihan dan menyegarkan.

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LIST OF ABBREVIATIONS

HSE	Health and Safety Executive
CIPD	Chartered Institute of Personnel and Development
UK	United Kingdom
MSDs	Musculoskeletal Disorders
AI	Average Index

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Stress is not limited to any particular profession (Ng, Skitmore, & Leung, 2005). However, Statt (1994) noted that construction work is the third most stressful profession after mining and police work. Specifically, Campbell (2006) found that in the United Kingdom, construction professionals were increasingly viewing their work as being stressful. Linda (2003) identified the nature of production processes that take place in the construction industry as being responsible for making construction work a dangerous and stressful occupation. This goes to suggest that work stress is a major threat to the attainment of sustainable growth in the construction industry in particular and economic development of any nation in general.

The concept of stress has a long tradition in organizational and social literature (Sommerfield & McCrae, 2000). However, evidence in contemporary literature shows that stress has been defined and viewed from diverse perspectives. Aitken and Crawford (2007) noted that the exploration of the concept of stress began with the work of Hans Selye in 1936. Selye in his work defined stress as the force, pressure, or strain exerted upon an object or a person that resists these forces and attempts to maintain its original state. He conceived of stress as a pathological human response to psychological, social, occupational and/or environmental pressures; and therefore concluded that stress is neither a simple nervous tension resulting from damage nor necessarily something to be avoided (Selye, 1978). Drawing from Selye's submissions, Pulat (1997) and Ibe, Anosike, Azuh and Mosaku (2011) opined that some amount of stress is necessary to generate enthusiasm and creativity for optimal productivity. They however cautioned

that intense or too much stress in work environment poses great risk to workers' safety, health and emotional stability. The foregoing submissions tend to suggest that stress is an unavoidable consequence of modern living and is not necessarily a negative phenomenon as long as it is within a tolerable level that can engender enthusiasm, creativity and productivity.

Occupational stress may also be seen as comprising a three-dimensional syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment (Maslach, Jackson, & Leiter, 1996). Stress in this context is seen as a state of physical, emotional and mental exhaustion due to long-term involvement in situations that are emotionally testing (Hoffmeister, Cigularov, Sampson, Rosecrance, & Chen, 2011). Maslach et al (2001) noted that individuals experiencing long periods of chronic job stress are likely to encounter physical and health problems, reduced productivity or effectiveness, lower levels of satisfaction and organizational commitment. This concept of stress suggests that long exposure to physically, mentally and emotionally testing activities could result in exhaustion which can lead to reduction in one's level of productivity and accomplishment.

There is a growing body of research literature on occupational stress among managers and workers in the construction industry (Campbell, 2006; Leung, Chan, Chong, & Sham, 2008; Leung, Chan, & Yuen, 2010; Lingard, Yip, Rowlinson, & Kvan, 2006). Interestingly, this body of contemporary literature has advanced our understanding on the causes of stress and how construction professionals in the West and Asia were coping with it. They however do not provide adequate insight on the situation among professionals in the building construction industry in Malaysia. In particular, the review of literature shows that very little research has examined stress factors among professionals in the building construction industry in Malaysia. This paper reports on the result of research aimed at identifying positive behavior among managers in the building construction industry in Malaysia. Based on the findings, it suggests strategies to eliminate or reduce stress factors among professionals in the industry in this country.

In the last few decades, the building construction industry has witnessed tremendous institutional and organizational transformation across the globe. Continuous modification of building process, pace and complexity of work and increasing demand

for higher productivity have become common features of this industry. These are in response to globalization of economy and markets, technological advancement and changing consumer preferences. In fact, the dynamic and complex nature of construction works, diverse backgrounds and hostile attitudes of participants are also believed to be contributing greatly to rapid changes taking place within the construction industry in general (Wong, Teo, & Cheung, 2010). As a result, professionals and indeed the work force in this sector operate in an extremely competitive environment where projects are designed, constructed and delivered within tight budgets and time frames. All these have combined to make construction work mentally and emotionally demanding and stressful (Wahab, 2010).

Work stress is known to impact negatively on productivity and job satisfaction among workers in different professions (Lath, 2010; McVicar, 2003; Ng, et al., 2005; Zaeem, Zafar, & Atif, 2008). It is also believed to be a major contributor to absenteeism, low employee morale, high accident and turnover rates as well as increasing medical expenses of many organizations (Wahab, 2010). Hence, research into job-related stress has increased in recent years (Whetten & Cameron, 2002). Notably, previous studies have shown that work stress can be physically and mentally harmful to workers and it is related to physical condition, organizational structure, interpersonal conflict, personal characteristics and nature of work (Lath, 2010; Ng, et al., 2005; Zaeem, et al., 2008). There is also evidence in the literature suggesting that occupational stress has manifested itself in unsafe working practices, decrease in the quantity and quality of performance at work and reduction in performance accuracy (Halkos & Bousinakis, 2010; Hoffmeister, et al., 2011; Kumar & Srivastava, 2007). Therefore, there is a consensus that intense, continuous and repeated work stress can be inimical to individual and organizational productivity and competitiveness in job performance, and thus deserves more research attention.

Since stress perception is highly subjective and varies from one individual and context to another (Wong, et al., 2010), there is bound to be variation among professionals in the building construction industry in their perception of stress factors. This no doubt has implications for stress management strategies in the construction industry in general. Also the urgency of attaining sustainable growth and national development calls for more studies on work stress, especially in developing countries, including Malaysia. This paper reports on the result of research aimed at identifying

stress factors among professionals in the building construction industry in Malaysia. It identifies the key stress factors among architects, builders, civil engineers and quantity surveyors directly involved in building construction projects in Malaysia. Based on the findings, it suggests strategies to eliminate or reduce stress factors among professionals in the industry in this country.

Managers have a key role to play in minimizing stress-related risks for their staff. Management behaviour has a direct impact on staff well-being – managers can prevent or cause stress in those they manage. Managers also act as “gatekeepers” to their employees’ exposure to stressful working conditions and are vital to the identification and tackling of stress in the workplace. This means that managers need to understand what behaviours they should show in order to manage their employees in a way that minimizes work-related stress. New research has identified management behaviour/competencies that prevent and reduce stress at work and this paper aims to present this.

With regards to stress factors in the construction industry, Kenneh (2005) noted that construction project stress is the manifestation of factors that negatively erode values from the project, and thus make desired goal unattainable. Work overloads, working long hours and role ambiguity are known to be leading causes of stress amongst professionals in construction projects (Sutherland & Davidson, 1989). Statt (1994) asserted that multilevel subcontracting, time pressure; constant worker rotation and unstable work due to temporary contracts can contribute to psychosocial stress among workers. From a gender perspective, Kumar and Srivastava (2007) found that male professionals in the construction industry suffer more stress in relation` to risk taking, disciplinary matters and implications of mistakes, redundancy and career progression than their female counterparts while female professionals suffer stress due to opportunities for personal development, rate of pay, keeping with new ideas, business travel and accumulative effect of minor tasks. Previous studies shows that the general sources of stress among construction sector workers are quantitative work load, tight time schedule for work, lack of career guidance, poor communication among participants and bureaucracy. Others are inadequate room for innovation, unsatisfactory remuneration, ambiguity of job requirement, inadequate knowledge of project objectives, long working hours, tight schedules and unfavourable working conditions (Leiter, 1991; Ng, et al., 2005).

Hoffmeister et al (2011) on the other hand indicated that stress is an experience expressed in one's feeling of being strained while the Health and Safety Executive (Barrett, 2007) defined stress as the adverse reaction people have due to excessive pressure or other types of demand placed on them. Put differently, Lath (2010) was of the view that 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. From the occupational perspective, stress has also been defined as the physical and emotional responses that occur when workers perceive an imbalance between their work demands and their capability to meet such demands. In other words, stress is a harmful physical and emotional response that can occur when there is conflict between job demands on a worker and his/her capacity to meet such demands (Brown, 2001; Lath, 2010). The general inference that can be drawn from the foregoing definitions is that stress can be considered as an inevitable and unavoidable component of life. It can also be inferred that occupational or work stress is the type of stress experienced as a direct consequence of a person's occupation. Therefore, in this study, work stress is viewed as a human perception of conditions that scare, excite, annoy, threaten or strain individuals as a result of their occupation.

1.2 Problem Statement

Work-related stress is now a major concern for employers. In the UK, Health and Safety Executive (HSE) figures show that work-related stress, depression or anxiety account for an estimated 12.8 million lost working days per year. Around one in seven working individuals think their job is very or extremely stressful and 420,000 individuals in Britain believe that they are experiencing work-related stress at a level that is making them ill (HSE, 2005). This means that very few organizations are likely to escape the impact of stress-related absence and employee stress. Where stress-related problems lead to an employee being absent from work, an average of 29 working days are lost. In a recent Chartered Institute of Personnel and Development (CIPD) survey, 40 percent of the responding organizations reported an increase in stress-related absence (CIDP, 2007).

Workplace stress is a significant problem for organizations. Recent estimates suggest that over half a million people are affected by work related stress, costing UK industry an estimated £9.6bn per year. In 2004/2005, a total of 12.8 million working days were lost to stress, depression, and anxiety (Barrett, 2007). Knapp and McDaid (2009) express that, 40% of responding organizations reported an increase in stress related absence. In response to this escalating problem, the UK Health and Safety Executive (HSE) has developed national Management Standards for work related stress, which it published in November 2004. These standards provide guidance on best practice for employers, with the aim of improving stress management throughout UK workplaces. The aim is that implementation of the standards, by reducing work related stress, will contribute to the HSE achieving its targets for reducing prevalence and incidence of work related illness (and absence).

In response to the problem presented by work-related stress, the HSE has established “Management Standards” for stress at work that are designed to help employers tackle the major sources of work-related stress risk. Published in 2004, these represent a “set of conditions that reflect high levels of health, well-being and organizational performance” (Barrett, 2007). They cover six key areas, which, if not managed well, put employees at risk of stress-related ill-health. They are demands, control, support, relationships, role and change. This study is undertaken to identify behavior among managers in the building construction industry in order to prevent or reduce stress at construction works.

In view of evidence in the literature on the negative consequences of stress among modern day work forces, a number of theoretical models on work stress have been developed. One such theory is the Person-Environment fit theory first proposed by French, Robert and Van Harrison in 1982. According to this theory, stress occurs as a result of an incongruity between the individual and the ambient environment (Hoffmeister, et al., 2011). The key elements of this model comprise objective and subjective variables that could be found in the environment or the person. Iben et al (2011) were of the opinion that stress is a highly individual phenomenon which exists as a result of a person’s appraisal of his/her involvement in the environment. They pointed out that stress arises as a result of an imbalance between the person’s perception of the demand placed on him/her and his/her perception of ability to cope.

1.3 Aim and Objectives of Study

The aim of this Master Project is to study the existence and coping mechanism of stress among project manager at construction sites in Malaysia. To achieve this aim the following objectives have been identified:

- i. To identify the source of stress for project manager at workplace;
- ii. To explore the consequence of stress to the project manager at workplace;
- iii. To examine the project manager coping ability from stress at workplace.

1.4 Scope of Study

This research will focus on the Malaysian Construction Industry stress issues. It is impossible to address the whole spectrum of stress in the duration given. Therefore, this research will only be concentrated on the causes, impact and ways to minimise the impact on people involved at construction site. This research is conducted among the local construction company in Kuala Lumpur in order to obtain accurate and representative results.

The aim was to generate a sample of approximately sixty (60) from construction organization that had involved in the project in Malaysia. Therefore, sixty (60) set of questionnaire have been distributed out randomly to construction companies in Kuala Lumpur. The scope of this study should make simpler the process of information gathering in order to analysis the result in a limited time. For achieving to the objectives of this study, the following scope of work will be done:

- i. The questionnaire will be distributed among construction managers who will be selected randomly;
- ii. Due to time limitations some aspects of construction site issues may not be discussed in the present study;
- iii. Collecting construction activities which are only related to construction buildings;

- iv. The data collected via questionnaire which be distributed from 5 Sep to 5 Oct 2012;

1.5 Significance of Study

The significance of this study is to identify positive manager behaviour due to preventing stress at construction site. The findings of this study are important to help construction managers, site managers and other partners to specify positive manager behaviour related to preventing and reducing stress at construction site. Thus, it will have an important role in eliminating and reducing stress at construction site.

Today, it is obvious that stress is part of construction site. The presence began to cause problems for the people involved at construction site. From time to time, measures are taken to address specific problems arising out of stress but these measures are at times in contradiction with each other. Thus, the mixed and confused message and signal are sent out.

Throughout the 1960s, no action was taken to address the issue of stress. It was only taken when the presence of stress began to cause problems then steps were taken to address the problem.

Thus, this research is aim to investigate the Malaysian construction industry stress issues. The focus is on the causes, problems or impact on people involved in construction industry and the ways to minimize these impacts.

This research also aims to serve as basic study for the person in the construction industry to understand the stress problems and positive manager behavior issues. In addition, it is hoped that the finding from this survey will provide some indications to the parties involved on construction industry.

1.6 Methodology of Study

The research method used in conducting this study comprised of literature review and followed by a random questionnaire survey. The research literature review was framed around the existing Malaysian Construction Industry stress and managerial behaviour issues. The basic concern throughout the review is to identify causes, impacts and to establishing the ways to minimise the impact on preventing stress by promoting positive manager behaviour.

The questionnaire method was conducted to collect the latest primary data from industry practitioners that accomplish with the research objectives. The primary data will be analysed through quantitative and qualitative approaches after considering the types of data and the research objectives.

The result for data analysis and interpretation will use to provide conclusions and recommendations. This research report will be ended with an overview conclusion for the thesis by answering the research aims and objectives together with constructive recommendations for the future research.

To conduct a systematically and thoroughly research, the following series of process has to be carried out to find the answer to the problems selected for this study.

The research methodology serves as a method to achieve the aim and objectives of this study. The aim and objectives of this study were achieved by collected data through literature review and questionnaire survey. The research will be carried out in several steps in order to obtain to research's aim. First of all, the objectives of the study should be identified. The second step is managing the literature review in order to find out some information about existing preventing stress activities in sites and get information about some methods which used for improving positive manager behaviour.

In addition, studying of the project manager coping ability from stress at workplace is carried out through questionnaire which was distributed among respondents who are managers in construction in Malaysia. This step is a way to complete the two objectives of this research. Then for accomplish the integrating stress

prevention at construction site, the related strategic approach should be determined. The last step is associated to the performance of the analyze questionnaire's data, programming and the results of third objective, and finally writing the result and conclusions.

The methodology of this study is carried out in 5 steps. The sequence of these steps is not absolute and with experience it may change.

- i. Determine manger behavior due to stress at construction site
- ii. Study the consequence of stress to the project manager at construction site
- iii. Link manager behavior to related stressors at construction site searching and their abilities through literature review and questionnaire Integrating collected data in conclusion

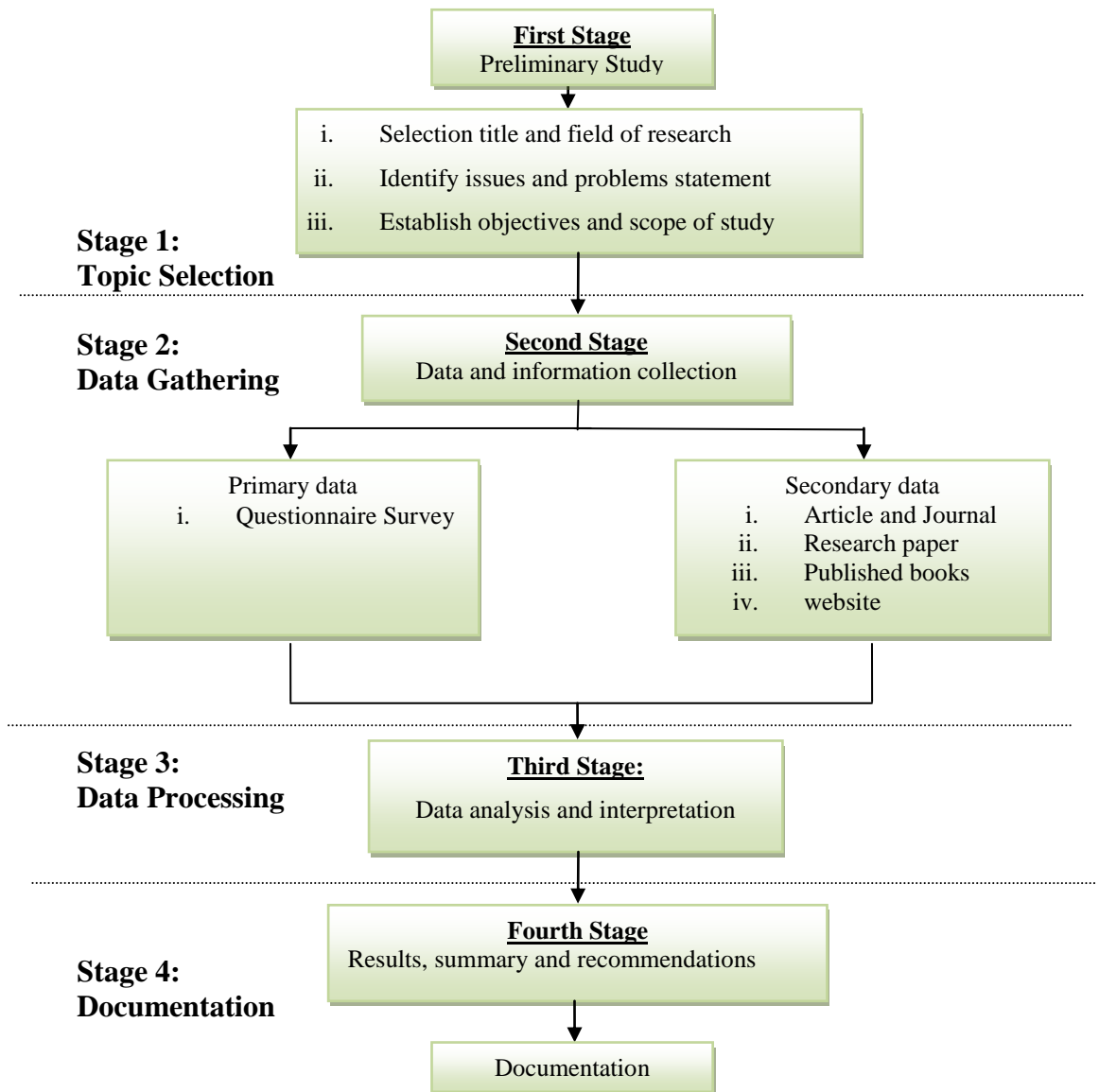


Figure 1.1: Outline of the Research Methodology Process

1.7 Arrangement of Report

This study has been organized into 5 chapters as below:

Chapter 1 outlines the introduction of this study. It includes the background of study, problem statement, scope and significance of study and the method to carry out this study. It also identified the aims and objectives of this research.

Chapter 2 consists of literature review. The stress issues in construction industry have been highlighted and the causes, impacts on managerial behaviour and measures proposed have been discussed in this chapter.

Chapter 3 discuss on the theoretical frame of work and together with research methodology that have been used to gather the information, the method of analysis and format for presenting the findings.

Chapter 4 focuses on the analysis of the data collected from the questionnaire survey and the findings are reported in this chapter. Due to easy reference and presentable, the result will be presented in tables, histogram, pie charts and others for better understanding.

Chapter 5 will provide the recommendations and conclusions to this study. This includes the discussion on the results of the finding and some recommendations and suggestions for future research.

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