

PERCEPTION OF SAFETY, PHYSICAL WORKING CONDITIONS AND STRESS BETWEEN MALAYSIA AND UNITED KINGDOM

Nazahah Abd Rahim

University of Gloucestershire

Hui-Kim Ng

University of Gloucestershire

David Biggs*

University of Gloucestershire

Karyn Boots

University of Gloucestershire

ABSTRACT

21st century businesses operate faster and with more complexity and uncertainty than ever before, and therefore industrial accidents and diseases become more prolific, bringing a serious and costly burden to all countries. For the majority of the world's workforce, a working environment does not meet the minimum standards and guiding principle predetermined by the international bureaus. This has called for occupational safety and health to be implemented and enforced. Different laws and regulations have been introduced by most of the developed countries meant for the prevention of industrial accidents and occupational diseases and the statistics of occupational accidents is being kept updated. Differences of behavioral patterns in organizations are attributed to beliefs, norms and values amongst employees from different parts of the world. Therefore, the health and safety of employees becomes a vital aspect of the work of human resource management teams. This study compared the perception of employees towards health and safety in workplaces in Malaysia and the United Kingdom (UK). Malaysia is a developing country whereas the UK is a developed country. Investigating their perceptions would provide insights for different points of view on occupational health and safety from a developing country and a developed country.

Keywords: Health, Safety; Occupational Stress; Physical Work Conditions; Accidents, Safety Climate.

* Corresponding author: Programme Director, Occupational Psychology, School of Natural and Social Sciences University of Gloucestershire, Francis Close Hall, Cheltenham, Gloucestershire, UK, GL50 4AZ. Tel: 01242 714758. Fax: 01242 714856. Email: dbiggs@glos.ac.uk

1. INTRODUCTION

The predicament of work-related accidents and diseases are becoming more worldwide considerations, predominantly in developing countries as a result of the growing pace of global relaxation of trade and economies on top of the technological revolution (Soehod & Lekha, 2007). In many countries, the issues of occupational health and safety such as occupational stress, safety climate and healthy work environment are the most concerned issues in business (Hall, Dollard & Coward, 2010).

It is estimated that about 2 million employees are killed every year by job-related accidents and diseases (Bohle & Quinlan, 2000). Each year about 270 million occupational accidents and 160 million occupational diseases occur in the world, as reported by the International Labour Organization (ILO). It is estimated that 4 percent of the world gross national product is lost due to these accidents and illnesses (Bohle & Quinlan, 2000). The ILO, therefore, has a mandate to protect against workforce illness, diseases and grievances that are caused by workplace hazards and risks including ergonomic and work organisation risk factors. Managing Occupational Safety and Health (OSH) is essential for all the employers at their workplace. This is because lack of management control often leads to grounds for accidents and toleration of hazardous practices among the employees (Niu, 2010).

Other than that, poor workplace ergonomics, number of hours of computer usage and high work demands leads to postural pressures which have been linked with an array of musculoskeletal and visual troubles (Sha, 2010). There are numbers of physical conditions that can lead to a productivity decrease of an employee, such as spinal cord problems, neck and shoulder pain and thoracic issues (Sha, 2010). Stress has numerous overwhelming effects on the workplace environment, as well as upon individuals who become victims of stress. Stress has immense implications for company profitability. Stress can be seen as localized. Workers in different countries may perceive stressful situations in different ways, for instance, the role expectations of equivalent grades in the same area of work could differ between the two countries (Lambert, Lambert & Yamase, 2003).

1.1. Background of the OSH Law in Malaysia and UK

In Malaysia there were no satisfactory provisions to ensure employees' health and safety in the workplace until 1994 (Bakri, Mohd Zin, Mishan & Mohammed, 2006). The traditional approach of legislation was used and human aspects of ensuring health and safety at the workplace were lacking (Bakri et. al., 2006). Soehod & Laxman, (2007) suggested that the expansion of practicing OSH would be unlikely in most of the countries that do not have the legislative system on OSH. Thus, Malaysia Parliament approved the OSH Act 1994 with the intention to foster a safe working environment. The rationale of the law is to secure a safe, sound and healthy working environment. The Malaysian OSH legislation is based on the English equivalent to a certain extent, for that reason, some characteristic of OSH legislation (Soehod & Lekha, 2007). The bureau that is accountable for implementing the OSH law is the Department of OSH (DOSHS) which is under the Ministry of Human Resources; whilst the Social Security Organization (SOCSSO) is the organization that is endowed with compensation for injured employees (Jemoine, 2006).

Due to self-regulation, most of the employers do not pay attention to health and safety in the workplace. For instance, A. Balasubramniam, Vice President of Malaysian Trades Union Congress (MTUC) said that some employers did not supply safety helmet or harness belts for their employees who are working on high-rise construction. Employees were also not educated on the precautionary measures that need to be taken when working in a dangerous situation. Statistics released by Social Security Organization (SOCSCO) revealed that in 2007, a total of 56,339 accidents were reported and they claimed that the amount was considered as high rate after taking into consideration the number of workers in the country.

OSH principles are obligatory rules and regulations set and executed to eliminate or diminish occupational vulnerability in the workplace. OSH criterion intends to bestow on employees at least the minimum satisfactory degree of protection. This protection is universal and applies to every member of the workforce in their individual areas of work and is designed to protect against the dangers of sickness, injury or death which might happen due to his or her profession (Soehod & Lekha, 2007). The Health and Safety at Work Act 1974 (HASAWA) is a major piece of health and safety legislation in Great Britain. The Act is an elementary constitution and authority for endorsement, guideline and enforcement of workplace health, safety and welfare within the UK which was passed in 1974 (Holt, 2005).

Soehod & Lekha (2007) stated that the introduction of HASAWA received extensive support and was seen by numerous people as the resources through which noteworthy enhancements in health and safety criterion could be accomplished. Predominantly the responsibilities of HASAWA are to protect the people and avoid the risks as regards to health and safety of the people that caused from the activity of works (Stranks, 2001). The main motive of legislation was to increase the level of attention on issues about health and safety, as well as to promote increased level of participation by the employees (Holt, 2005). In fact, the Act includes duties which are common and general in relation to OSH, but however does not include the well-described standards set by the regulatory authorities (Soehod & Lekha, 2007).

1.2. Physical Condition

OSH is the regulation concerned with preserving and protecting the health, safety and welfare of people in the workplace. The focus of OSH is to foster a healthy and productive workforce environment for the people and the nation (Soehod & Lekha, 2007). OSH is an interdisciplinary field which includes the disciplines of industrial hygiene, occupational medicine, occupational nursing, engineering, epidemiology, and toxicology (Levitt & Samelson, 1993). It includes the surroundings and conditions that affect employees and other related persons at workplace (Bakri et.al, 2006). The influence of working condition on health has been studied extensively over the last two decades. Most studies have mainly focused on the relationship with cardiovascular diseases and musculoskeletal disorders, sickness absence and general health outcomes (Nordin, Abdin & Lin, 2007).

Bambra et al, (2009) stated that hazardous physical working conditions were a foremost issue of sickness in the working age population. The working atmosphere has been described as stressful with psychosocial and physical stressors. The example of the psychosocial stressors

are complex working and living circumstances, lengthy working hours and shift work including night-time work (Hoivik, Tharaldsen, Baste & Moen, 2009). Noise, ergonomics and chemical hazards are examples of physical stressors in the working environment (Hoivik et al, 2009). All of these factors whether they are psychosocial or physical may impinge on wellbeing, atmosphere and safety (Hoivik et al, 2009). Work environment is defined as working conditions, office automation and organizational context; it is the physical and social aspects of the workplace (Che Rose, Kumar, & Gani, 2008).

1.3. Safety Climate

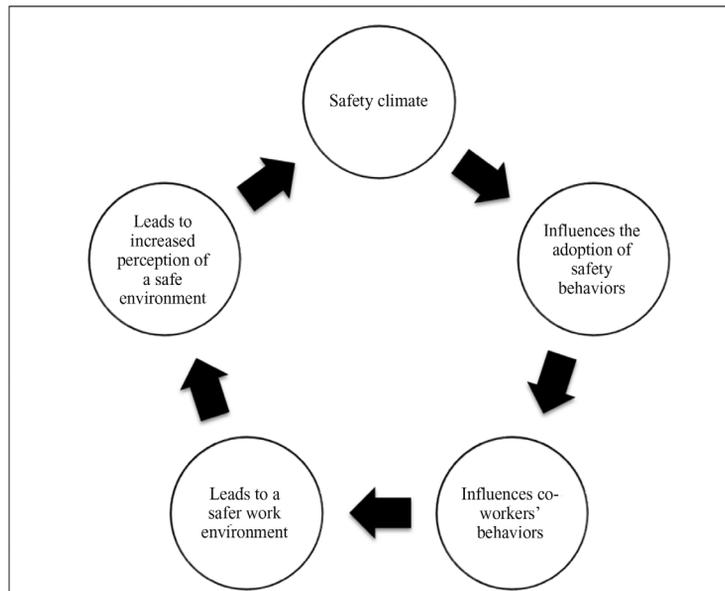
Generally, safety in organizations is associated to employees and other organizational stakeholders' physical well-being (Katz-Navon, Naveh & Stern, 2005). Employees' perceptions about safety are essential for the reason that generally fewer workplace injuries were reported by the organizations with strong safety climates. Fewer employee injuries were reported in organizations with strong safety climates not merely because the workplace has well-developed and had effective safety programs, but the management's commitment to safety being visible to employees sends a clear message (Gershon, Karkashian, Grosch, Murphy, et al. 2000). In addition, previous studies indicated that those workers who had not witnessed/had any industrial accidents felt safer than those who had witnessed/had accidents in the workplace (Huang et al, 2007). Hayes, Perander, Smecko & Trask (1998) stated that previous studies have shown that accident-related variables such as accident rates, anxiety and employees' compliance with safety behaviors are interrelated to the perceptions of workplace safety issues. Evidence also shows that employees are more likely to obey the practices if the organization promotes safe work practices (Figure 1).

An environment that is believed to be safe supports and emphasizes individual safety behaviour which will further influence other colleagues. Increasing pressure can be put on non-compliers to fall in line when the safety behaviors have been adopted throughout the organization (Gershon, et al., 2000). Evaluating employees thoughts towards safety can be considered as a functional method of safety management in that the employees who have more mature attitudes towards safety tend to be more likely to favour a safer environment. Thus, it would help to decrease the unsafe behaviour in the organization (Gershon, et al., 2000).

1.4. Ergonomics

Awareness that ergonomics is useful for achievement of a sound and safe work environment is increasing, especially in the Asia-Pacific region (Kogi & Kawakami, 1997). However, ergonomics awareness in Malaysia is still low (Mustafa, Kamaruddin, Othman & Mokhtar, 2009). Even though ergonomics activities and research in the industrial developing countries began during the early of 1960s, Malaysia was only introduced to ergonomics over two decades ago on 1st December 1992, with the establishment of the ergonomics division in the National Institute of OSH (NIOSH) (Mustafa, et al, 2009).

Ergonomics are integrated into their occupational health programmes either by the government or the private sector (Kogi & Kawakami, 1997). A balance between characteristics of the workers' demands of the job will be able to be accomplished if the design of work can be

Figure 1: Influence of Safety Climate

Source: GERSHON, ET AL. (2000), p.212

effectively being utilized, and with the achievement of this, it will further encourage productive workers, safety worker, mentally and physically well-being as well as satisfaction on the job (Mustafa et. al, 2009). Niu (2010) stated that ergonomics is necessary and fundamental element of the work-related health practice. Ergonomics is a multifaceted relationship between the workforce and their work (Rowan & Wright, 1995).

The purpose of ergonomics is to ensure the suitability of tasks, working environment, tools and environment for use by the individual that directly enhances the functional capacity of the employee and optimizes their ability to perform their role (Gilworth, 2008). Applying ergonomics in the workplace will helps to reduce the possibility of accidents and injury or ill health (Borkar, 2010).

Optical, muscular and psychological disturbances, for example eye strain, headaches, fatigue, musculoskeletal disorders, chronic back, neck and shoulder ache, Cumulative Trauma Disorders (CTDs), Repetitive Strain Injuries (RSIs) and Repetitive Motion Injuries (RMIs), psychological nervousness, anxiety and depression can be caused by an inappropriate ergonomic working environment (Niu, 2010). Punnett & Wegman (2004) stated that “musculoskeletal disorders” integrated a broad range of circumstances which distress the muscles, tendons, ligaments, joints, peripheral nerves and supporting blood vessels. It may result in pain and functional impairment that may affect the neck, shoulders, elbows, forearms, wrists and hands (Buckle & Devereux, 2002).

1.5. Stress

Stress in the workplace has become of widespread concern to all managers and administrators (Lambert, Lambert & Yamase, 2003). After back pain, stress is considered as the second most common wellbeing issue associated with work (Greiner, 2008). When occupational stress and the stress from day to day life are taken as a whole, it can bring about unfavorable physical and emotional outcomes to the individual, for the reason that excess demands of physical and mental pressures on the individual body and mind (Cartwright & Cooper, 1994). It can be detrimental to the organization as a whole if the workplace is stress-filled (Carr, Kelley, Keaton & Albrecht, 2011).

Stress is a psychological state that develops when an individual is dealing with situations that fatigue or exceed his or her perceived internal and external resources (Mirela, 2009). Stress is an expression which we are all familiar with, yet difficult to characterize. There are many definitions in the literature and the term is frequently used to illustrate feelings of exhaustion, distress and incapacity to cope. There are many causes of stress and it varies between individuals. As stated by Stranks (2006) stress is usually interrelated with the changes that come about in a person's life, wherein some of the changes may be caused by the company that the individual works with. There is no job which is liberated from stress seeing that all types of work bring accountabilities, exertion, hassles and pressures. As a result, stress is an obligatory component of working life. A reasonable amount of pressure is to be expected from work when the workers are being paid to work. On the contrary, not all strains are harmful seeing that with adequate amount of challenges and difficulties, it keeps the employees stimulated (Aziah, Rusli, Winn, Naing & Tengku, 2004).

1.6. Hypotheses

- H1:* There is a difference of employees' perception between Malaysia and the UK in safety climate
- H2:* There is a difference of employees' perception between Malaysia and the UK in general health well-being
- H3:* There is a difference of employees' perception between Malaysia and the UK in physical condition of the workplace
- H4:* Employees in Malaysia feel greater discomfort in back compared to employees in United Kingdom
- H5:* Employees in the UK feel greater shoulder discomfort compared to employees in Malaysia
- H6:* Physical condition is related to the safety climate in the workplace.
- H7:* There is a relationship between general health and safety climate.

2. METHODOLOGY

2.1. Participants

Participants were recruited from both the UK and Malaysia using opportunist sampling via contact through a social networking site. The sample consisted of 64 employees, 36 employees from the UK and 28 employees from Malaysia. There were 34 females and 30 males. The average working hours per week for the participants in the UK and Malaysia were 38.02 hours and 48.57 hours respectively. From the questionnaires distributed to the participants in Malaysia, the response rate was 35 percent. In United Kingdom, the response rate was 45 percent.

2.2. Design

The study was a cross sectional design utilising questionnaires. Participants were given informed voluntary consent. The questionnaire investigated the employees' insight of health and safety in their workplace in their different cultures and countries. The reason for using the questionnaire was that an increased number of participants could be reached as the questionnaire can be sent to individuals via e-mail. More to the point, by using questionnaire, the same instrument could be used to survey both participants from Malaysia and United Kingdom for the reason to reduce the tendency of dissimilarities.

2.3. Apparatus

The questionnaire that was used incorporated different scales that measured the following: Safety Climate (Hahn & Murphy, 2008), Physical Condition (Smith, 1976), and Workplace Stress (Goldberg, 1978). Safety climate was measured by the Hahn & Murphy (2008) scale. This scale is reliable and a valid measure with coefficient alphas ranging from .71 to .85 (Hahn & Murphy, 2008). In addition, convergent validity correlations specify that the 6-item measures of safety climate measure is associated to a selection of safe work behaviours, for example engaging in safe work traditions, reducing disclosure to blood and body fluid and reports of safer employment atmospheres (Hahn & Murphy, 2008). Physical condition is also measured adapted from Index of Organisational Reactions (IOR) by Smith (1976). This scale had a reliability of .90, reported by Dunham, Smith & Blackburn (1977). Goldberg introduced the General Health Questionnaire (GHQ) in 1978; the scale has been commonly used in evaluating workplace stress. Banks, Clegg, Jackson, Kemp, Stafford and Wall (1980) reported that GHQ-12 has provided enough evidence of its "sensitivity" and "specificity" in discriminating between "normal" and "extremes". The alpha coefficient for NHS Trust was .89 (Mullarkey, Wall, Warr, Clegg and Stride, 1999). According to Yusoff, Abdul Rahim and Yaacob (2009), in various studies, the reliability coefficients of the questionnaire have ranged from 0.78 to 0.95. Based on various studies, the internal consistency reliability of General Health Questionnaire (GHQ-12) is satisfactory. Further question on ergonomics were asked adapted from the Computer Workstation Ergonomic Questionnaire.

3. RESULTS

3.1. Reliability of Measures

Table 1 below, details the means, standard deviations and number of contributors for each group. Before testing the hypotheses, reliability analyses were conducted on each of the instruments. The reliability of the measures in this study were found to range from adequate to good as shown in Table 2.

Table 1: Means, Standard Deviations and Respondents Numbers for the Psychological Variables

Variables	British Workers			Malaysian Workers		
	mean	mean	N	mean	mean	N
Safety Climate	34.50	5.27	36	29.93	3.98	28
Physical Condition	17.60	1.99	35	18.53	1.79	28
General Health	23.83	6.19	35	23.57	4.77	28

3.2. Test of differences

The multivariate analysis of variance (MANOVA) determined whether a disparity of any significance existed statistically when comparing the two groups with the results from the survey, this enabled the hypotheses to be tested to a further extent. The Wilks' Lambda was significant ($p=.01$) therefore indicating that there were differences between the employees in the UK and Malaysia. Independent Sample t-tests were used further to test the hypotheses. Hypothesis H1: There is a difference of employees' perception between Malaysia and the UK in safety climate was supported ($t=4.28$, $p<0.05$) with the safety climate in the UK being significantly higher than in Malaysia. Hypothesis H2: There is a difference of employees' perception between Malaysia and the UK in general health well-being was rejected ($t=.19$, $p=n/s$). Hypothesis H3: There is a difference of employees' perception between Malaysia and the UK in physical condition of the workplace was rejected as no significant difference between the two workers groups was found ($t=-1.94$, $p=n/s$). Hypothesis H4 regarding back pain was rejected as no significant difference were found between the countries. Hypothesis H5: Employees in the UK feel greater shoulder discomfort compared to employees in Malaysia was supported with a significant difference of shoulder discomfort between the two groups ($t=2.38$, $p<0.05$).

3.3. Relationships between the variables

In order to ascertain whether there is any relationship between the variables, correlations were run to test the relationship between the variables. Hypothesis H6: Physical condition is related to the safety climate in the workplace was found with is a significant negative relationship between physical condition of the workplace with employee's perception of safety climate in

the workplace ($r = -0.32, p = .05$). Interestingly no significant relationship was found between general health and the safety climate (Hypothesis H7).

Table 2: Correlation Matrix

	1	2	3	4	5	6
1 Safety Climate	.79					
2 General Health	-0.199	.83				
3 Physical Condition	-0.317*	0.077	.66			
4 Back discomfort item	0.050	0.041	-0.142			
5 Hand discomfort item	0.020	-0.167	0.002	0.033		
6 Shoulder discomfort item	0.194	-0.022	-0.209	0.221	0.383**	
7 Wrist discomfort item	0.095	0.091	-0.150	0.213	0.406**	0.181

Notes: * $p < 0.05$ ** $p < 0.01$ Cronbach alphas on diagonal

4. DISCUSSION

4.1. Safety Climate

The study demonstrated that there is difference of the perception on safety climate between the employees in UK and Malaysia. This result has supported the previous research that stated employees from different backgrounds have different perceptions on the safety climate in their organization. According to Lin et al, (2008), the employees' credence, awareness and attitudes towards safety and the entire background civilization are contradictory between a developing country in Asia and developed Western countries. Employees may have differences in their discernment and approach towards safety when they are working in a dissimilar industrial environment and different countries.

According to Kortum, Leka & Cox (2010), the understanding of the consequences of safety acquiescence in developing countries such as Malaysia was still low compared to the industrialized countries. In addition, violation of the safety procedure by employees is caused by the unawareness and lack of safety conformity by the management. As such violation of rules and regulations, unsafe behaviors, dangerous situations, injuries and accidents would occur in the organization. More to the point, employees' understanding and practicing of health and safety in their organization is merely based on the theme of rationale. From the legislation, regulations and requirements, the employees found that the issue of health and safety was excessively complicated and not easy to identify with (Abdullah et al, 2009). As a result, general awareness of the employees in relation to their occupational health and safety traditions was comparatively low (Abdullah et al, 2009).

This is further supported by Idrus et al, (2009) who stated that safety conditions in Malaysia were still observed as poor although legislation relating to workplace safety has revealed various improvements. Health and safety is approximately an assurance in developed countries

by the government legislations. Even though there are laws for health and safety in developing countries, the legislations have been considered as having “no teeth” (Mbakaya, Onyoyo, Lwaki and Omondi, 1999). In reality, occupational health and safety is still considered to be a luxury by many decision-makers in most of the developing countries, which is one of the rationale for lack of political realization, unsatisfactory data gathering and weak enforcement of occupational health and safety regulations (Kortum, et al., 2010).

Due to culture, the belief of what is considered good and acceptable safety practices might differ culturally from one nation to another. In the industrialized countries, safety is habitually considered by the management as a priority. For instance, the international contractors being assigned to the construction site in developing countries think that safety measures are important at all times. The contractors considered it wise to wear safety equipment at all times for the reason that despite heavy machinery, there are still many dangers on the construction site. However, in the perception of the manual workers both in India and Taiwan, safety measures are needed to be taken into consideration when the work situation is in tremendous or hazardous circumstances. Thus, abundant accidents and fatalities were taking place as a result of the low level of safety consciousness of the Indian and Taiwanese workforce (Mahalingam & Levitt, 2007).

According to Mbakaya et al, (1999), in many developing countries, the foremost factor that relates to treacherous work is lack of safety consciousness amongst the employees and employees. In addition, some employers use this concern to generate huge profits at the disbursement of safe work. Creating awareness about the implication of safety climate is fundamental among the Malaysian labour force owing to the reason that it helps in improving health and performance of the employees, consequently leading to higher organizational productivity (Makhbul, Idrus & Rani, 2007).

4.2. General Health

Occupational stress is becoming increasingly globalized and affects all countries, all professions and all categories of workers, as well as families and society in general (Malik, 2011). According to Malik (2011), other research pointed out that in developed countries, almost a third of the working population reported high to very high intensity of stress. There is still lack of awareness of work-related stress in developing countries even though some research has been carried out so there is still a deficiency of resources to deal with stress especially in Malaysia (Houtman, Jettinghoff & Cedillo, 2007).

Previous studies indicated that different cultures have an impact on the perception by an employee in regard to work-related stress. According to Carr et al. (2011), each human being is diverse from each other in different ways; therefore, this has a reflective effect on human behavior and their response to stress. Different style of organizational cultures would encourage different principles, manners and approaches of work and construct emotionally different environments and structures of psychosomatic contract between employer and employees (Cartwright & Cooper, 1994).

Occupational stress is one of the areas which has not been recorded in developing countries as a consequence there is a lack of information on relationships or causality, important exposures and outcomes (Houtman, et al., 2007). In developed countries, it has been well recognized for the reason that a large quantity of research to about this psychosocial vulnerability having the capability to influence the physical, mental and social health of an individual (Kortum, et al., 2010). In this study, the result indicated that there is no difference of employees' perception between Malaysia and the UK in General Health Well-being. This is supported by the studies done by Lambert et al, (2004) who indicated that regardless of culture and country, the employees within Asia may be facing parallel working environment as in Western countries.

4.3. Physical Conditions

There was no significant difference between the perceptions on their working condition for the Malaysians and British employees. Nevertheless, the result had revealed an approaching significance of difference between the perception of employees in Malaysia and the UK on their working conditions. In today's industrialized world, work environment is the most vital aspect in keeping an employee satisfied. Unproductive working conditions can take place for any number of reasons which include workers who are negative or are troublemakers. Unproductive working conditions can also be brought about by a malfunction to provide employees with the appropriate tools, training, software and provisions. The employees have to be comfortable in their working environment in order for them to be productive (Al-Anzi, 2009). Thus, the function of job design is to discover the desirable circumstances that would ensure enhanced work outcomes (Genaidy et al, 2007).

It is common that developing countries look for foreign investments from developed countries with the intention of improving their employment offer (Houtman, et al., 2007). In response, developed countries have a tendency to reassign outmoded manufacturing processes and normally treacherous equipment to developing countries either as foreign investments or to sell those technologies to local shareholders who intended to pay less for used rather than for new machines (Houtman, et al, 2007). In Malaysia, there are noteworthy problems with working conditions, for instance lighting, ventilation, temperatures and noise (Leman, Omar & Yusof, 2010).

4.4. Body Discomforts

Based on the result provided for this study, there was no difference between the score of the employees in Malaysia and the UK with regard to back pain. However, there are differences of the scores with regard to shoulder pain. Deeney and O'Sullivan (2009) stated that several employee health surveys was conducted in the UK between 2002 and 2007 by HSE and it had consistently found that the leading contributor to work-related sickness was musculoskeletal disorders which accounted for between 42 per cent and 58 per cent of the entire work-related ailments. In Malaysia, musculoskeletal sicknesses were mainly reported as pain in the hands and arms on top of back and shoulder ache (Chee & Rampal, 2004).

The fourth European Working Conditions Survey in 2005 discovered that musculoskeletal disorders were the most familiar work-related issues in 27 European countries wherein 25 per cent of European workers complained of backache and 23 per cent of muscular tenderness (Niu, 2010). Rationalization for these occurrences may perhaps incorporate differences in training in safer work practices and in working experiences, dissimilar work assignments, age, gender proportionate to physical size and strength and health care seeking behaviour (Niu, 2010).

4.5. Relationship between Physical Conditions and Safety Climate

Safety climate perceptions have been found to be interconnected with individual safety behaviours, individual misfortune, damage rates and safety occurrence in the majority of the occupational health and safety studies (McCaughy, McGhan, DelliFraine & Brannon, 2011). Physical conditions were shown to have a significant relationship with employees' perception on safety climate. Clarke (2006) indicated that discernment of the working atmosphere was an essential predictor of accident occurrence. The safety climate perception of individuals is important to promote safe working (McCaughy et al, 2011).

In accordance to Varonen & Mattila (2000), the reason that the working environment immediately affects the individual, employees' discernment on the work environment might have a stronger persuasion than observing the company safety traditions. The working environment is related with employees' job contribution and job satisfaction (Srivastava, 2008). Therefore, affirmative perceptions on workplace safety have positive relationship with employees' attitudes towards work (McCaughy, et al, 2011). Employees who identify and are aware of their working environment considering it to be satisfactory, secure and friendly would develop an optimistic approach towards diverse job components (Srivastava, 2008). Individuals may have better perception of their workplace safety if they think that their working environment is safer and will experience fewer injuries (Fang, Chen & Wong, 2006).

A potential limitation of this study is the relatively small sample size. The sample size was adequate for the statistical analysis used; however, it may not be diverse enough to represent the employees specifically from either country. Future research could be conducted in this area increasing the range of industries surveyed. Issues applicable to the information technology industry in the UK may be different in Malaysia. Further categorising of industries relevant to both countries and the gathering of more information is recommended. Nevertheless, the present study does represent a fascinating insight into the differences and similarities in health and safety between Malaysia and the UK.

5. CONCLUSIONS

Workplace accidents, injuries and complaints continue to be an anxious dilemma in organizations today. Therefore, the management of the organization has a new challenge which is to create a work environment with the purpose of attracting, keeping and motivating its labour force. The classification of safety culture and climate is therefore observed as an important contributor to the reduction of occupational accidents (Bjerkkan, 2010). Creating awareness about the health and safety in the workplace and sharing the best practices with

other organizations plays an important role especially in developing countries. Therefore there should be more activity in educating employees about the safety in their organization. Providing safe and healthy working environments for the employees by the employers is essential in today's working environment. Avoiding the injuries and health problems and increasing comfort in the workplace provide many benefits to an organization. For instance, this would help the company to save money currently spent on medical compensation, time loss caused by absenteeism and by increasing employee retention reduces the cost of recruitment.

REFERENCES

- Abdullah, N. A. C., Spickett, J. T., Rumchev, K. B., & Dhaliwal, S. S. (2009). Assessing employee's perception on health and safety management in public hospitals. *International Review of Business Research Papers*, 5(4), 54-72.
- Al-Anzi, N. M. (2009). Workplace environment and its impact on employee performance. Retrieved August 10, 2011, from <http://masterstudies.net/media/pdf>
- Aziah, B. D., Rusli, B. N., Winn, T., Naing, L., & Tengku, M. A. (2004). Prevalence and risk factors of job strain among laboratory technicians in Hospital University Sains Malaysia. *Singapore Medicines Journal*, 45(4), 170-175.
- Bakri, A., Mohd Zin, R., Mishan, M. S. & Mohammed, A. H. (2006) Occupational Safety and Health (OSH) Management Systems: Towards Development of Safety and Health Culture. *Proceedings of the 6th Asia-Pacific Structural Engineering and Construction Conference (APSEC 2006)*, 19-28.
- Bambra, C., Gibson, M., Sowden, A. J., Wright, K., Whitehead, M., & Petticrew, M. (2009). Working for health? Evidence from systematic reviews on the effects on health and health inequalities of organisational changes to the psychosocial work environment. *Prevention Medicine*, 48(5), 454-461.
- Banks, M., Clegg, C., Jackson, P., Kemp, N., Stafford, E., & Wall, T. (1980). The use of the General Health Questionnaire as an indicator of mental health in occupational studies. *Journal of Occupational Psychology*, 53(3), 187-194.
- Bjerkan, A. M. (2010). Health, environment, safety culture and climate –analysing the relationship to occupational accidents. *Journal of Risk Research*, 13(4), 445-477.
- Bohle, P., & Quinlan, M. (2000). *Managing occupational health and safety: a multidisciplinary approach* (2nd ed.). South Yarra: Macmillan Publishers Australia Pty Ltd.
- Borkar, R. (2010). Ergonomics in the workplace. Retrieved July 30, 2011, from <http://www.buzzle.com/articles/ergonomics-in-the-work-place.html>

- Buckle, P. W., & Devereux, J. J. (2002). The nature of work-related neck and upper limb musculoskeletal disorders. *Applied Ergonomics*, 33(3), 207-217.
- Carr, J., Kelley, B., Keaton, R., & Albrecht, C. (2011). Getting to grips with stress in the workplace: strategies for promoting a healthier, more productive environment. *Human Resource Management International Digest*, 19(4), 32-38.
- Cartwright, S., & Cooper, C. L. (1994) Healthy Mind; Healthy Organization— A Proactive Approach to Occupational Stress. *Human Relations*, 47(4) 455-471
- Che Rose, R., Kumar, N., & Gani, H. (2008). Environmental changes and collective bargaining priorities: analysis implications and outline for further research. *Journal of International Social Research*, 1(5), 684-705.
- Chee, H. L., & Rampal, K. G. (2004). Work-related musculoskeletal problems among women workers in the semiconductor industry in Peninsular Malaysia. *International Journal of Occupational Environment Health*, 10(1), 63-71.
- Clarke, S. (2006). Safety climates in an automobile manufacturing plant: the effects of work environment, job communication and safety attitudes on accidents and unsafe behaviour. *Personal Review*, 35(4), 413-430.
- Deeney, C., & O'Sullivan, L. (2009). Work related psychosocial risks and musculoskeletal disorders: potential risk factors, causation and evaluation methods. *Work*, 34(2), 239-248.
- Dunham, R. B., Smith, F. J., & Blackburn, R. S. (1977). Validation of the index of organisational reactions with the JDI, the MSQ and Faces Scales. *Academy of Management Journal*, 20(3), 420-432.
- Fang, D., Chen, Y., & Wong, L. (2006). Safety climate in construction industry: a case study in Hong Kong. *Journal of Construction Engineering and Management*, 132(6), 573-584.
- Genaidy, A., Salem, S., Karwowski, W., Paez, O., & Tuncel, S. (2007). The work compatibility improvement framework: an integrated perspective of the human-at-work system. *Ergonomics*, 50(1), 3-25.
- Gershon, R. R. M., Karkashian, C. D., Grosch, J. W., Murphy, L. R., Escamilla-Cejudo, A., Flanagan, P. A., Bernacki, E., Kasting, C., & Martin, L. (2000). Hospital safety climate and its relationship with safe work practices and workplace exposure incidents. *American Journal of Infection Control*, 28(3), 211-221.
- Gilworth, G. (2008). The role of health screening and ergonomics in reducing sickness absence. Retrieved July 1, 2011, from <http://www.backcare.org.uk/779-857/the-role-of-helth-screening-and-ergonomics-in-reducong-sickness-absence-html>

- Goldberg, D. P. (1978). *Manual of the General Health Questionnaire*. Windsor, England, NFER Publishing.
- Greiner, A. (2008). An economic model of work-related stress. *Journal of Economic Behaviour and Organization*, 66(2), 335-356.
- Hahn, S. E., & Murphy, L. R. (2008). A short scale for measuring safety climate. *Safety Science*, 46(7), 1047 – 1066.
- Hall, G. B., Dollard, M. F., & Coward, J. (2010). Psychosocial safety climate: development of the PSC-12. *International Journal of Stress Management*, 17(4), 353-383.
- Hayes, B. E., Perander, J., Smecko, T., & Trask, J. (1998). Measuring perceptions of workplace safety: development and validation of the work safety. *Journal of Safety Research*, 29(3), 145-161.
- Hoivik, D., Tharaldsen, J. E., Baste, V., & Moen, B. E. (2009). What is most important for safety climate: The Company belonging or the local working environment? – A study from the Norwegian offshore industry. *Safety Science*, 47(10), 1324-1331.
- Holt, A. S. J. (2005). *The Principles of Health and Safety at Work* (7th ed.). Leicestershire: Hascom Network Limited.
- Houtman, I., Jettinghoff, K., & Cedillo, L. (2007). *Raising awareness of stress at work in developing countries: a modern hazard in a traditional working environment: advice to employers and worker representatives*. World Health Organization Protecting Workers Health Series No. 6.
- Huang, Y. H., Chen, J. C., DeArmond, S., Cigularov, K., & Chen, P. Y. (2007). Roles of safety climate and shift work on perceived injury risk: A multi-level analysis. *Accident Analysis and Prevention*, 39(6), 1088-1096.
- Idrus, D., Abdul Wahab, S. R., Mat Shah, I., & Rees, C. J. (2009). How far is transformational leadership relevant to safety performance? *Malaysia Labour Review*, 3(1), 74-97.
- Jemoin, M. N. (2006). Status and future tasks of OHS in Malaysia. *International Congress Series*, 1294, 65-68.
- Katz-Navon, T., Naveh, E., & Stern, Z. (2005). Safety climate in health care organisations: a multidimensional approach. *Academy of Management Journal*, 48(6), 1075-1089.
- Kogi, K., & Kawakami (1997). Current research: ergonomics. *Environmental, Management and Health*, 8(5), 188-190.

- Kortum, E., Leka, S., & Cox. T. (2010). Psychosocial risks and work-related stress in developing countries: Health impact, barriers and solutions. *International Journal of Occupational Medicine and Environmental Health*, 23(3), 225-238.
- Lambert, V. A., Lambert, C. E., & Yamase, H. (2003). Psychological hardiness, workplace stress and related stress reduction strategies. *Nursing and Health Sciences*, 5(2), 181-184.
- Lambert, V. A., Lambert, C. E., Itano, J., Inouye, J., Kim, S., Kuniviktikul, W., Sitthimongkol, Y., Kanuangnit, P., Gasemgitvattana, S., & Ito. M. (2004). Cross-cultural comparisons of workplace stressors, ways of coping and demographic characteristics as predictors of physical and mental health among hospital nurses in Japan, Thailand, South Korea and the USA (Hawaii). *International Journal of Nursing Studies*, 41(6), 671-684.
- Leman, A. M., Omar, A. R., & Yusof, M.Z.M. (2010). Monitoring of welding work environment in small and medium industries (SMIs). *International Journal of Research and Reviews in Applied Sciences*, 5(1), 18-26.
- Levitt, R. E., & Samelson, N. M. (1993) *Construction safety management* New York: J. Wiley & sons.
- Lin, S. H., Tang, W. J., Miao, J. Y., Wang, Z. M., & Wang, P. X. (2008). Safety climate measurement at workplace in China: A validity and reliability assessment. *Safety Science*, 46(7), 1037-1046.
- Mahalingam, A., & Levitt, R. E. (2007). Safety issues on global projects. *Journal of Construction Engineering and Management*, 133(7), 506-516.
- Makhbul, Z. M., Idrus, D., & Abdul Rani, M. R. (2007). Ergonomics design on the work stress outcomes. *Jurnal Kemanusiaan*, 9, 50-61.
- Malik, N. (2011). A study on occupational stress experienced by private and public bank employees in Quetta City. *African Journal of Business Management*, 5(8), 3063-3070.
- Mbakaya, C. F. L., Onyoyo, H. A., Lwaki, S. A., & Omondi, O. J. (1999). A survey on management perspectives of the state of workplace health and safety practices in Kenya. *Accident Analysis and Prevention*, 31(4), 305-312.
- McCaughey, D., McGhan, G., DelliFraine, J. L., & Brannon, S. D., (2011). Perception is reality: How patients contribute to poor workplace safety perceptions. *Health Care Management Review*, 36(1), 18-27.
- Mirela, B. (2009). Managing stress – The key to organizational wellness. *The Journal of the FACULKTY OF Economics – Economic*, 4(1), 112-116.

- Mullarkey, S., Wall, T. D., Warr, P. B., Clegg, C. W., & Stride, C. (1999). *Measures of job satisfaction, mental health and job related wellbeing*. Sheffield: Institute of Work Psychology and ESRC Centre for Organization and Innovation.
- Mustafa, S. A., Kamaruddin, S., Othman, Z., & Mokhtar, M. (2009). The effect of ergonomics application in work system on mental health of visual display terminal workers. *European Journal of Scientific Research*, 31(3), 341-354.
- Niu, S. (2010). Ergonomics and occupational safety and health: An ILO Perspective. *Applied Ergonomics*, 41(6), 744-753.
- Nordin, R., Abidin, E., & Lin, N. (2007). Working conditions, self-perceived stress, anxiety, depression and quality of life: A structural equation modelling approach. *BMC Public Health*. Retrieved August 15, 2011, from <http://www.biomedcentral.com/1471-2458/8/48>
- Punnett, L., & Wegman, D. H. (2004). Work-related musculoskeletal disorders: The epidemiologic evidence and the debate. *Journal of Electromyography and Kinesiology*, 14(1), 13-23.
- Rowan, P. M., & Wright, P. C. (1995). Ergonomics is good for business. *Facilities*, 13(8), 18-25.
- Sha, G. (2010). Ergonomic solutions for call centre stress. Retrieved March 30, 2011, from <http://www.articlesbase.com/corporate-articles/ergonomic-solutions-for-call-center-stress-3653681.html>
- Smith, F. J. (1976). Index of Organizational Reactions. *Catalogue of Selected Documents in Psychology*, 6(54), 1265.
- Soehod, K., & Lekha, L. K. P. (2007). *Law on safety and health in Malaysia*. Project Report Universiti Teknologi Malaysia. Retrieved July 1, 2011, from <http://www.eprints.utm.my/2660/1/7177.pdf>
- Srivastava, A. K. (2008). Effect of perceived work environment on employees' job behaviour and organisational effectiveness. *Journal of the Indian Academy of Applied Psychology*, 34(1), 47-55.
- Stranks, J. (2001). *Health and Safety Law* (4th ed.). Harlow: Pearson Education Limited.
- Stranks, J. (2006). *The Manager's Guide to Health and Safety at Work* (8th ed.). London: Kogan Page Limited.

- Varonen, U., & Mattila, M. (2000). The safety climate and its relationship to safety practices, safety of the work environment and occupational accidents in eight wood-processing companies. *Accident Analysis and Prevention*, 32(6), 761-769.
- Yusoff, M. S. B., Abdul Rahim, A. F., & Yaacob, M. J. (2009). The sensitivity, specificity and reliability of the Malay version 12-items General Health Questionnaire (GHQ-12) in detecting distressed medical students. *ASEAN Journal of Psychiatry*, 11(1), 1-8.