

A STUDY OF STRESS LEVELS AND STRESS FACTORS TOWARD EMPLOYEES:

A CASE STUDY AT PROVINCIAL ELECTRICITY AUTHORITY

A MASTER'S PROJECT

BY

PEERADA SIYAWAN



Presented in Partial Fulfillment of the Requirements for the

Master of Arts Degree in Business English for International Communication

at Srinakharinwirot University

May 2011

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AN ABSTRACT

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This study aims to assess the work stress levels of the employees in the Finance Division at Provincial Electricity Authority (PEA). It also determines the leading factors that caused stress among the employees. Thirty permanent employees were randomly selected to respond to the questionnaires. The Suan Prung Stress Test-20 (SPST-20) was used to assess the level of stress while the Warren and Toll (1996) criteria were used to identify the work stress factors. The findings were analyzed through frequency, percentage and mean.

It was found that the PEA Finance Division employees were subject to stress at a moderate level. “*Workplace environment and conditions*” and “*workload*” were the two factors that most likely to cause work stress among the PEA Finance Division employees.

การศึกษาระดับความเครียดและปัจจัยที่มีผลให้เกิดความเครียดต่อพนักงาน

กรณีศึกษาการไฟฟ้าส่วนภูมิภาค



เสนอต่อบัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ เพื่อเป็นส่วนหนึ่งของการศึกษา
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การศึกษานี้มีวัตถุประสงค์เพื่อประเมินระดับความเครียดและศึกษาปัจจัยสำคัญที่
ก่อให้เกิดความเครียดของพนักงานกองการเงิน การไฟฟ้าส่วนภูมิภาค (กฟภ.) กลุ่มตัวอย่างคือ
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ความเครียดของสวณปรุ่งจำนวน 20 ข้อ ในการประเมินระดับความเครียด และใช้เกณฑ์ทฤษฎีของ
Warren และ Toll เพื่อสำรวจปัจจัยความเครียด การวิเคราะห์ผลการศึกษาด้วยวิธีสถิติพรรณนา ซึ่ง
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ผลการศึกษาพบว่า พนักงานกองการเงิน การไฟฟ้าส่วนภูมิภาค มีความเครียดอยู่ในระดับ
ปานกลาง สภาพแวดล้อมในที่ทำงานและภาระงานเป็นสองปัจจัยที่มีแนวโน้มว่าเป็นสาเหตุหลักที่ทำให้
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The Master's Project Advisor, Chair of Business English for International Communication and Oral Defense Committee have approved this master's project, *A Study of Stress Levels and Stress Factors toward Employees: A Case Study at Provincial Electricity Authority*, by Peerada Siyawan as partial fulfillment of the requirements for the Master of Arts Degree in Business English for International Communication of Srinakharinwirot University.

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May....., 2011

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Peerada Siyawan

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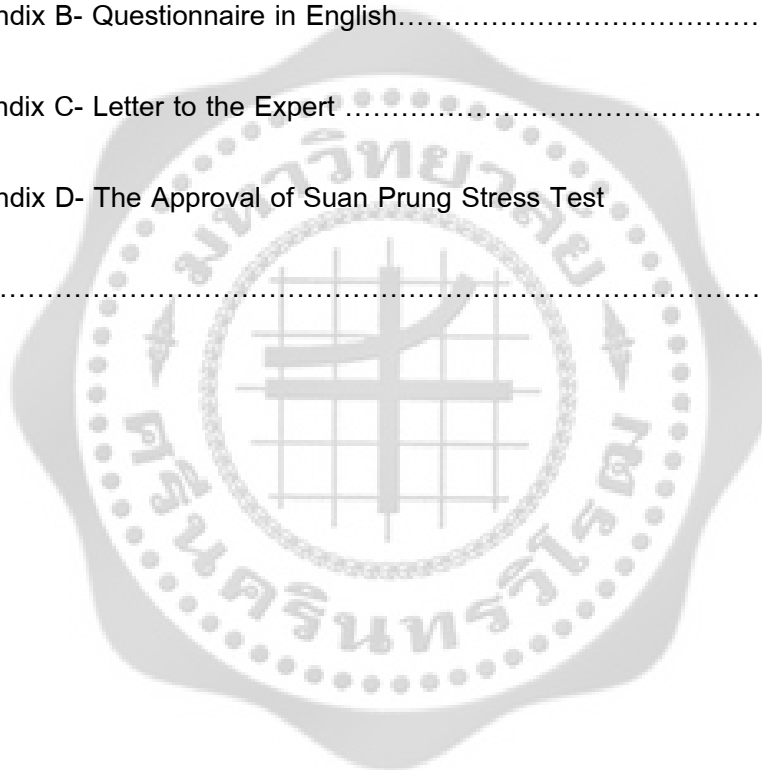
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CHAPTER 1

INTRODUCTION

Background of the Study

Work stress plays an important role in an organization (World Health Organization [WHO], 2003). Most people often think that stress creates negative feelings and bad mood. However, stress can sometimes motivate people to perform their tasks at their best, thus leading to positive results (Warren & Toll, 1996). A certain amount of stress is acceptable in a workplace, but an excessive amount of stress can cause unproductive outcomes. Stress can produce both positive and negative effects upon employees' performance (Hellriegel, Slocum, & Woodman, 1998). For example, a lack of privacy at workplace and frequent intrusion by visitors can easily distract a busy finance officer that she loses her concentration while issuing cheques or calculating figures. On the other hand, multiple tasks assigned to an employee under a tight schedule can pose a great challenge for her. Therefore, the organization and its employees need to understand the causes and effects of stress and learn how handle them wisely.

Performance can be affected by one or more factors relating to employees and their working environments (Dubrin & Ireland, 1993). One employee may have multiple roles at work. One of them can be a team leader supervising her team players to ensure that everyone is performing his or her tasks properly. Each employee is to observe reporting line, which is a vertical route in a hierarchy, or is responsible to the next person higher up, that she is expected and required to play her roles in a certain way (Griffin & Moorhead,

2009). This explains why a person with far too many responsibilities feel so disoriented and confused that she can neither manage her time nor balance her roles, and it can affect her performance as a result.

Welford (1973) points out that stress occurs when there is an imbalance between the employees' capacities and the demands of the tasks, environmental situations as well as social circumstances, which either over load or under load the employees. At work, a person may find certain activities to be far too complicated for her. The employee who has more tasks than she can handle will obviously end up with anxiety and tension.

Conversely, the one who has only a few tasks to perform can get into such boredom. In the latter case, her abilities exceed the demand of the work. In addition, it is also implied that the supervisor can rely on the competence of the former than the latter (Devereux, Hastings & Noone, 2009). Work stress occurs when the demand of the job does not match the capabilities, skills and needs of the employees (National Institute for Occupation Safety and Health [NIOSH], 1999).

The interpersonal relationship (among supervisors, subordinates and colleagues) is one significant factor that gives rise to work stress situations (Jex, 1998). A person becomes involved with others in such way that he must be either a team player or a team leader. As Liu and Batt (2010) noted that the supervisor's proper guidance and instructions can improve the employee's performance. The supervisor should be supportive to the employees and give feedback on their performance. Unfortunately, some socially interactive situations such as low trust, poor relationship with colleagues and lack of support from the supervisors can create a variety of work stress scenarios.

In fact, personal problems can increase stress at work (Chandola, 2010). Financial difficulties, long-term health issues and poor relationship with family members may produce severe impact on the employee that she cannot concentrate on what she is doing at work. This same employee may also bring home her work stress. In addition, women employees tend to be under stress more than men because women spend eight hours straight, they still have to take care of children and housework. In some countries (such as India), the facts that women get lower pay and unequal opportunities for career growth and performance assessment are the major concerns that kept working women under unreasonable stress (The Times of India, 2010).

In this study, the participants were the finance officers working in Finance Division, PEA headquarter. The employees are likely to suffer from work stress through performing any of the following tasks:

- Management of cash and fund transfers
- Age of debt analysis and follow-ups on late payments
- Handling high volume of customers at the front office
- Receiving payments and administration of incomes through several service channels
- Daily and monthly report generation
- Development of payment methods

The finance officers must take meticulous care in dealing with detailed-oriented items such as bank accounts, amount of money in number and words, transaction terms and conditions, customer's identification numbers and meter serial numbers. All

transactions require a high degree of accuracy as the organization can incur losses or damages through transfer of incorrect or invalid fund into an account. For example, payment should not be made by cheque or wire transfer when there is insufficient fund in the bank account. Any invalid transaction will subject PEA to penalty, causing loss of faith and reputation.

As PEA provides services to the public, it must avoid any kind of complaints and do whatever it can to enhance its image and reputation. Working routinely with figures can cause stress already, but the finance officers have to take care of the special projects as occasionally required by others divisions. The one that causes severe stress is the Core Business Software (CBS) Project, which is still in progress. Since 2006, PEA has tried to improve its operation by using the CBS, but its organization is running into difficulties in system integration, which involves data conversion for migration from the legacy system to the new system. During this transition period, the finance officers have to spend long hours working on the computers and other office equipment that they end up with physical and mental strain (Sanderlin, 2004). PEA is a very large organization with customers in 73 provinces in Thailand. Its day-to-day business involves complicated processes that are subject to stringent quality control. Having to deal with so many customers and to work by the rules and regulations to avoid mistakes and disciplinary actions, PEA employees must take meticulous care in everything they do. Hence, they could become stressed. The work itself involves decision making. Therefore, the employees have to physically and mentally sound to be able to pay full attention to work and make the right decisions.

Objectives of the Study

The objectives of this study are:

1. To assess the stress levels of the employees in the Finance Division at Provincial Electricity Authority (PEA).
2. To determine the leading factors that cause stress among the employees at Provincial Electricity Authority (PEA).

Research Questions

The research questions are as follows:

1. What are the levels of stress perceived by the employees at Provincial Electricity Authority (PEA)?
2. What are the leading stress factors among the employees at Provincial Electricity Authority (PEA)?

Significance of the Study

The findings can be used by the executives in planning and development of organizational policies to enhance the potential of the employees in the organization. They can also be used as guidelines on elimination and alleviation of stress in the workplace. Furthermore, this study helps the employees understand stress at any level, which will hopefully lead to the improvement of their living and working conditions.

Scope of the study

The study focused on the work stress of permanent employees of the Finance Division, PEA headquarters. Thirty participants were randomly chosen to participate in the study. In March 2011, the questionnaires were distributed and collected at PEA office.

Definition of Terms

Work stress refers to a physical and mental response triggered off by an employee when his capabilities do not match his organization's demands.

Employee refers to a person employed on a permanent basis in the Finance Division, Provincial Electric Authority (PEA).

Job performance refers to the assessment of the results of an employee's work.

CHAPTER 2

REVIEW OF RELATED LITERATURE

This study aims to explore stress levels and stress factors in the workplace. This chapter presents an overview of Provincial Electricity Authority (PEA), work stress and previous studies on stress in the workplace.

Overview of Provincial Electricity Authority (PEA)

The Provincial Electricity Authority of Thailand is a state enterprise under the Ministry of Interior. PEA provides utility services through generation and sale of electric energy to 73 provinces in Thailand. PEA has 900 sub-offices and 15,444,335 customers throughout the country (which accounts for 99% of the country's area), except Bangkok, Nontaburi and Samut Prakan. PEA's customers can be classified into four categories: resident 90.68%, business 7.35 %, government and non-profit organizations 0.92 % and others 1.2 %.

The main job responsibilities of finance officers in Finance Division, PEA headquarter are as follows:

1. Management of cash and transfer of funds – To manage cash of the organization and transfer money to 900 sub-offices and other customers as required. The PEA employees who perform these tasks are likely to be under stress at the end of the month when there are a lot of fund transfers to sub-offices in which all the accounts must be properly managed to

ensure sufficient funds for transfers to PEA's major creditors, and all transactions will be subject to audit by EGAT to avoid duplication of transactions.

2. Age of debt analysis and follow-ups on late payments – To deal with heavy incoming calls while working on computerized customer database. Many customers are unable to make their payments and are in debt to PEA—these debtors include businesses, residents, government and non-profit organizations and others. To protect PEA's interests, the employees must, on a monthly basis, perform age of debt analysis and issue notifications to the customers who are in arrears with payments. The employees are likely to feel stressed when the customers who get their power supply cut off make complaints.

3. Handling high volume of customers at the front office – To deal with more than 100 customers daily, and this number can very well increase to 200 to 300 on the due date. Customers come to the front office either to make or collect payments by cheque or in cash. In Finance Division, dealing with many customers continuously can cause blurred vision and fatigue. The employees who have to work in this unpleasant environment can easily become stressed.

4. Receiving payments and administration of incomes through several service channels
– To manage and organize online and mobile settlements through direct debit from customer's bank accounts, credit cards, representative bill collectors such as Counter Service, Pay at Post, Just Pat, Jay Mart Paypoint, mPay Station, True Partner and Lotus. Approximately 2,388,461 customers make payments through these channels every month.

5. Daily and monthly report generation – To submit reports on financial transactions -- such as daily balance report, daily purchase and sales taxes and monthly payment methods--to several superiors in line up to the Finance Deputy Governor, which is the highest authority in the Account and Finance hierarchy.

6. Development of payment methods – The Finance Division's mission is to devise new methods of payment constantly for the convenience of our customers. Some of the potential employees shall become the parts of the team players in the development and implementation of payment method plans. The development of payment methods involves many complicated stages such as consultation with legal and IT experts, and communication with end users that long meetings have to be convened. Having spent so much time at each meeting, the employees fall behind in their work that they have to rush about to get their work done by the end of the day. The demand of such work can easily put the employees under stress.

Overview of Work Stress

This section gives an overview of work stress. Types and degrees of stress are defined, and levels of stress are elaborated.

In most research studies, work stress is defined as an individual's emotional and physical response to a situation in which the work demands exceed her abilities. Stress also occurs when an individual fails to response appropriately to the imbalances between the work demands and her knowledge, skills and abilities. The situation becomes worse when there is

neither support from her supervisors and colleagues nor proper control over the work processes (Welford, 1973; McShane & Glinow, 1999; Lazarus, 2000; WHO, 2003; Colligan & Higgings, 2005).

Jex (1998) describes work stress in three different ways. First, stress refers to the consequence of the failure of an employee to respond appropriately to stressors or stimuli in the environment. Second, it refers to the emotional or physical strains that occur when the work demands exceed the employee's capabilities. Third, it refers to the entire process of work that affects all the employees. Furthermore, female employees tend to be under irrational stress more than men do. The major concerns that kept women experienced stress are payment parity, equal opportunities, career advancement and performance appraisal. For instance, women have too much working at work and also spend the rest of the day working at home such as childcare and housework (The Times of India, 2010).

According to Yerkes–Dodson law developed by Yerkes and Dodson (1908), performance increases with physiological or mental arousal (stress), but when the level of arousal become too high, performance decreases. The positive and negative aspects of stress are most essential in their relationships (Warren & Toll, 1996; Hellriegel, Slocum, & Woodman, 1998; Jex, 1998). In Figure 2.1, the inverted U-shape represents the relationships between stress and performance. It illustrates that when employees are subjected to stress at a low level, they are not motivated, alert or challenged to perform their tasks with their utmost capabilities. Then, as stress builds up to the optimum level they feel stimulated, excited and

focused that they perform their tasks with their best efforts, especially during the absolute peak period. Finally, if the employees are subjected to stress at a level that is far too high for a constant period of time that the stress event becomes repetitive, their performance will decline accordingly (Sullivan & Bhagat, 1992; Warren & Toll, 1996).

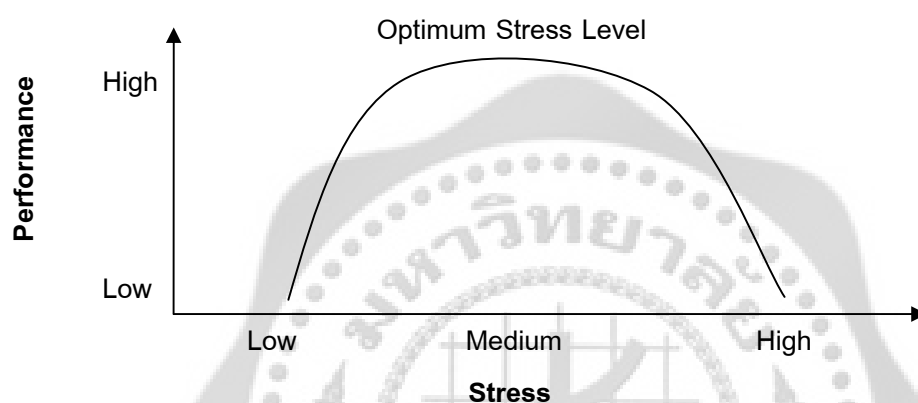


Figure 1 A U-shape representation of relationships between stress and performance.

In summary, stress is yet acceptable in the workplace because it has both positive and negative effects on the employees' performance. When subjected to stress at an optimum level, each employer can easily accomplish her task, no matter how complicated the task is.

Types and Degrees of Stress

This section discusses the types and degrees of stress. Based on one's own experience and personality, an individual perceives stress differently; therefore, he or she adopts different kinds of strategies in dealing with stressful situations. In most cases, stress at

a moderate level can have a positive impact on job performance (Warren & Toll, 1996; Hellriegel, Slocum, & Woodman, 1998; Jex, 1998).

Types of Stress

Stress theories are the groundwork for the research because theorists view stress from different perspectives such as occupation related stress, impact of stress upon an individual and psychological effects of stress. Therefore, studies on stress are more or less based on these theories.

According to Schermerhorn (2010), stress is a state of tension experienced by individuals facing extraordinary demands, constraints, or opportunities, and further divided it into two types: constructive stress and destructive stress. Constructive stress produces positive effects on the employees' attitude and performance. It energizes employees which helps boost performance and encourages increased effort, stimulates creativity, and enhances diligence, while still not overwhelming the individual and causing negative outcomes. On the other hand, destructive stress produces negative effects on the employees' attitude, and it impairs their job performance.

The American Psychological Associations [APA] (n.d.) divided stress into three types: acute, episodic and chronic stress.

First, acute stress is the most common form of stress from which people can gain advantage. This short-term stress can be exerted by the demand and pressure of a recent

experience. The symptoms of acute stress are anger, irritability, anxiety, depression, tension headache, back pain, jaw pain, chest pain, muscle tensions, diarrhea, dizziness, migraine headache and cold hands and feet in varying degree of combination (Lazarus, 2000; Scott, 2005; Bailey, 2008). Once the situation is resolved, the stress diminishes.

Second, the main characteristic of episodic acute stress is an intense reaction to everything. The employees who are subjected to this type of stress can be associated with an excessive competitive drive, aggressiveness, impatience with an insistent sense of time urgency personalities. In addition to acute stress, common symptoms of episodic acute stress are persistent tension headache, hypertension and heart disease (APA, n.d.)

Third, chronic stress which is developed as a result of a constant worry in which the issue has never been resolved. This kind of stress might be a traumatic experience that arose during childhood, such as family abuse, dysfunctional family or a long term illness of a family member. This type of stress can give rise to personal health issues such as heart disease or gastric ulcers (Bailey, 2008).

Degrees of stress

Individuals' health and performance can be affected by stress at different levels, depending on their perception, sensitivity and adaptation to stress.

According to Frain and Valiga (1979), the measurement of stress level can be divided by the duration of stress which affects the individuals (as cited in Saoharitawong, 2001; Suwantip, 2002; Yoadchan, 2006), and stress can be divided into four levels:

1. Day to day stress People who are exposed to this kind of stress will be adjusting to the situations unconsciously. Such circumstances occur in everyday life such as living in a busy city, having to hurry to and back from work during rush hours. It is, however, not a life threatening condition.

2. Mild stress People who are exposed to stress at this level are alert and active in the situations such as job interview and important incident in life. This stress will diminish in a matter of minutes or hours.

3. Moderate stress People who are exposed to stress at a moderate level for a long time may fail to adjust themselves accordingly within a short time. These stressful situations include new employment, heavy workload and serious illness. Being in any of these situations, individuals are in between success and failure, depending on whether or not he or she can keep everything under control. Failure to keep everything under control will result in emotional outburst for stress reduction. The stress at this level can last for weeks or even months.

4. Severe stress People feel threatened when they are in stressful situations. Long lasting stressful situations can be severely damaging. Failure to adapt to the situations will

result in distractions and impaired performance at work as well as negligence of family. The stress at this level usually lasts for months or even years.

The Suan Prung Stress Test-20 (SPST-20) developed by Mahatnirankul, Pumpisanchai and Tapanya (1997) divides stress into four levels:

1. Mild stress This kind of stress produces slight strains that dissipate in a short time. It is stress in daily life, not a serious threat. Anyone can response to it appropriately without much effort. An example of the event that causes mild stress is traveling to and back from work everyday. The employees have to face heavy traffic congestion in Bangkok that they feel stressed over being late for work. However, they feel relieved by the time of arriving at work.

2. Moderate stress An individual who is subjected to stress at a moderate level will be anxious and fearful to a certain extent at the time of response to the stress event. It is not harmful. It is in fact quite normal. The individual will feel challenged by the event. An example that best illustrates the event that causes moderate stress is the finding of incorrect cash balance at the end of the day. The employees involved will feel moderately stressed that they become fully alert and pay more attention to work that they can rectify the errors within the deadline.

3. High stress An individual who is subjected to stress at a high level cannot alleviate strains within a short time. Long-term high stress situations give rise to personal health issues such as high blood pressure or heart disease. It can also lead to chronic stress. For example,

in dealing with customers there are certain risks of conflicts that can lead to complaints. When exposed to such risks those who are not in good health can end up suffering from chronic stress.

4. Severe stress Being subjected to severe stress over a long period of time, an individual may experience emotional and physical threats so much that he fails to respond to them appropriately. As a result, she feels exhausted and burnt out. Being in a severe stress event over a long period of time, she is likely to develop emotional and physical disorders.

In summary, the types and degrees of stress affect the employee's performance. Under PEA working conditions, a front office cashier, who normally deals with over 100 customers on a regular day-to-day basis, can be pushed to her limit on a hectic due date that she is required to cope with 200 to 300 customers in time. The perceived stress forces her to beat the tight deadline by the end of the day. In this case, a supervisor with aggressive and strong personality is able to achieve the difficult and time constraint tasks in a timely manner. However, when the degree of stress continues to increase while the stressful situations remain unsolved, the performance of the employee and organization will, in the long run, be permanently impaired.

Methods of Stress Measurement

Stress can be measured in different ways. According to Kanjanawong & Kompayak, (2002) one way to determine one's stress level is to observe physiological changes, life events and symptoms of stress.

1. Physiological Arousal Physiological arousal can be determined by the amount of cortisol (a hormone secreted by the adrenal glands) and the time of stress, which involve in blood pressure regulation. Therefore, the measurement of the two values can determine the level of stress.

2. Life Events Life events can also be used to determine stress levels. The target group is given questions on life events of the past 24 months, and they are asked to response to those questions by giving points indicating the severity of stress with the higher points for higher stress and lower points for lower stress. Holmes and Rahe Scale, for example, is used to determine whether stressful events might cause illnesses (Holmes & Rahe, 1967). However, the scale has certain disadvantages: It only measures the stressful events that cause illnesses and some of the choices are vague, e.g. "Change in responsibilities at work" as it does not identify the stress severity level.

3. Stress symptom To measure physiological reactions to mental stress, these tools are created:

- *The Health Opinion Survey (HOS)* is a measure of general mental health in response to temporary stressors. The HOS was developed as a tool to identify individuals with

psychological disturbances in the general population (MacMillan, 1957). The instrument contains 20 items, each describing a physical symptom (e.g., “Are you bothered by your heart beating hard?”).

- *The Suan Prung Stress Test -20 (SPST-20)* is capable of measuring the following: 1) sensitivity to stress, 2) sources of stress and 3) physiological reactions to stress can be used to determine the symptoms related to muscular stress, nervous system, emotional stress, cognitive stress, etc. The test determines how much daily activities produce work related stress and how sensitive an individual is to stress. SPST has already been examined by experts and tested by the Normalized T-scores on the basis of electromyography (EMG) scores (Mahatnirankul et al., 1997).

Here, the Suan Prung Stress Test -20 (SPST-20) is regarded as the most appropriate instrument because it can measure the physiological arousal, life events and stress symptoms. So, the four degrees of stress developed by Mahatnirankul et al. (1997) were used in this study.

Stress Factors

There have been many studies on stress, and the findings show that there are quite a few factors that cause stress: rapid change in circumstances and the pressure arising therefrom. The following is the work-related factors cited in some of the research studies:

Warren and Toll (1996) claimed that there are 14 main common factors related to work stress. These factors contribute to the stress on the organization and on the individual. On the organization, work stress can seriously relate to the organization's accomplishment of its

goals. However, on the individual, work plays an equally important role. If the employees perform good work, they will build a career path for their own good.

1. Workplace environment and conditions refers to the environment in the workplace which can affect the results. These environment and conditions can be light, privacy and space, air freshness and quality, resources and equipment and the standard of accommodation. For example, the works of PEA employees in finance department such as documentation, fund transfer, payment by cheques, submission of copies of tax invoices and receipts to the departments concerned require meticulous care and high precision. To ensure seamless operation, the computer, printer, copier, fax machine and other office equipment have to be properly maintained in good working conditions.

2. Travelling refers to the regular journey to and from work. Bad weather conditions and traffic congestion can make the journey quite rough that the employees tend to arrive work late, feeling stressed and exhausted (Cooper & Straw, 1993; Rout & Rout, 2002). For example, some employees must travel to government offices to collect payments or to many banks to make certain financial transactions. The journey in Bangkok where the traffic is heavily congested while carrying a lot of cash involves the risks of accident or even robbery. Being in this situation over a long period of time, the employees can become stressed.

3. Intrinsic to the job (workload) refers to the nature of work either overload or underload, the specific work demands and extent of decision making. Being assigned more tasks than they can possibly complete within the deadline, the employees can feel stressed. Work stress can also occur if the employees lack the skills and knowledge essential to the new

job assigned by their supervisor (Neunan & Hubbard, 1998; Rout & Rout, 2002). For example, if the employees are assigned too many difficult tasks, they will not be able to complete them within a stringent deadline. They will feel stressed and their work performance will decline.

4. Roles refer to the job descriptions either clear or vague. Too many responsibilities and unclear job descriptions can cause the employees to feel so disoriented and confused. For example, one finance officer can have many roles such as a head of department, who has to deal with many subordinates and work in other teams on customer service improvement. At the same time, she has to be the head of her family. She could end up bringing stress from work to home and vice versa.

5. Managers refer to the way the superior manages, whether or not they are approachable by their subordinates. The supervisor's proper guidance and instructions can improve the employees' performance. The employees who receive training and get a reasonable amount of support and feedback from their supervisor will acquire new knowledge and skills that they can see their shortcomings and make improvement accordingly. For example, there shall be performance assessment every six months and a meeting every week to maintain close communication between the management and staff, in which the managers can offer feedback and comments to their subordinates to ensure performance enhancement.

6. Rewards refer to the appraisal and acknowledgement of successful performance of the employees, which aim to enhance their potential and to retain them in the organization. Unbiased assessment can boost the employees' morale. Good fringe benefits give the

employees job satisfaction. For example, the PEA employees get the fringe benefits in the form of medical allowance, bus service, scholarship, inhouse and outside training, bonus, etc.

7. Relationship refers to the relationships among supervisors, subordinates, colleagues and the persons who influence their careers. Effective communication and good relationship create pleasant working environment. In this environment, the employees can work together in perfect harmony to adopt efficient work process and find the best solutions to all kinds of work related issues. Hence, it ensures successful operation. Having worked together for over a long period of time, the employees at PEA are already enjoying friendship. Certain events (for example a walk rally) are organized to maintain good relationships among all employees. Also, the weekly meetings between supervisor and subordinates will help everyone up-to-date with the latest changes of the working progression and everyone's needs and expectations over the work processes.

8. Interest in work refers to the levels of involvement, job satisfaction, variety, work pace and the control that employees have over the work processes. The employees should be allowed to work on their initiative to maximize their potential. However, the employees have to work according to PEA's stringent rules and regulations that they are not given the opportunity to assist in decision making.

9. Commitment to the goals of the organization refers to the faith in the organization and any disagreement with the values or methods of the works. The employees must fully understand the organization's missions. For example, the finance officers have to put a lot of effort into customer service to ensure customer's maximum satisfaction.

10. Organizational culture refers to the internal politics, power relationships and management styles of the people within the organization. The internal politics at workplace can infringe upon the employees' freedom of expression. Without freedom of expression, honest views on any person cannot be made for fear of retaliation. For example, replacement of the management always results in change of internal policies. Therefore, the employees have to adjust their code of conduct and working procedures accordingly without the opportunity to express their views.

11. Career progression refers to the career development, promotion, retirement and the organization's views of career path. High work performance requires extensive knowledge, skills and experience. Acquisition of knowledge, skills and experience takes time. However, the employees who are expert at their work can also find routine work monotonous that they become stressed (Neunan & Hubbard, 1998; Rout & Rout, 2002). For example, PEA employees are working up the career ladder according to the concept of promotion within the organization; their annual pay review and promotion are based on a fair performance assessment.

12. Individual refers to the personality type, the ability to cope with changes or difficult situations either at work or at home and the non-work problems of the employees. Inexperienced employees may not see the overall picture of work. When something goes wrong they will be too afraid to make decision on their own.

13. Home work balance refers to the incompatible demands between work and home that one interferes with another under time-constraint situations; conflicting demands of work

and home, low support at home, dual career problems. Stress at home may set strain on the employee at work (Rout & Rout, 2002).

14. Changes refers to any changes in circumstances either at work or at home which affect the employees' life such as the introduction of new technology and the accumulation of personal life events. PEA has employed new technologies to improve its work process. However, system integration involves data migration from the legacy system to the new system. Many issues arise such as delay, errors and confusion. To resolve the issues, the finance officers have to work harder for longer hours which could lead them to stress conditions.

In a nutshell, the stress factors based on Warren and Toll (1996) were chosen to find the leading stress factors of the employees in the PEA Finance Division because it can measure all-round factors surrounding the employees. Furthermore, these fourteen work-related stress factors covered almost aspects of working life in PEA. Secondly, compared to other previous studies, using only five factors were not enough to PEA working environment. Thirdly, the 14 factors were applicable to the PEA, as they covered all the individual and organization stress.

Studies on Work Stress

Chaowai (2008) studied the stress at work of the Public Cooperative Auditors. A self-assessment questionnaire adapted from a questionnaire of the Mental Health Department was used as the tool for measuring the auditors' stress levels. Investigation was conducted to identify the stress factors at work. The findings showed that the public cooperative auditors

were subject to stress at a moderate level, and that their relationships with colleagues were positive. However, job description, work opportunities and their relationship with super-ordinates were all viewed as moderate.

Yucham (2009) investigated the factors affecting stress at the workplace of the employees at Metropolitan Waterworks Authority (MWA). In this study, questionnaire was used as a tool to find the personality factors relating work stress. The results showed that the employees with different personalities had the same level of stress; however, the employees with different working environments displayed statistically significant differences. The relationship between work factors affecting work stress among operational personnel at MWA indicated a significant level with respect to job descriptions, unclear roles, career development, relationships inside organizations and working conditions.

Vannasuta (2009) studied stressors that affected 152 internal auditors at a commercial bank. She used Suan Prung Stress Test (SPST-20) to measure their stress levels, and found that the stress factors at work were role conflict, job description ambiguity, workload, physical environment, relationship with supervisors and colleagues. The findings showed that the auditors in the commercial bank suffered from stress at a high level, and that stress factors at work were role conflict, physical environment, relationship with supervisors and colleagues.

Chansom (2009) studied factors associating with work stress among 284 staff of National Intelligence Agency (NIA). This research focused on the investigation into the factors causing work stress and the measurement of the levels of work stress among NIA staff. The findings showed that that the job responsibility, career development, work role and relationship

factors contributed to stress at a moderate level, and that the staff suffered from stress at a moderate level. On the other hand, workplace environment and work structure factors contributed to stress at a low level.

Sancini et al. (2010) studied stress characteristics of female employees under different working conditions: visual display unit (VDU) operators and kindergarten teachers.

Questionnaire was used as a tool for factor analysis and calculation of questionnaire single item scores. On the basis of the factors concerning perceived work load responsibilities accounting for the structure of the questionnaire--perceived work load responsibilities, independence and autonomy in performing work-duties and negative features of work interfering with psycho-physical wellbeing—they came up with the these findings: As compared with the VDU operators, kindergarten teachers had a higher level of perceived stress related to their occupation; they also perceived more stressful conditions in their responsibility for taking independent decisions and autonomously managing their work.

Yu, Lee, and Tsai (2010) examined the relationships among work stress, work roles, work-family conflicts and emotional exhaustion among electronics industry employees in China. The questionnaire was used as a tool in factor analysis and regression analysis. The findings illustrated that work stress and work roles had a significant effect on emotional exhaustion whilst work-family conflicts have a positive effect on emotional exhaustion. They also suggested that the human resources departments in the industry should also establish and strengthen a scheme of organizational support that extends to the employees' families.

Neelamegam and Asrafi (2010) studied work stress among 74 employees of Dindigul District Central Cooperative Bank, Tamil Nadu, India. A questionnaire on three factors based on task demands, physical demands and role demands was used to analyze the causes of stress. The findings revealed that noise, polluted water, work role, hard work and lack of skills were the major stressors for the employees.

Dewa, Thompson, and Jacobs (2011) studied the relationships between work stress and employee perceived responsibilities and work characteristics. The questionnaire was used to determine the job and organization characteristics. The study showed that 18 % of the 2,373 sample employees considered their work as being highly stressful. In addition, there was a significant number of employees who perceived that their poor job performance had more serious implications on their colleagues than on the environment and the company profit. There were also significant relationships between work characteristics that were related to additional working hours such as working away from home or traveling on the job.

In summary, several studies indicated that the employee's environments, work demands and colleagues affect the stress level of the employees as well as their job performance. Therefore, the studies on work stress can be of beneficial to the employees themselves as well as the company's management department because the findings help all of them see the big picture of stress in the workplace and its effects.

CHAPTER 3

METHODOLOGY

This study aims to investigate the stress levels and stress factors of the employees in the Finance Division at the headquarters of Provincial Electricity Authority (PEA). This chapter covers research participants, research instrument, data collection, and data analysis.

Research Participants

The participants in this study were thirty employees comprising males and females of different age groups, marital statuses, durations of service and salary scales, and were currently employed on a full-time basis at the Finance Division in the PEA's headquarters.

Research Instrument

A questionnaire was used as an instrument for data collection. It was specifically designed for PEA working environment grounded on the researcher's experience of seven years within the organization.

It consisted of three parts:

Part 1: Personal Information

This part aims to gather the personal information concerning personal profiles of the participants such as gender, age, marital status, educational background, duration of service, salary scale and chronic diseases (if any).

Part 2: Work Stress Measurement

The second part was designed to answer the first research question in order to find out the stress level of the PEA employees in Finance Division. A 20-statement questionnaire was adapted from the 'Suan Prung Stress Test-20' (Mahatnirunkul et al, 1997). The participants were asked to rate their degree of stress on a 5-level scale of "extremely severe" (5), "severe" (4), "moderate" (3), "Slightly" (2), "Not at all" (1). The meaning of the rating scale was defined as follows:

Number 5 means under extremely severe stress

Number 4 means under severe stress

Number 3 means under moderate stress

Number 2 means slightly under stress

Number 1 means not under stress at all

Mahatnirunkul et al, 1997 interpreted the scores as follows:

0 – 24: mild stress

25 – 42: moderate stress

43 – 62: high stress

63 and above: severe stress

Part 3: Stress Factors Related to Workplace

The aim of this part was to draw answers to the second research question to find out the leading stress factors in Finance Division, PEA. Constructed on the basis of stress factors (Warren & Toll, 1996), this part includes 42 questions concerning 14 stress factors. This questionnaire was comprised of negative statements. The participants were asked to provide answers on Likert's 5-rating scale of "Strongly Agree" (5), "Agree" (4), "Neutral" (3), "Disagree" (2), and "Strongly Disagree" (1). The meaning of the rating scale was defined as follows:

Number 5 means *strongly agree*

Number 4 means *agree*

Number 3 means *neutral*

Number 2 means *disagree*

Number 1 means *strongly disagree*

The scores were interpreted as follows:

4.21 – 5.00: the highest stress factors

3.41 – 4.20: high stress factors

2.61 – 3.40: moderate stress factors

1.81 – 2.60: low stress factors

1.00 – 1.80: the lowest stress factors

To ensure content validity, the questionnaire was revised according to the opinions and suggestions of two experts in the department of linguistics and the department of psychology.

The question was piloted with 30 PEA Expenditure Control Division employees whose job descriptions were quite similar to the research participants; i.e. having to deal with the verification process for any kind of payment to approximately 12,000 lists per month. The piloted employees of the study had no questions on the questionnaires and returned them to the researcher within two days.

Data Collection

The questionnaires with sealable envelopes were distributed to 30 permanent employees of the Financial Division, the PEA headquarters. The section chiefs collected all the 30 responses and forwarded them to the researcher after one day of distribution. The employees were randomly chosen to complete the questionnaires.

Data Analysis

To determine the degree of work stress and the leading factors that cause stress among PEA employees, the completed questionnaires were analyzed by SPSS (Statistical Package for the Social Sciences) and presented through frequency, percentage and mean.

The findings were presented in Chapter 4.



CHAPTER 4

FINDINGS

The work stress levels of PEA Finance Division employees and the factors contributed to such stress were studied. The findings were presented in this chapter in the following order: participants' personal information, stress levels and stress factors at work.

The study was conducted to assess the levels of stress perceived by the employees at Provincial Electricity Authority (PEA) and to determine the leading stress factors among the employees at PEA. The questionnaires were divided into three parts: personal information of the participants, levels of work stress measurement, and factors related to stress at workplace. The findings from the first part showed the personal information of the participants classified by gender, age, marital status, education, years of employment at PEA, monthly income and any chronic disease.

Personal Information of Participants

Table 1 illustrates the personal information of the thirty permanent employees of the Finance Division, PEA headquarters. The findings were presented in frequency and percentage.

Table 1 Personal Information of the Participants

Personal Data	Respondents	Percentage
Gender:		
Male	4	13.3%
Female	26	86.7%
Total	30	100.0%
Age:		
20-30	2	6.7%
31-40	2	6.7%
41-50	13	43.3%
Older than 51	13	43.3%
Total	30	100.0%
Marital Status:		
Single	5	16.7%
Married	21	70.0%
Divorced / Widowed / Separated	4	13.3%
Total	30	100.0%
Education:		
Diploma or lower	12	40.0%
Bachelor's degree	16	53.3%
Master's degree	2	6.7%
Total	30	100.0%
Years of Employment at PEA:		
Less than 6 years	2	6.7%
6 -10 years	1	3.3%
11-15 years	2	6.7%
More than 15 years	25	83.3%
Total	30	100.0%

Table 1 (continued)

Personal Data	Respondents	Percentage
Monthly Income:		
20,000 baht or lower	2	6.7%
20,001 - 25,000 baht	3	10.0%
25,001 - 30,000 baht	2	6.7%
30,001 baht or higher	23	76.7%
Total	30	100.0%
Any Chronic Disease:		
Yes	8	26.7%
No	22	73.3%
Total	30	100.0%

Table 1 shows that 86.7% of the participants were female and 13.3% were male. The participants of the age 41 to 50 and older than 51 years formed the largest age groups (43.3 each). Most of them were married (70%). In terms of education, 53.3% of the participants held Bachelor's degree, only 6.7% of them held Diploma or lower qualification and 6.7% of them held Master's degree. With regard to years of service, the majority of the participants have worked for PEA for more than 15 years (83.3%). Most of the participants earned monthly income of 30,001 bath or higher (76.7%). For the chronic disease category, 73.3% of the participants were free from chronic diseases and only 26.7% of them had chronic disease(s).

Levels of Stress of the Employees in Finance Division, PEA Headquarters

This section provides answers to the first research question in order to find out the levels of stress as perceived by the employees at PEA. Suan Prung Stress Test (SPST-20), comprising 20 self-assessment questions, was used to determine the stress levels of the thirty employees in Finance Division. The participants were asked to rate their degree of stress on five scales of “Extremely Severe” (5), “Severe” (4), “Moderate” (3), “Slightly” (2), and “Not at all” (1). From the scores, stress levels were identified. They were presented in terms of frequency and percentage as follows:

Table 2 Levels of Stress of the Thirty Employees of PEA Finance Division

Stress level	n	Percentage
Mild Stress	6	20.00%
Moderate Stress	15	50.00%
High Stress	7	23.33%
Severe Stress	2	6.67%
Total	30	100.00%

Table 2 illustrates that the participants were subject to stress at various levels. Half of the participants had moderate stress level with a score of 50%. It was found that 23.33% of the participants had high stress level and 20% of them had mild stress level.

Surprisingly, only 6.67% of them had severe stress level. One of the two participants was a married female employee who was over 51 years old and free from chronic disease. The other was a married male employee with the age ranged of 31 to 40 years old and had

chronic disease (s). Both of them held a Bachelor's degree, earned a monthly income of more than 30,001 baht. They had been working for PEA more than 15 years. From the questionnaire answers in part two, both of the participants rated high score on these items:

conflicts in family members over financial issues and household affairs and inadequate income.

Their life events caused them the following stress symptoms: a migraine, worried and anxious, uneasy and frustrated, angry or irritated feelings during the last six months. This is probably due to the fact that the participants were worried about financial issues over a long period of time, so they suffered from a lot of emotional and physical pressure. Then, they became physical disorders and end up having severe stress (Mahatnirankul et al., 1997)

Overall, the PEA Finance Division employees had the optimum stress. The number of employees who had stress at a mild level and those who had stress at a high level were almost identical. However, those with severe stress belonged to the smallest group.

Stress Factors Related to Workplace

This section provides answers to the second research question which aims to find out the leading stress factors that caused work stress among the employees at Finance Division, PEA. Based on Warren and Toll's (1996) 14 stress factors at work (see Appendix B), a questionnaire was developed to investigate the leading stress factors at PEA.

To explore the leading stress factors, the participants were asked to fill in a questionnaire to rate their levels of agreement on Likert's 5-rating scales of "Strongly Agree"

(5), “Agree” (4), “Neutral” (3), “Disagree” (2), and “Strongly Disagree” (1). The scores were presented in terms of mean and standard deviation.

Table 3 Stress Factors at Work

(n=30)

Stress Factors	Level of Agreement		Stress Level
	Mean	Standard Deviation	
1. Workplace Environment and Conditions	3.71	0.105	High
2. Traveling	2.63	0.068	Moderate
3. Workload	3.43	0.080	High
4. Work Roles	3.00	0.131	Moderate
5. Managers	3.19	0.023	Moderate
6. Rewards	2.89	0.095	Moderate
7. Relationships	2.60	0.081	Low
8. Interest in work	2.88	0.190	Moderate
9. Commitment to the goals of the organization	2.48	0.056	Low
10. Organization culture	3.13	0.172	Moderate
11. Career Progression	3.37	0.103	Moderate
12. Individual	2.70	0.091	Moderate
13. Home-Work Balance	2.87	0.057	Moderate
14. Change	3.10	0.136	Moderate

As seen in Table 3, the employees' answers on the 14 stress factors at work yielded a mean score ranging from 3.71 to 2.48. *Workplace environment and conditions* was rated as the highest stress factor with a mean score of 3.71; *workload* was rated as the second highest stress factor with a mean score of 3.43; *career progression* was rated as a moderate stress factor with a mean score of 3.37. Rating for other factors: *managers* 3.19, organization culture

3.13, *change* 3.10, *work roles* 3.00, *rewards* 2.89, *interest in work* 2.88, *home-work balance* 2.87 and *individual* 2.70.

Interestingly, the *relationships* and *commitment to the goals of the organization* were low stress factors with a mean score of 2.60 and 2.48 respectively. These could probably be due to the fact that the employees have been working together for more than 15 years; therefore, they have developed harmonious relationships and also effective communication among supervisors, subordinates and colleagues. Furthermore, one of the Finance Division policies is hold a weekly meeting in order to keep everyone informed of the company's mission and they can talk about their needs and expectations over the work processes as mentioned in Chapter 2. Additionally, another low stress factor was *commitment to the goals of the organization*. This is probably that the PEA employees have loyalty to the organization; they believe that the organization cares about their needs in career advancement by providing the chance to learn new skills and others fringe benefits such as bonus, childcare, and company bus as mentioned in Chapter 2.

In conclusion, the findings reflect that the *workplace environment and conditions* and the *workload* factors highly affect the stress at work of 30 PEA participants. *Relationships* and *commitment to the goals of the organization* factors only created stress level at a low level.

The discussion and conclusion of major findings were drawn in Chapter 5.

CHAPTER 5

DISCUSSION AND CONCLUSION

This chapter presents the discussion of major findings, the limitations and implications of the study. Recommendation for further studies is also included.

Discussion of Major Findings

Personal Information of Participants

The majority of the participants were female. The participants aged 41 to 50 and older than 51 formed the two largest age groups. Most of them were married and had been working for PEA for more than 15 years. More than half of them held a Bachelor's degree and earned a monthly income of more than 30,001 baht. Most of them were free from chronic diseases.

Stress Levels of Employees in Finance Division, PEA Headquarters

To find out the stress levels perceived by the employees at PEA, Suan Prung Stress Test – 20 (SPST-20) was used as the instrument for measuring the degree of stress of 30 employees in the PEA Finance Division. The results showed that 50% of the participants were subject to stress at a moderate level. The findings were consistent with those of Mahatnirankul et al., (1997) provided in Chapter 2.

In response to some demanding events, stress usually occurred at a moderate level that the employees felt enthusiastic and challenged. When the work was done, the stress would diminish within an hour without leaving any long lasting effects on the body and the mind. For

example, the employees would try to complete whatever they were doing by the end of the day to avoid any backlog of work to catch up on. In their attempt to accomplish the tasks, they would be stimulated and would remain active until everything was done that the stress diminished. However, the finding in this part is inconsistent with those of Vannasuta (2009) that the internal auditors in a commercial bank are subject to stress at a high level. This study used Suan Prung Stress Test to measure the stress level and it was found that the stress factors at work were role conflict, physical environment, relationship with supervisors and colleagues.

Stress Factors at Work

To find out the leading stress factors among the employees at PEA, part three of the questionnaire was designed on the basis of Warren and Toll's (1996) 14 work stress factors. The results showed that *workplace environment and conditions* and *workload* were the two factors that were highly rated by the participants.

The findings that unpleasant physical settings and surroundings such as exposure to dirt, noise, bad odor and poor lighting could affect the job performance were consistent with those of Warren and Toll (1996) provided in Chapter 2. The employees' demand exceeded the organization's resources and their job performance consequently declined. Such findings suggest that the organization should provide its employees with healthy working environments to ensure that the tasks that require a high degree of precision could be accomplished flawlessly and that the employees would feel more motivated and enthusiastic to work for the organization. Trying to accomplish a task within stringent rules while being exposed to noise, the employees would be stressed and it would negatively affect their job performance.

The findings in this part were also consistent with the previous study of Neelamegam and Asrafi (2010), who studied work stress among 74 employees of Dindigul District Central Cooperative Bank, Tamil Nadu, India. Their study showed that workplace environment such as noise and polluted water affected both physical and psychological stress. Work stress occurred when the demand of workplace environment was more than the capacity of the employees to respond effectively.

Workload was found to be a high stress factor, especially when the employees were required to work with meticulous care and high precision. Such finding was consistent with the literature reviews of Warren and Toll, 1996; Neunan and Hubbard, 1998; Rout and Rout, 2002 which found that *workload* factor was one of the variables that strongly related to work stress. As mentioned in Chapter 2, if the employees were assigned too many tasks, they will not be able to complete them within a deadline. They will feel stressed and their work performance will decline. It is clearly evident that the specific demand for the employees to work intensively with meticulous care and high precision to complete so many tasks within the stringent deadline can definitely cause severe stress.

The degree of difficulty, the quantity of work and the tight deadline that exceed the employee's ability can also cause stress. Such findings were consistent with those of the literature reviews of American Psychological Associations, n.d.; Lazarus, 2000; Scott, 2005; Bailey, 2008 that the state of working continuously probably causes them acute stress exerted by high demand of work. As mentioned in Chapter 2, dealing with more than 200 to 300 customers on the due date can cause blurred vision and fatigue. This short-term stress symptoms (such as anxiety,

tension headache, back pain, eyes strain and muscle tensions) are likely to increase when the employees are triggered. However, when they have completed their work, their stress diminishes.

Work stress is known to decrease the employees' ability and reduce their willingness to work (Warren & Toll, 1996; Schermerhorn, 2010). It negatively affects an individual job performance and/or the organization's goals. The findings of this study are beneficial for the organization in improving management policies so that the employees are content with their work and are willing to work for the organization for a long period of time.

Limitations of the Study

1. This study was limited to a specific group of participants: Only randomly selected 30 permanent employees of PEA Finance Division participated in the survey. The findings may not represent all the employees in the PEA Finance Division.

2. In this study, 30 employees (26 females and 4 males) were randomly selected from the PEA Finance Division. Hence, it is impossible to pinpoint whether male or female workers were exposed to work stress more because most of the employees were female.

Implications of the Study

The major findings and analysis give rise to the following contributions:

1. The study findings showed that *workplace environment and conditions* was the factor that contributed to the highest work stress in the Finance Division. In this regard, PEA should carry out effective action on 5S: sorting, straightening, systematic cleaning, standardizing and

sustaining methodology in keeping the workplace clean and tidy. Cubicles should be built to minimize the distraction while working. Such methods may help create a livable and pleasant workplace which will help make PEA employees less stressful and pay more attention to their work.

2. From the results in the previous chapter, it can be interpreted as events of excessive workload and unclear job descriptions that caused the employees to feel disoriented and confused that their work performance significantly declined as mentioned in Chapter 2. More effective policies on work stress should be implemented. For example, a clearer job description should be provided. It will help communicating PEA's expectations to the employees. In addition, an effective delegation is also important. Different employees may be better at different skills; the superior should put the right employees to the right responsibility. As a result, the employees will work at full capacity and perform better.

3. In the previous chapter, the results indicated that the relationships and commitment to the goals of the organization were low stress factors. Therefore, PEA should continue to organize weekly social events to improve communication and maintain good relationship among PEA employees. Promotion within the organization is definitely a way to enhance the employee's loyalty. The opportunity for essential skill training and other fringe benefits can keep the employees satisfied that they want to stay on with the organization as mentioned in Chapter 2.

Recommendations for further studies

Recommendations for further studies are suggested as follows:

1. This study only focused on the employees in Finance Division. The work stress of the employees at various departments and management levels should be studied to widen the scope of coverage and ensure higher reliability. The findings can be used more effectively in the improvement of the employees' working conditions and the enhancement of the organization's performance.

2. A higher number of employees with the same area of expertise should also be included. For example, the finance officers at the headquarters and in the provincial offices should be included so that the levels of their work stress could be compared across the board.

REFERENCES



REFERENCES

- American Psychological Association (n.d.) .*The different kinds of stress*. Retrieved June 12, 2009, from <http://www.apa.org/helpcenter/stress-kinds.aspx>.
- Bailey, E. (2008, June, 25) *Acute stress vs. Chronic stress*. Retrieved November 22, 2010, from <http://www.healthcentral.com/anxiety/c/22705/31980/stress-chronic>.
- Chandola, T. (2010). *Stress at Work*. The British Academy. Retrieved January 27, 2010, from <http://www.britac.ac.uk/policy/Stress-at-Work.cfm>.
- Chansom, P. (2009) *Factors associating with work stress among staff of National Intelligence Agency*. Thesis. M.A. (Social Development). Bangkok: Graduate School, National Institute of Development Administration. Photocopied.
- Chaowai, S. (2008). *The Public Cooperative Auditors' Stress*. Thesis. M.A. (Cooperative Economics). Bangkok: Graduate School, Kasetsart University. Photocopied.
- Colligan, T. W., & Higgins, E.M. (2005) *Workplace stress: Etiology and consequences*. Retrieved November 24, 2010, from www.choixdecARRIERE.com/pdf/6573/2010/ColliganHiggins2005.pdf.
- Cooper, C., & Straw, A. (1993). *Successful stress management in a week*. London: Hodder and Stoughton.
- Dewa, C.S., Thompson, A.H., & Jacobs, P. (2011) *Relationships between job stress and worker perceived responsibilities and job characteristics*. Retrieved January 27, 2010, from <http://www.theijoem.com/ijoem/index.php/ijoem/article/viewFile/67/146>.
- Devereux, J., Hastings, R., & Noone, S. (2009). Staff stress and burnout in intellectual disability services: *Work stress theory and its application journal of applied research in intellectual disabilities*, 22, 561-573.
- Dubrin, A. J., & Ireland, R. D. (1993). *Management & organization*. Cincinnati: South-Western Publisher.

- Frain, M. & Valiga, T.M. (1979). The multiple dimension of stress. *Topic in clinical Nursing*, 1(1), 43 – 52.
- Griffin, R. W., & Moorhead, G. (2009). *Organizational behavior: Managing people and organizations*. Cincinnati, Ohio: South Western Cengage Learning.
- Hellriegel, D., Slocum, J. W Jr., & Woodman, R. U. (1998). *Organizational behavior*. Cincinnati, Ohio: South-Western College.
- Holmes, T.H. & Rahe, R.H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Jex, S. M. (1998). *Stress and job performance: Theory, research, and implications for managerial practice*. Thousand Oaks: SAGE Publication, Inc.
- Kanchanawong, S. & Kompayak, J. (2002). *Stress, health, and illness: concepts and research studies in Thailand*. Faculty of Social Sciences and Humanities. Mahidol university. Nakorn Pathom.
- Lazarus, J. (2000). *Stress relief & relaxation techniques*. Los Angeles, CA: NTC/Contemporary Publishing Group, Inc.
- Liu, X., & Batt, R. (2010). How supervisors influence performance: A multilevel study of coaching and group management in technology-mediated services. *Articles & Chapters. Paper 347*. Retrieved January 27, 2010, from Cornell University, ILR School site: <http://digitalcommons.ilr.cornell.edu/articles/347/>.
- MacMillan, A. M. (1957). The Health Opinion Survey: Technique for estimating the prevalence of psychoneurotic and related types of disorder in communities. *Psychological Reports*, 3, 325-339.
- Mahatnirunkul, S., Pumpaisanchai, W., & Tapanya, P. (1997) . *The construction of Suan Prung Stress Test for Thai Population*. Suan Prung Hospital.
- McShane, S.L., & Glinow, M. A. V. (1999). *Organizational behavior*. Florida: McGraw-Hill College.

- National Institute for Occupation Safety and Health. (1999). *Stress at work*. Retrieved February 14, 2009, from <http://www.cdc.gov/niosh/docs/99-101/pdfs/99-101.pdf>.
- Neelamegam, R. & Asrafi, S., (2010). Work stress among employees of Dindigul District Central Cooperative Bank, Tamil Nadu: A Study. *The IUP Journal of Management Research*, Vol. IX, No. 5, pp. 57-69, Retrieved January 27, 2011 from <http://ssrn.com/abstract=1631709>.
- Neunan, J. C., & Hubbard, J. R. (1998). Stress in the workplace: An overview. In J. R. Hubbard & E. A. Workman (Eds.), *Handbook of stress medicine: An organ system approach*. Boca Raton, Florida: CRC Press.
- Rout, U. R., & Rout, J. K. (2002). *Stress management for primary health professionals*. New York: Kluwer Academic/Plenum Publishers.
- Sancini, A., Tomei, F., Schifano, M.P., Giorgio, V.D., Caciari, T., Fiaschetti, M., & et al. (2010). Stress characteristics in different work conditions: is it possible to identify specificity of risk factors by the questionnaire method? *European Journal of Inflammation*, 8 (2), 117-123.
- Sanderlin, T. K. (2004). Managing technostress in the organizational environment: symptoms and solutions. *Annals of the American Psychotherapy Association*. Retrieved February 17, 2011., from http://findarticles.com/p/articles/mi_hb013/is_1_7/ai_n29084500/.
- Schermerhorn, J. R. (2010) *Management* (11th ed.). Hoboken, New Jersey :Wiley John Wiley and Sons.
- Scott, E. (2005) . *Stress management glossary*. Retrieved April 7, 2010., from <http://stress.about.com/od/stressmanagementglossary/g/accutestress.htm>.
- Sullivan, S. E., & Bhagat, R. S. (1992). Organizational stress, job satisfaction and job performance: Where do we go from here? *Journal of Management*, 18 (2), 353-374.

- The Times of India. (2010). *Women suffer more stress at work*. Retrieved May 1, 2011, from http://articles.timesofindia.indiatimes.com/2010-07-22/bangalore/28287797_1_work-stress-fewer-women-women-fight.
- Vannasuta, R. (2009). *Factors affecting work stress of internal auditors in a commercial bank*. Thesis. M.B.A. (Business Administration). Bangkok: Graduate School, Kasetsart University. Photocopied.
- Warren, E., & Toll, C. (1996). *The stress work book: How individuals, teams & organizations can balance pressure and performance*. London: Nicholas Brealey Publishing.
- Welford, A. T. (1973). Stress and performance. *Ergonomics*, 16 (5), 567 – 580.
- World Health Organization. (2003). *Work organization and stress*. Retrieved June 29, 2010, from www.who.int/occupational_health/publications/en/oehstress.pdf.
- Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology*, 18, 459-482.
- Yucham, B. (2009). *Factors affecting stress at work of operation staff of Metropolitan Waterworks Authority*. Thesis. M.B.A. (Management). Bangkok: Graduate School, Dhurakij Pundit University. Photocopied.
- Yu, M. C., Lee, Y. D., & Tsai, B. C. (2010). Relationships among stressors, work-family conflict, and emotional exhaustion: a study of electronics industry employees in China. *Social Behavior and Personality: an International Journal*, 38 (6), 829-844.



APPENDICES



APPENDIX A
QUESTIONNAIRE (THAI)

แบบสอบถาม

การศึกษานี้เป็นส่วนหนึ่งของสารนิพนธ์ หลักสูตรศิลปศาสตรมหาบัณฑิต (ศศ.ม.)
 สาขาภาษาอังกฤษธุรกิจเพื่อการสื่อสารระหว่างประเทศ มหาวิทยาลัยศรีนครินทรวิโรฒ
 แบบสอบถามนี้สร้างขึ้นเพื่อประเมินระดับความเครียด และสาเหตุของความเครียดของพนักงานกอง
 การเงิน การไฟฟ้าส่วนภูมิภาค คำตอบของท่านจะถือเป็นความลับ ขอความกรุณาตอบคำถามทุก
 ข้อ หวังเป็นอย่างยิ่งว่าจะได้รับ ความร่วมมือจากท่าน และขอขอบคุณมา ณ โอกาสนี้

ตอนที่ 1: ข้อมูลทั่วไปเกี่ยวกับผู้ตอบแบบสอบถาม

คำชี้แจง: โปรดทำเครื่องหมาย "X" ลงในช่องว่าง () ให้ตรงกับตัวท่านมากที่สุด

- | | |
|-------------|--|
| 1. เพศ | () ชาย
() หญิง |
| 2. อายุ | () 20-30 ปี
() 31-40 ปี
() 41-50 ปี
() 50 ปี ขึ้นไป |
| 3. สถานภาพ | () โสด
() แต่งงาน
() หย่าร้าง / ม่าย / แยกกันอยู่ |
| 4. การศึกษา | () อนุปริญญา หรือต่ำกว่า
() ปริญญาตรี
() ปริญญาโท |

5. อายุการทำงานใน กฟภ. ☐ 0 - 5 ปี
☐ 6 -10 ปี
☐ 11-15 ปี
☐ มากกว่า 15 ปี

6. รายได้ต่อเดือน ☐ ไม่เกิน 20,000 บาท
☐ 20,001 – 25,000 บาท
☐ 25,001-30,000 บาท
☐ มากกว่า 30,001 บาท

7. มีโรคประจำตัว ☐ ใช่
☐ ไม่ใช่



ส่วนที่ 2: การประเมินระดับความเครียดของผู้ตอบแบบสอบถาม

คำชี้แจง: ภายใน 6 เดือนที่ผ่านมา มีเหตุการณ์ในข้อใดเกิดขึ้นกับตัวคุณบ้าง ถ้าข้อไหนไม่ได้เกิดขึ้นให้ข้ามไปไม่ต้องตอบ แต่ถ้ามีเหตุการณ์ในข้อใดเกิดขึ้นกับตัวคุณให้ประเมินว่าคุณมีความรู้สึกอย่างไรต่อเหตุการณ์นั้น โปรดทำเครื่องหมาย “X” ลงในช่องว่างให้ตรงกับตัวท่านมากที่สุด

	ไม่รู้สึก เครียด	รู้สึก เครียด เล็กน้อย	รู้สึก เครียด ปาน กลาง	รู้สึก เครียด มาก	รู้สึก เครียด มาก ที่สุด
	(1)	(2)	(3)	(4)	(5)
1. ฉันกลัวทำงานผิดพลาด					
2. ฉันไปไม่ถึงเป้าหมายที่วางไว้					
3. ครอบครัวของฉันมีความขัดแย้งในเรื่องเงิน หรือเรื่องงานในบ้าน					
4. ฉันเป็นกังวลกับเรื่องสารพิษ หรือมลภาวะใน อากาศ น้ำ เสียง และดิน					
5. ฉันรู้สึกว่าต้องแข่งขันหรือเปรียบเทียบ					
6. ฉันเงินไม่พอใช้จ่าย					
7. ฉันมีอาการกล้ำเนื้อตึงหรือปวด					
8. ฉันปวดหัวจากความตึงเครียด					
9. ฉันปวดหลัง					
10. ความอยากอาหารของฉันเปลี่ยนแปลง					
11. ฉันปวดศีรษะข้างเดียว					
12. ฉันรู้สึกวิตกกังวล					
13. ฉันรู้สึกคับข้องใจ					
14. ฉันรู้สึกโกรธหรือหงุดหงิด					
15. ฉันรู้สึกเศร้า					
16. ฉันความจำไม่ดี					
17. ฉันรู้สึกสับสน					
18. ฉันตั้งสมาธิลำบาก					
19. ฉันรู้สึกเหนื่อยง่าย					
20. ฉันเป็นหวัดบ่อยๆ					

ส่วนที่ 3: การประเมินสาเหตุของความเครียดของผู้ตอบแบบสอบถาม

คำชี้แจง: ภายใน 6 เดือนที่ผ่านมา ท่านมีความรู้สึกต่อไปนี้หรือไม่ โปรดทำเครื่องหมาย “X” ลงในช่องว่างให้ตรงกับตัวท่านมากที่สุด

	ไม่เห็นด้วยอย่างยิ่ง (1)	ไม่เห็นด้วย (2)	เฉย ๆ (3)	เห็นด้วย (4)	เห็นด้วยอย่างยิ่ง (5)
สภาพแวดล้อมในที่ทำงาน					
1. สภาพแวดล้อมในที่ทำงานไม่ดี เช่น สกปรก เสียงดัง ฯ					
2. วัสดุอุปกรณ์ในการทำงานไม่พร้อม/ไม่เพียงพอต่อความต้องการ					
3. สถานที่ทำงานของฉันไม่มีความเป็นส่วนตัว					
การเดินทาง					
4. การเดินทางไปและกลับจากบ้านจนถึงที่ทำงานไม่สะดวกสบาย					
5. ฉันเหนื่อยที่ต้องเดินทางไปทำงานทุกวัน					
6. ฉันรู้สึกเสี่ยงภัยที่ต้องออกไปทำงานนอกสถานที่					
ภาระงาน					
7. ฉันต้องทำงานภายใต้ความกดดัน					
8. ถ้าภาระงานและความรับผิดชอบของฉันน้อยลงกว่าที่เป็นอยู่ ฉันจะทำงานได้อย่างเต็มความสามารถและปฏิบัติงานได้ดี					
9. งานของฉันต้องอาศัยความละเอียดรอบคอบในการปฏิบัติงานสูง					
บทบาทหน้าที่					
10. ฉันมักจะได้รับมอบหมายให้ทำงานที่ไม่ตรงกับทักษะ ความรู้ และความสามารถ					
11. ฉันมีภาระงานที่ต้องรับผิดชอบมากเกินไป					
12. บทบาทหน้าที่ และความรับผิดชอบของฉันไม่ชัดเจน					

	ไม่เห็น ด้วย อย่างยิ่ง (1)	ไม่เห็น ด้วย (2)	เฉย ๆ (3)	เห็น ด้วย (4)	เห็นด้วย อย่างยิ่ง (5)
หัวหน้างาน					
13. ฉันขาดการสนับสนุนจากผู้บังคับบัญชา					
14. ฉันไม่ได้รับคำติชมอย่างตรงไปตรงมาเรื่องผลการปฏิบัติงานที่ไม่ดีของฉัน					
15. หัวหน้างานและฉันมีรูปแบบการทำงานที่แตกต่างกันอย่างสิ้นเชิง					
รางวัลหรือผลตอบแทน					
16. ฉันไม่ได้รับการประเมินผลการปฏิบัติงานอย่างยุติธรรม					
17. หัวหน้างานของฉันไม่ยอมรับและเห็นคุณค่าผลงานของฉัน					
18. ฉันไม่พอใจกับสวัสดิการที่ได้รับจากองค์กร					
ความสัมพันธ์ระหว่างบุคคล					
19. ฉันกับเพื่อนร่วมงานขาดความสัมพันธ์อันดีต่อกัน					
20. ฉันกับเพื่อนร่วมงานมักจะมีความคิดเห็นขัดแย้งกันอยู่เสมอ					
21. แผนกอื่นมักจะโยนความผิดมาให้กับแผนกของฉัน					
ความเอาใจใส่ต่องาน					
22. ฉันไม่มีอิสระในการตัดสินใจเรื่องงาน					
23. ฉันไม่มีโอกาสแสดงความสามารถในการทำงานได้เต็มศักยภาพ					
24. หากมีโอกาส ฉันต้องการจะย้ายไปทำงานกับหน่วยงานอื่น					
ความรับผิดชอบต่อเป้าหมายขององค์กร					
25. ฉันไม่ใช่คนประเภทที่จะเสียสละและทุ่มเทเวลาส่วนตัวต่อเป้าหมายขององค์กร					
26. ฉันคิดว่าเป้าหมายขององค์กรอยู่ไกลเกินเอื้อม					
27. บางครั้งฉันต้องฝ่าฝืนกฎระเบียบบ้างเพื่อให้งานสำเร็จตามเป้าหมายขององค์กร					

	ไม่เห็น ด้วย อย่างยิ่ง (1)	ไม่เห็น ด้วย (2)	เฉย ๆ (3)	เห็น ด้วย (4)	เห็นด้วย อย่างยิ่ง (5)
วัฒนธรรมองค์กร					
28. การเมืองภายในองค์กรทำให้ทำงานไม่เป็นสุข					
29. ฉันไม่มีอิสรเสรีที่จะแสดงความคิดเห็นที่ขัดแย้งต่อผู้อื่น					
30. ฉันไม่จำเป็นต้องปฏิบัติตามกฎระเบียบเพราะไม่มีบทลงโทษที่ชัดเจน					
ความก้าวหน้าในหน้าที่การงาน					
31. ฉันไม่ได้เลื่อนตำแหน่งที่ควรได้รับมาหลายปีแล้ว					
32. ฉันได้รับการเลื่อนตำแหน่งที่ยากเกินกว่าความสามารถและทักษะของฉัน					
33. ในองค์กรของฉันมีการแข่งขันกันสูงเพื่อที่จะได้ตำแหน่งที่สูงขึ้น					
ส่วนบุคคล					
34. ฉันไม่สามารถแก้ไขปัญหาที่ฉันทำพลาดได้ด้วยตัวเอง					
35. ปัญหาสุขภาพของฉันทำให้ไม่สามารถทำงานได้เต็มศักยภาพ					
36. ฉันหงุดหงิดเสมอที่ต้องเข้าคิวเพื่อรออะไรบางอย่าง					
ความสมดุลระหว่างเรื่องส่วนตัวและการทำงาน					
37. ฉันต้องใช้เวลา 2-3 ชั่วโมงเพื่อทำงานต่อให้เสร็จก่อนกลับบ้านทุกวัน					
38. ฉันมีปัญหาส่วนตัวให้ขบคิดอยู่เสมอ					
39. ฉันมักจะนำปัญหาที่ทำงานมาเล่าให้ที่บ้านฟังอยู่เสมอ					
ความเปลี่ยนแปลง					
40. ฉันไม่ชอบการเปลี่ยนแปลงใดๆ ที่ทำให้ต้องเปลี่ยนการดำเนินชีวิตแบบเดิมๆ					
41. ขั้นตอนการปฏิบัติงานของหัวหน้างานคนใหม่ทำให้การทำงานมีความยุ่งยากกว่าเดิม					
42. การนำโปรแกรมคอมพิวเตอร์ต่างๆ มาใช้ ทำให้งานมีความยุ่งยากและซับซ้อนกว่าเดิม					

ผู้วิจัยขอขอบพระคุณท่านที่กรุณาสละเวลาในการตอบแบบสอบถาม



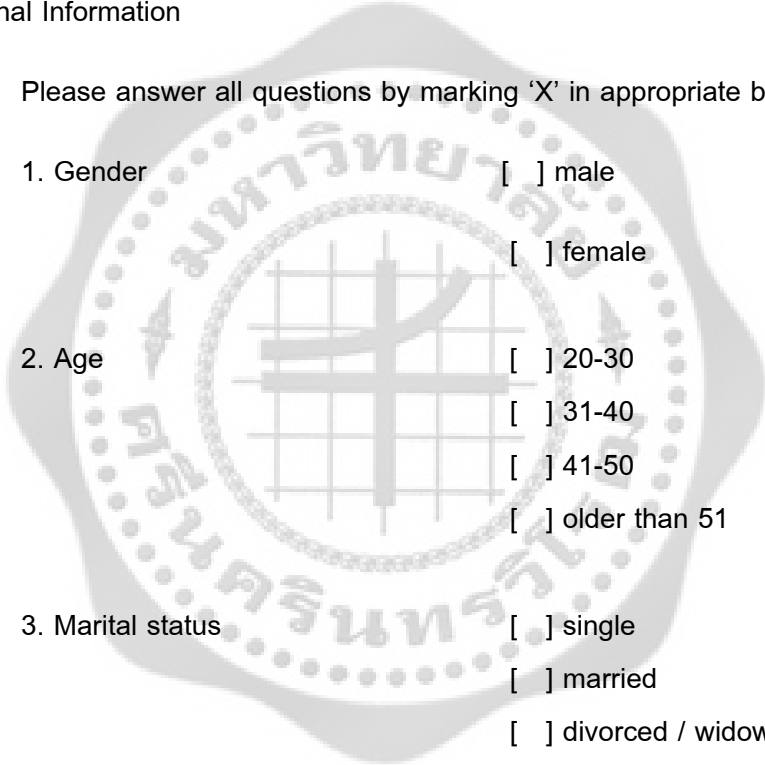
APPENDIX B
QUESTIONNAIRE (ENGLISH)

QUESTIONNAIRE

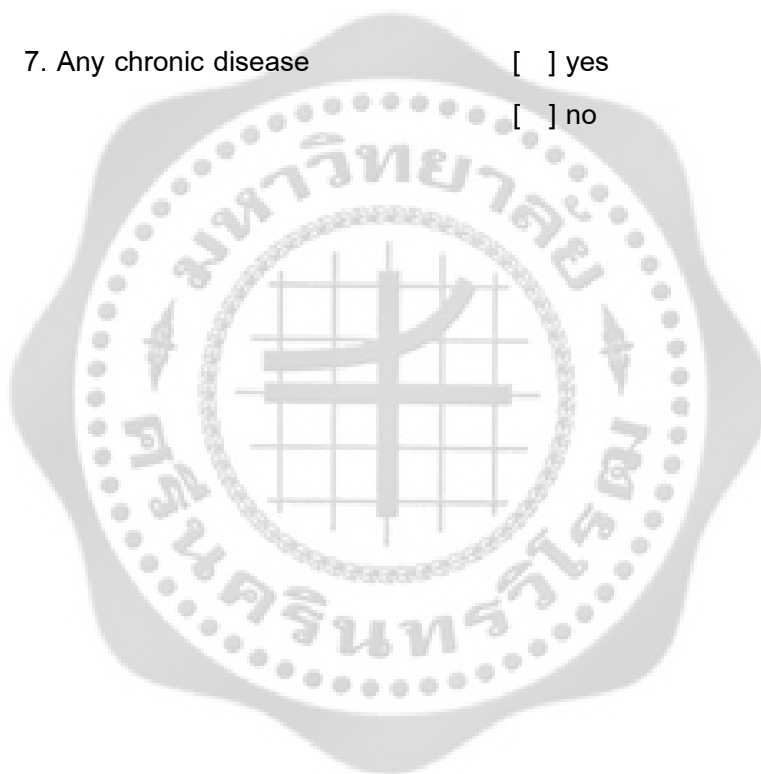
This questionnaire is designed for a graduate research project in Business English for International Communication at Srinakharinwirot University. Your cooperation in completing this questionnaire will be greatly appreciated. Your information will be treated as confidential. Thank you for your kind attention.

Part 1: Personal Information

Instructions: Please answer all questions by marking 'X' in appropriate boxes.

- 
1. Gender ☐ male
☐ female
2. Age ☐ 20-30
☐ 31-40
☐ 41-50
☐ older than 51
3. Marital status ☐ single
☐ married
☐ divorced / widowed / separated
4. Education ☐ Diploma or lower
☐ Bachelor's Degree
☐ Master's Degree

5. Years of employment at PEA? ☐ less than 6 years
 ☐ 6 -10 years
 ☐ 11-15 years
 ☐ more than 15 years
6. Monthly income ☐ 20,000 baht or less
 ☐ 20,001 – 25,000 baht
 ☐ 25,001-30,000 baht
 ☐ 30,001 baht or more
7. Any chronic disease ☐ yes
 ☐ no



Part 2: This part is to determine your stress levels for the last six months.

Instructions: Please mark 'X' in appropriate spaces. You may skip the questions that are inapplicable to you.

Items	Not at all (1)	Slightly (2)	Moderate (3)	Severe (4)	Extremely severe (5)
1. I have been afraid of making mistakes.					
2. I have failed to reach my goal.					
3. My family members have had conflicts over financial issues and household affairs.					
4. I have worried about air, light, noise or water pollution, or even exposure to poisonous substances.					
5. I have felt like I am in 'competition' or being compared with others.					
6. I have earned inadequate income.					
7. I have experienced muscular tension or pain.					
8. I have had muscular tension headaches.					
9. I have had a back pain.					
10. My appetite has undergone changes.					
11. I have had a migraine.					
12. I have felt worried and anxious.					
13. I have felt uneasy and frustrated.					
14. I have felt angry or irritated.					
15. I have felt sad and depressed.					
16. I have had a temporary memory loss.					
17. I have felt confused.					
18. I have been unable to concentrate.					
19. I have often felt fatigued.					
20. I have caught a cold easily.					

Part 3: This part aims to discover your stress factors. Have you encountered any of these situations during the last three months?

Instructions: Please mark 'X' in appropriate spaces.

Items	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Workplace Environment and Conditions					
1. I have been in unpleasant working environments such as being exposed to dirt, noise, etc.					
2. The office equipment has failed to meet the employee's demand.					
3. I have had very little privacy at work.					
Traveling					
4. I have made a long journey to and back from work.					
5. Commuting to work has made me tired every day.					
6. Working outside can be tough. I worry about traffic congestion and the risks of accidents.					
Workload					
7. I have been working under pressure.					
8. If I had had less workload and responsibility, I would have been able to work at full capacity and perform better.					
9. My work requires meticulous care and high precision.					
Roles					
10. I have often been assigned the task that does not match my area of expertise.					
11. I have had far too many job responsibilities.					
12. My job description remains unclear.					

Items	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Manager					
13. I have had little support from my supervisors.					
14. I have not received straightforward feedback about unsatisfactory performance.					
15. My supervisor and I have completely different working styles.					
Rewards					
16. I have not received a fair performance appraisal.					
17. My supervisor has not acknowledged or recognized my performance.					
18. I am not satisfied with the fringe benefits offered by the organization.					
Relationships					
19. I have had poor relationships with my colleagues.					
20. My colleagues and I have often argued.					
21. Other workgroups usually put the blame on my group.					
Interest in Work					
22. I am not free to make decisions related to work.					
23. I am not given the opportunity to work at my full capacity.					
24. I wish to be transferred to another position.					

Items	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Commitment to the Goals of the organization					
25. I am not the kind of person to devote my time and energy to the goals of the organization.					
26. I find that the organization's goals seem to be out of reach.					
27. Sometimes, I have to bend the rule in order to achieve organizational goals.					
Organizational Culture					
28. Due to internal politics, I am unhappy with my work.					
29. I am not free to oppose the opinions of others.					
30. I do not need to observe the rules because the penalty for nonobservance is not clearly indicated.					
Career Progression					
31. I have been working for too long without making much progress in my career.					
32. I have been promoted to the position that exceeds my abilities and skills.					
33. In my organization, there is a fierce competition for promotion.					

Items	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Individual					
34. When I commit errors at work I cannot rectify them by myself.					
35. I cannot work at my full capacity because of my personal health issue.					
36. I usually feel irritable when I have to queue up for something.					
Home-Work Balance					
37. At the end of the day, I need a few hours to finish my work before I go home.					
38. I constantly worry about many things in my life.					
39. I usually tell people in my family about the problems at my work.					
Change					
40. I do not like any changes that require me to revise or even abandon my habitual way of doing things.					
41. The new supervisor has adopted the procedures that make my work more complicated.					
42. The use of IT systems makes the work more complicated that it takes longer to complete.					

Thank you for your cooperation.



APPENDIX C
LETTER TO THE EXPERT



APPENDIX D

THE APPROVAL OF SUAN PRUNG STRESS TEST



VITAE

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