CHAPTER 1

INTRODUCTION

1.0 INTRODUCTION

In this chapter will discuss about the background, problem statements, and research objectives. Besides that, hypothesis of this study will be develops. Next, will discuss about scopes of study, significance of study, operational definition of study and expected results.

1.1 BACKGROUND OF STUDY

Noise is one of the most important environmental factors, which affects the workers' health and efficiency (Noweir and Zytoon, 2013). Noise pollution is now considered one of the main problems in urban areas: actually noise is one of the major pollutants in both workplaces and living space (Tomei et al., 2000). This is due to the increasing number of noise sources, such as the technological and industrial progress (Caciari et al., 2013). Exposure to occupational noise, that is, unwanted sound, has been linked with variety of adverse effects upon well-being over and above its obvious relationship with hearing loss (Leather et al., 2013).

Stress defined as the acceptance resources of an individual, social system or tissue system had been exceed or tax by any event in which environmental demand, internal demand, or both (Victoria, 1993). Stress can be caused by unpleasant or dangerous physical conditions such as crowding, noise, air pollution, or ergonomic problems (Keshavarz and Mohammadi, 2011). According to Neely (2007), workers are daily exposed to several factors such as noise, vibration and stress that can adversely
affect the performance of work, for example, the sound being produce from a piece of equipment maybe be so loud and distract the worker and cannot hear an important signal, by this may lead to a higher risk for accidents and injuries.

McDonald (1989) reported a dose-response relationship among blue collar workers between occupational noise exposure and symptoms of psychological distress. Based on (Bigert et al., 2004) statement, they mentioned that there 30 previous studies regarding the interaction between stress and noise exposure, the studies include various types of noise, such as occupational noise, traffic noise or aircraft noise. Psychological, physiological, behavioral stress in people can be cause by the noisy environment and influence sleep, work efficiency, performance, communication abilities (Sheeladevi et al., 2006). In the blue-collar environment, noise can be a particular work stressor (Tennant, 2001).

To protect the workers, Malaysia had established regulation to govern the noise exposure that will be exposed by the workers, which is Factory and Machinery (Noise Exposure) Regulations 1989, under Factory and Machinery Act 1967.

1.2 BACKGROUND OF PROBLEM

Textile Industries are developing rapidly to meet the necessities of human beings by supplying the basic needs of cloth for day to day needs, for decoration purposes and in the world’s fashion. The growth of textile industry in accelerated in the early 1970s when the country embarked on export-oriented industrialization. Malaysia’s manufacturing focus has resulted in the continued growth of the textile and apparel industrial, according to Malaysian Industrial Development Authority (MIDA), the government’s industrial development promotion and coordination agency. While, based on the information by Malaysian Investment Development Authority (MIDA), in 2011, the textile industry was the 10th largest export earner, contributing approximately 2.3 per cent to Malaysia’s total exports of manufactured goods. Exports of textiles and textile products for the year 2011 were RM10.8 billion while imports amounted to RM6.6 billion. Currently, the textile industry employs more than 68,000 workers.
With the rapid development, there are several issues that occurring in the textile industry. Textile workers are exposed to cotton fiber, dust, noise and many hazardous chemicals by this the major occupational health issues had been raised in the textile industries (Lu et al., 2013). Noise pollution is often most severely exposed by the workers in textile industry (Lee, 1986). Low frequency large amplitude noise was been chronically exposed by the textile workers (Cardoso et al., 2009). In the textile industry have several work stations, which are from blow room to carding, spinning, winding, warping, sizing, weaving, grey checking, desizing, bleaching and scouring, dyeing, and lastly finishing. An occupational noise survey had been carried out found that the sound levels were highest in the weaving and spinning sections (Talukdar, 2001). According to Lee (1986), ring spinning frame is one of the major noise sources in the textile industry, the noise levels is range from approximately 90dBA to 100dBA. Based on the survey, the main cause of high noise level in the weaving and spinning section are likely due to outdated old machinery, poor design and construction and crowding of the workplace (Ashraf et al., 2009).

From Table 1.1, the report by (Basu, 2000), a retired General Manager from Reliance Industries Ltd, the noise level in weaving department in textile industry is 100 – 120 dBA. While for spinning department, there are four types which are ring spinning (90-100 dBA), Schubert salzer spincomet rotor spinning (84 dBA), schlafhorst autocoro rotor spinning (85 dBA), open end rotor spinning (100 dBA). The rest of the work stations just around 80 dBA to 100 dBA. According to Lee (1986), ring spinning frame is one of the major noise sources in the textile industry, the noise levels is range from approximately 90 dBA to 100 dBA. Although the sound exposure level is lower, but still exceeding the limit the stated in the regulations.