

CHAPTER ONE

INTRODUCTION

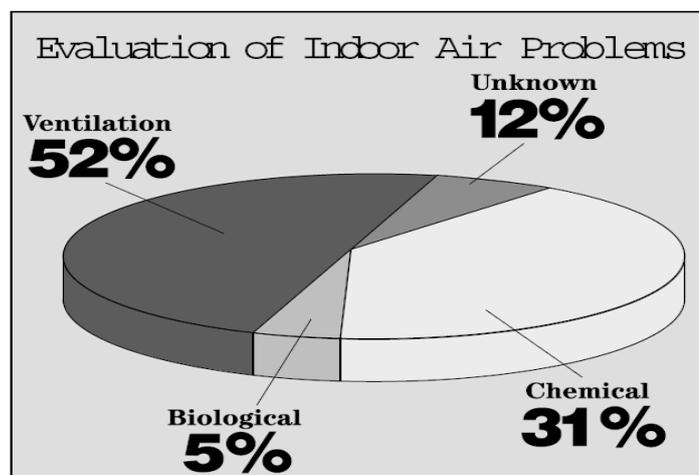
1.1 BACKGROUND

In the modern world, an increasing proportion of the workforce is working indoors in offices. As this trend continues, exposure to office environments is likely to influence the health, well-being, and productivity of more and more workers. Some office workers may feel relieved to step into their air-conditioned offices and stop breathing the fumes of the urban outdoors. However, the air they breathe inside their offices may be even more hazardous to their health. According to a recent study by the International Labor Organization [ILO] (2008), Thailand ranks third among countries where people are working excessively long hours-47 percent of Thais work more than 48 hours per week. It means that many of them are spending more time at the office than in their homes.

Nowadays, most people spend approximately 90 percent of their time indoors, particularly in an office building. Due to the energy crisis of 1973, the measures taken to conserve energy have been the “tightening” of existing buildings and the design and construction of “tighter” new buildings. Therefore, these buildings are insufficiently ventilated. People living and working in these tightened buildings begin to feel uncomfortable. They experience illnesses associated with particular buildings. Their symptoms include headache, eye, nose, or throat irritation, dry cough, itchy skin, dizziness and nausea, fatigue, and lack of concentration (Environmental Protection Agency [EPA], 2008, p. 1). Chatchai Ekpanyaskul (ฉัตรชัย เอกปัญญาสกุล, 2548) mentioned that during the past two decades, a new civilized syndrome with no specific etiology among workers in modern office buildings has become apparent in occupational and environmental practice. Its symptoms usually develop after entering the building and are relieved soon after leaving or staying away from that building. Its occurrence is associated with indoor environmental quality which is affected by occupants, work activity, office equipment, plants, furnishing, building material, and ventilation system of the building. These work-related symptoms have been defined as “Sick Building Syndrome” (World Health Organization [WHO], 1983, p. 129).

Sick Building Syndrome (SBS) refers to health and comfort problems associated with working or being in a particular building. No specific illness or cause can be identified. World Health Organization estimated that up to 30% of newly constructed and remodeled buildings worldwide may have problems involving Sick Building Syndrome related to indoor air quality (IAQ). One national survey reported that 25% of American workers feel that the quality of their workplace air affects their work adversely and 20% of the office workers in the United States may be affected by Sick Building Syndrome. Often this condition is temporary, but some buildings have long-term problems. Frequently, problems result when a building is operated or maintained in a manner that is inconsistent with its original design or prescribed operating procedures. Sometimes indoor air problems are a result of poor building design or occupant activities. Most indoor air pollution complaints are due to a lack of fresh air. Around 50% of the Sick Building Syndrome cases result from poor ventilation. Air can become stuffy or stagnant when there is not enough fresh air entering a building. This lack of fresh air can also cause contaminants to build up inside the building. When too little fresh air enters the building, chemicals, and other organisms are more likely to spread. Also, poor temperature or humidity control can make workers feel more uncomfortable (National Institute for Occupational Safety and Health [NIOSH], 1988, p. 5).

Figure 1. Chart of the sources of air pollution



Note. From *Hazard Evaluations and Technical Assistance Branch* (p. 5), by National Institute for Occupational Safety and Health. Retrieved August 20, 2008 from <http://www.seiu.org/pdfs/BldMsick.pdf>

It's important that buildings provide a healthy, safe and comfortable environment for occupants. Considerable attention has recently been given to the high incidence of sickness among people who work in modern office buildings. Sick Building Syndrome is not only an obvious concern to the sufferer, but has commercial implications, in terms of increased absenteeism, reduced productivity, increased staff turnover, and low morale, etc.

1.2 STATEMENT OF THE PROBLEM

This study aims to answer the following questions:

1.2.1 Main Research Question

Are office workers aware of Sick Building Syndrome?

1.2.2 Sub Research Questions

1. To what extent do office workers know the causes of Sick Building Syndrome?
2. How well do office workers understand the symptoms of Sick Building Syndrome?
3. How well are office workers aware of the prevention of Sick Building Syndrome?

1.3 OBJECTIVES OF THE STUDY

The objectives of this study are the following:

1.3.1 Main Objective

To explore the degree of awareness of Sick Building Syndrome of office workers in the Silom area.

1.3.2 Sub-Objectives

1. To measure to what extent office workers know the causes of Sick Building Syndrome.
2. To investigate how well office workers understand the symptoms of Sick Building Syndrome.
3. To ascertain how well office workers are aware of the prevention of Sick Building Syndrome.

1.4 DEFINITION OF TERMS / VARIABLES AND DEFINITIONS

The definition of the terms of this study is as follows:

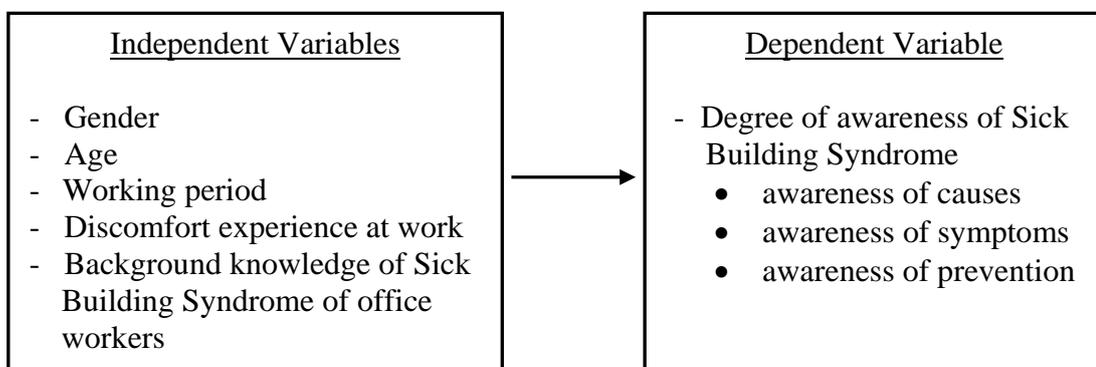
1) Sick Building Syndrome means an illness affecting workers in office buildings, characterized by skin, eye, nose, or throat irritations, headache, and respiratory problems, and thought to be caused by indoor pollutants, microorganisms, or inadequate ventilation.

2) Awareness of Sick Building Syndrome of the office workers means awareness, understanding and knowledge of office workers towards the causes, the symptoms and the prevention of Sick Building Syndrome.

3) Office workers mean those people at every age and gender who work full-time in air-conditioned buildings in the Silom area.

Independent variables influence a dependent variable as shown in Figure 2.

Figure 2. Conceptual framework of awareness of the office workers in Silom area on Sick Building Syndrome



1.5 SCOPE OF THE STUDY

The research focuses on office workers who work full-time in air-conditioned buildings in the Silom area, considered as the central business area where many office buildings are located. Therefore, part-time and temporary office workers are not included in the sampling group. Moreover, security guards, maids, messengers and office visitors are not selected as the subjects.

1.6 SIGNIFICANCE OF THE STUDY

1.6.1 The results of this study will reveal the degree of awareness of Sick Building Syndrome of office workers.

1.6.2 The findings will be useful to office workers to concentrate more about their health and realize the work hazard when they cannot avoid working in an air-conditioned building.

1.6.3 The results of the study will provide some insight for employers in terms of poor working environment affecting their employees' health. The employers will be able to improve their workplaces or raise health awareness to their employees by giving knowledge and information related to sickness at work to help them work effectively. When every office worker is healthy, it will decrease absenteeism, increase productivity, and reduce staff turnover and low morale.

1.7 ORGANIZATION OF THE STUDY

The study is divided into five chapters as follows:

Chapter 1 is the introduction. It includes background of the study, statement of the problem, objectives of the study, variables and definitions, scope of the study, significance of the study, and organization of the study.

Chapter 2 reviews related literature consisting of theories, concepts as well as relevant research.

Chapter 3 covers research methodology regarding subjects, materials, procedures, and data analysis.

Chapter 4 presents the results of the study.

Chapter 5 provides conclusions, discussions and recommendations for further study.