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NEAR EAST UNIVERSITY
EDUCATIONAL SCIENCES INSTITUTE
EDUCATION ADMINISTRATION and SUPERVISION
DEPARTMENT

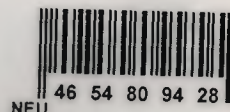
**THE EVALUATIONS OF THE SCHOOL ADMINISTRATORS WHO
ARE WORKING AT THE SCHOOLS UNDER GENERAL SECONDARY
EDUCATION AND PROFESSIONAL AND TECHNICAL EDUCATION
DIRECTORIES ON THE MANAGERIAL STRESS SOURCES THAT
AFFECT THEIR PERFORMANCES**

(Nicosia – Famagusta Sample)

MASTER DEGREE THESIS

Prepared by
Osman SÜTPINAR

Nicosia – 2006





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APPROVAL PAGE**To Educational Sciences Institute Directory ;**

We the undersigned duly appointed committee have read and examined the manuscript prepared by Osman SÜTPINAR and titled "The Evaluations Of The School Administrators Who Are Working At The Schools Under General Secondary Education And Professional And Technical Education Directories On The Managerial Stress Sources That Affect Their Performances" and certify it is adequate in scope and quality as a **MASTER DEGREE THESIS** at the Education Administration and Supervision Department.

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APPROVAL

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PREFACE

Stress is one of the most important problems that humankind is facing in today's world. Stress is a factor, which directly impacts the performances of the employees of the organizations and especially the managers who are the brains of these organizations.

This research, aims at identifying the sources of the managerial stress that influences the performances of the school managers.

I hope that via this research, at least to one extend, I help the school managers learn about the sources of the stress and cope with the stress sources.

I would like to thank Mr. Hasan YILDIZ who helped me completing this research, Mr. Ozcan ERCIN who supported me at all stages of this thesis work with his knowledge and experience, Erdoğan ERCAN and many friends who did not hesitate to give me all their support, Dr. Fatoş SİLMAN who guided this research with her suggestions and criticisms, and my advisor Associate Professor Aydın ANKAY.

I dedicate thiw thesis to my parents who worked so hard for me and who never beared all the challenges and difficulties for their son.

Lefkoşa – January 2006

Osman SÜTPINAR

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ABSTRACT

Recently, organizations have been paying too much to manage stress but still continue to lose workforce. On the other hand people have been seeing great personal losses due to the damage that stress causes. Therefore, organizations must become aware and control stress by taking precautions to keep stress at manageable levels.

In this study, the stress term and the symptoms of stress seen in people as well as the factors that affect the organizational performance and productivity were investigated, the term related with organizational stress and its effects on organizations were explained.

The aim of the research was to define stress sources that affect the school administrators the National Education and Cultural Ministry in T.R.N.C. Evaluation is made according to the managers' approach to these stress sources.

The research included 91 General Secondary Education and Occupational and Technical School administrators during 2004-2005 education years in Nicosia and Famagusta.

The questionnaire used in the research was adapted from Prof. Dr. Yücel ERTEKİN's Managerial Stress Survey (MSS). The survey was formed from two parts. The first part included 4 questions that contain demographic information. The second part included 40 questions that were prepared according to likert scale. Administrators were asked to answer the level of the stress effect with "Never", "Rarely", "Sometimes", "Often", "Always" indicators.

In the research, reliability and validity analysis were made in order to define whether or not the questionnaire was suitable for T.R.N.C situations or not. And then according to the administrators' answers, the findings were analyzed by t- test which

were tested by sex, occupation, priority, management status, related department variances, and variance analysis was made according to the findings, then proposal was submitted.

The findings of the research were:

- Female administrators have more stress than male managers because they cannot join the managerial decisions and make a decision as quickly as the male managers.
- Male administrators and the young administrators who have less seniority develop stress because of the longer and tiring working hours.
- All of the administrators have been affected by political interference and pressure.
- All of the administrators have more stress because of not having an opportunity to develop themselves in the country and abroad.
- Administrators who are in the Occupational and Technical Education field have stress because of insufficient technical instruments and materials.
- Obligation of working with staff who are not properly educated and improper delegation of authority and responsibility were some of the sources of the stress that the administrators have faced.

CHAPTER I

INTRODUCTION

In this chapter, the problem status, the importance of the research, research goals, sub-problems, definitions, abbreviations, are identified.

1.1. Problem Status

People of the modern world, no matter what they do, live the great portion of their life by challenging their capabilities and limits. Twentieth century, has enabled people with mobility and speed incomparable with previous centuries, this caused people work in a continuous competition and change and live their lives in such an environment. The individual, either working for public or private sector or providing service without being directly attached to an organization, has to meet with the stress factor. Stress has gained particular attention of the scientists and researchers besides many other problems that resulted from the contemporary industry and work life. (Ertekin, 1993:3).

The striking results, which were derived in result of the applied research performed by scientists from the U.S. and other developed countries, have played an important role in stress being recognized as the illness of the XXIst century. Through such studies, it is identified that stress is spreading even more in today's world and severely threatening the existence and performance of humans and organizations. We next summarize some of the striking statistics from the literature, which are obtained through thousands of studies performed on mostly USA and Europe based organizations, which clearly explain the measurable impact of stress on the organizations (Geurts and Gründemann, 1999:10-11; Tutar, 2000:201; Öztürk, 1994: 114; Ertekin, 1993:152):

- The estimated cost of stress to the U.S. economy is approximately \$150 billion.
- It is reported that 75% to 85% of the work accidents in the U.S., are stress related.
- In the U.S., the indemnities to the employees due to stress related factors have tripled within the past decade.
- In the U.S., an average of 185 million work days per year is lost due to the heart problems resulting from stress related factors.
- In England, an average of 40 million work days per year is lost due to stress.
- In England, the work days lost due to stress are 10 times more than the ones lost in result of strikes.
- Only 5% of the employees in the U.S. report that their work is free of stress.
- It is identified that half of the work absences in EU countries are due to stress in the workplace.
- 57% of the employees in the EU countries say that their health is impacted from their work.
- 28% of the employees in EU countries have reported their health are in risk because of their jobs.

Although the above mentioned statistics clearly show that stress is a serious threat for the health of people and organizations, in the relevant literature, the researchers seem to agree on the fact that the programs to prevent the stress should not target completely removing the stress. In a work environment where there is no stress, the motivations are lost and work performance decreases. As the stress increases, the work performance is observed to increase as well. If the stress can be controlled, it will have a motivating role in fighting against the factors that prevent to achieve the goals. Also, optimal level of stress is an early alarm system for the situations that threat self-respect and mental balance such as happiness, health, and security. On the other hand, when stress level peaks, work performance decreases

and behavioral abnormalities start. The effects of heavy stress on the employee and the organization vary from hitting the work performance to bottom to quitting jobs and negative reflections such as deaths (Yılmaz ve Ekici, 2003:3).

Hindle (1998:10) enumerates the effects of heavy and continuous stress as reduction in the quality of the services and products, high turnover rates, increased absences, negative company image, and cold organization climate. Also, the studies show that there is no difference between very low and high stress in terms of the negative impacts on people's health and organizations.

Stress always creates problems for managers. They cannot be effectively managed unless their sources are not clearly recognized, thus they become chronic problems.

When stress sources are identified carefully and removed, it creates a positive impact for a more productive work environment. Chronic stress, on the other hand, can be fatal. Besides creating unhappiness for the individual, stress risks the health of the people, and can cause them to feel restless, exhausted and exhausted in their both work and personal lives.

Since every individual in the society faces different kinds of stresses all the time in the work environments, the important thing to is to identify the ways to control the stress factors that threaten the individuals and their organizations and the methods to help utilize these factors in useful manners and to increase the success and quality rates through implementing these methods.

Stress is a factor that directly impacts the managerial performance in the organizational life. In this research, which also considers the effects of stress on the performances of public sector employees, the individual and organizational results of stress are first theoretically studied, and then the findings of an experimental work performed on schools, which are public sector organizations, are analyzed. The idea of managers, who are involved in the management of schools, which are of the most

common public sector organizations, are working under the influence of such a managerial stress is the main reason for this research. Starting from this reason, the goal of this research is to be able to identify sources of the managerial stress that school administrators face.

Taking these ideas as a reference point, in this thesis, the questions of “ what type of a relation is there in between the sources of the stress that impact the school managers and the school managers’ attitudes towards these stress sources?” is the problem for this research.

1.2. The Research Goal

This research is performed so as to identify the stress sources that impact the performances of school managers and to help them cope with stress. The approaches of the objects within the scope of this research towards stress and related issues are tried to be identified via Managerial Stress Survey (MSS). With this goal, the answers are sought for the following questions:

1. Is the Managerial Stress Survey (MSS) which is prepared for the middle level public sector managers, valid and trustable for the managers of the schools in TRNC?

2. What are the approaches of the school managers towards

- General stress sources,
- Social stress sources,
- Employee related stress sources,
- Management related stress sources,
- Work load related stress sources?

3. Is there a difference between the approaches of the school managers, who are within the scope of the research, towards the stress sources according to the following parameters;

- Sex
- Professional hierarchy
- Managerial status
- The directory under which the manager is working?

1.3. The Impact of the Research

It should not be forgotten that the most important step in recognizing and reducing the stress is to identify the stress sources that negatively affects the individual. The manager always becomes successful in managing the organizations and foundations by gaining objective and problem solving directions, when he/she is aware of this fact.

As in the whole world, the school managers in TRNC, are facing several problems for which even they cannot know the reason, due to several negative factors and insufficiencies.

This research, both through its theoretical foundations and research applications, will help the public sector managers, including the ones in the Ministry of Culture and National Education in TRNC, understand and know the issue of stress in a scientific manner and attempt to cope with it.

1.4. Assumptions

- The selected research method is proper for the research goal.

- The managers who took survey, the truly and objectively survey answered the questions.
- The sampling resembles the space at the desired level.
- It is accepted that the provided data is valid and trustable.

1.5. Limitations

This research is limited to

- The schools in Nicosia and Famagusta who are affiliated with the Directories of General Middle Education and Professional and Technical Education as of 2004-2005 academic year,
- And the administrators in these schools (principals and vice-principals).

1.6. Definitions

Manager: The person who combines together the production tools such as people, money, raw material, and machine, and provides a proper combination among these tools in order to achieve certain goals in a time period. (Eren, 1993:6)

Stress: The weak reactive situation that the individual shows on physiological, psychological and behavioral platforms against the threatening environmental factors.(Luthans,1994:399)

Organization: The structure that is formed by the people, who came together in order to achieve the identified goals through common effort, who are utilized with the necessary tools, locations and facilities, and each of whose authorities and responsibilities are set in advance. (Arıkanlı ve Ulubaş, 2001:1).

Organizational Stress: The situation determined by the changes that force the individuals to deviate from their normal functionalities and their interactions with their work and other people, a.k.a work stress. (Pehlivan, 1995:12).

Social support: It means to satisfy the basic needs of the individual, such as affiliation, love, appreciation, self achievement, through the interactions with the other individuals (friends, family members, supervisors or professional consultants, etc).(Tutar, 2000:289).

Optimum Productivity: Productivity is optimum when the stress on the employees is at normal level. (Ertekin, 1993:91).

1.7. Abbreviations

MSS: Managerial Stress Survey

MNE: Turkish Republic of Northern Cyprus Ministry of National Education

GSE: General Secondary Education

PTE: Professional and Technical Education

CHAPTER II

THEORETICAL FOUNDATIONS

2.1. Definition and Characteristics of Stress

The Latinate-origin word stress has taken its place in daily languages almost all over the world and is being used by people from different socio-cultural backgrounds. This concept, which was initially being used to express the situations such as disaster, trouble, sorrow, has then gained a different meaning. Stress has been started to be used for explaining the pressure, power and force that are being applied to objects, humans, organs and spiritual structures. It should be noted here that the concept of stress has first been considered in physics and engineering, and then in medicine, biology and management sciences (Torun, 1997:43).

According to Baltaş and Baltaş'a (2000:277), the question of what stress means has to be answered from two different perspectives, because this word is being used in two different meanings. First meaning refers to the state of the organism, in other words, the state at the time when the person is in danger and his/her balance mechanisms are broken. In this situation, the word stress defines the person's physiological, biochemical, and psychological reactions. The other meaning of stress refers to the overall factors that might break down the balance of the organism. These factors, which are known as stressors in the scientific language can be of physical (trauma, hot, cold, etc), psychological (emotional tenderness, internal and external conflicts, spouse problems, etc), or social (environmental factors, cultural change, etc) content.

The facts that a stress-free life may only appear in movies and novels but things are much more complicated in reality and nobody is working in a job that is not affected by stress are now accepted. Thus, what is the stress, which is

commonly talked in daily life, cannot be clearly explained despite being faced very often in the organizational level? (Ertekin, 1993:4)

It is difficult to find the Turkish word for stress. In Turkish, stress stands for the words such as violence, to be under pressure and tightness. It is also difficult to find a word that stands for stress in the western literature. That is why they also have imported the word stress as is. (Özkalp, 1989:143).

According to Cüceloglu (1994:321), stress is *the effort that the individual spent beyond his/her bodily and psychological limits because of the inappropriate conditions in his/her physical and social environment.* According to Shermerborn et al (1988:533) it is; *"the tension that occurs in the individual based on extraordinary demands, pressures or opportunities"*. On the other hand, according to Sdorow (1998:558), stress is *"the body's physiological reaction against physical and psychological demands."*

Selye (1956) is one of the frontier scientists that studied stress and defines stress as *"the reaction of the body against any demand imposed on the body."*(Selye , 1977:23 ; Akt. Johnstone, 1989:4). DeFrank and Ivancevich (1998:55) define it as *"an adaptive reaction, which results from actions, states and events that impose several demands on the individual, and which reduces the individual differences."*

According to Pehlivan (1995:7) definitions of stress are classified into two. First group consists of the definitions that focus on the relation between the individual and his/her environment; the other group includes the definitions that take the reaction of an organism to a demand or to an action as a reference point.

According to Ankay, stress is not always a negative concept. It is sometimes an important event that helps the organisms survive by signaling alarm in danger.

Stress is often thought as a negative concept. However, it is not harmful, bad, or something to be avoided all the time. The concept of stress, which is related

to wish, need, and restrictions may sometimes refer to a positive state. The events that are desired by people such as promotion, fame, and marriage can be examples of stress. Restrictions and losses such as death, unemployment, or not being able to promote are examples of negative stress. While positive stress is motivating and encouraging the person, negative stress causes physical and psychological harms. (Torun, 1997:44)

In today's modern society, we are all occupied by stress, because we live most of our lives at work. In addition to all of these, most of us would look for satisfaction and identity in our professional life. That is why, the distinction between stress in professional life and outside the professional life is highly artificial. It is almost impossible to separate these two. A study indicates that two thirds of doctor visits in the U.S. are stress related. Secondly, although some professions such as airport traffic controllers, police, firefighters, and doctors, create high level of stress, it is very difficult to find a profession that involves less or no stress. Finally, reasons such as drastic changes in the economy, increased foreign rivalry, new technological inventions, and inflation have made it necessary to carry out many regulations for organizations and human life. All these have generated factors to create and increase stress. (Can, 1994:280).

Stress also varies by profession. A survey performed by USA National Professional Security Institute, ranks the top 12 professions with the highest level of stress among 130 professions as follows (Ertekin, 1993:45-46):

1. Worker
2. Secretary,
3. Auditor,
4. Technician (clinical laboratory),
5. Office Manager,
6. First Level Proctor,
7. Manager (medium level),
8. Waiter/Waitress,
9. Machine Operator,

- 10. Farmer,
- 11. Miner,
- 12. Painter,

The characteristics of the stressful jobs are listed as follows based on a survey by American Stress Institute (Baltaş and Baltaş, 2000:62):

- Professions that make it harder to cope efficiently with daily life problems. (Police, teacher, air traffic control operator, etc).
- Professions that do not provide enough control opportunity at the workspace, (telephone operator, cashier, secretary, consulting or customer service agent, etc.).
- Professions with heavy physical conditions, (miner, worker who work under humid and badly aired environments, traffic polices who work in noisy and dusty streets, etc).
- Professions that involve time pressure, rivalry, and risk, (journalism, stock market agents).

2.2. Symptoms of Stress

In today's modern society, we are all occupied by stress, because we live most of our lives at work. In addition to all of these, most of us would look for satisfaction and identity in our professional life. That is why, the distinction between stress in professional life and outside the professional life is highly artificial. It is almost impossible to separate these two. A study indicates that two thirds of doctor visits in the U.S. are stress related. Secondly, although some professions such as airport traffic controllers, police, firefighters, and doctors, create high level of stress, it is very difficult to find a profession that involves less or no stress. Finally, reasons such as drastic changes in the economy, increased foreign rivalry, new technological inventions, and inflation have made it necessary to carry

out many regulations for organizations and human life. All these have generated factors to create and increase stress. (Can, 1994:280)

Stress has some specific symptoms. These are state of tenderness, continuous anxiety, and high level of alcohol and tobacco consumption, insomnia, difficulties in developing collaboration, feeling of incapability, emotional unbalance, digestion problems, and high tension. (Davis, 1984:439. Akt. Pehlivan, 1995:45).

Symptoms of stress can be classified into four groups (Braham, 1998:52-54):

1. *Physical Symptoms*: Headache, irregularity in sleeping, back pains, chin stiffness or biting teeth, constipation, diarrhea and colitis, muscle pains, dyspepsia and ulcer, high tension or heart attack, excess sweating, appetite change, tiredness or low energy, increased accidents..
2. *Emotional symptoms*: Anxiety or fear, depression or crying easily, rapid and continuous changes in the emotional status, anger, tenderness, decline in self-confidence or feeling unsafe, excess sensibility, anger bursts, aggressiveness or animosity, feeling emotionally cracked.
3. *Mental symptoms*: Concentration, quandary, forgetfulness, mental confusion, weakness of memory, excessive dreaming, keeping oneself busy with a single idea or thought, loss of humor, low productivity, decline in work quality, increase in mistakes, weakness in reasoning.
4. *Social Symptoms*: Distrust against people, blaming others, not showing up at the appointments or canceling them right before the time, looking for others' mistakes and offending people verbally, over defensive attitude, not talking to many people at a time, not speaking.

If such symptoms are started to be commonly observed on a person except for normal cases, it means that the individual is under stress. The first step to control stress is to recognize it. What needs to be done are that the individual should carefully analyze his/her physical, emotional, mental, and social characteristics and recognizing these extraordinary symptoms, he/she should cope in the most efficient way with the stress creating factors (Braham, 1998:52-54).

The simplest definition of stress is the reactions that we show towards our desires. A lot of people think that stress occurs as a result of others' actions against themselves. However, in reality, stress is the sum of our reactions against the situations that result from our excessive desires and wishes. (Rowshan, 1998:27)

Again, according to Rowshan (1998:27), the reaction against stress is explained according to the four-step HERO principle. There are four stages of stress according to this principle:

- Happening H
- Evaluation E
- Response R
- Outcome O

Selye (1956), named the body's three-stage response to stressful situations as "General Adaptation Syndrome". According to this theory, the reaction of the organism against stress develops in three stages. These are alarm reaction, resistance and cracking stages (Johnstone, 1989:4; Baltaş and Baltaş, 2000:26; Balcı, 2000: 21-23).

- *Alarm Recognition:* When the individual face stress, due to activation in the sympatic nervous system, the body gives either "*fight*" or "*run away*". As a result of the physical and chemical changes in the body during this *fight* or *run away* reactions, the individual gets ready either to fight against or run away from stress. This process develops in the form of acceleration in the heart beats,

increase in tension, rapid breathing and sudden adrenalin secretion. The stage in which either *fight* or *run away* reactions occur is called the “alarm stage”. In this stage, the stress curve raises above the normal level in conjunction with the stress creating sources and their densities, and this way the first indications of deviations from the normal behavior are started to being observed (Güçlü, 2001:94).

- *Resistance Stage*: “Adaptation or resistance stage” follows the alarm stage. Everything goes back to normal if one can adapt to the stress source. In this stage, it is tried to gain the lost energy back and to repair the destruction in the body. When stress is managed, parasympatic nervous system becomes dominant. Heartbeats, tension, and breathing turns to normal, muscular strain reduces. During the resistance stage, the individual makes every effort to resist the stress and shows the typical behaviors of a person under stress. Such a situation may continue for a while (Güçlü, 2001:94).
- *Cracking Stage*: Unless the stress sources and their levels decline or when they increase, an era in which the individual’s resistance is broken and severe behavioral deviations and letdowns are observed starts. If one cannot cope with the stress source or cannot adapt, then the physical resources cannot be used anymore and cracking stage starts. In this stage, parasympatic nervous system is dominant. The person is cracked and stress source is still present. In this stage, one cannot cope with long term stress sources and becomes open to the effects of other stress sources (Güçlü, 2001:94).

2.3. Stress Sources That Influence Managers

Several reasons can cause stress for managers. These are:

- Personal Stress Sources that are personally related to the manager,
- Organizational (Managerial) Stress Sources that are related to the manager's work environment,
- Environmental Stress Sources that are mainly related to the general environment in which the manager is living.

2.3.1. Personal Stress Sources

An individual's personality, health, age, lifestyle, and mental status are highly correlated with stress. Individuals react differently to every situation they face.

The sensitivity against stress varies from one person to another. Some personality characteristics increase the sensitivity against stress, while others decrease it. Some stimulants are conceived as stress making by some people, while they have a neutral effect on other people. Also, the capabilities of people coping with stress also vary (Ataman, 2002:486).

2.3.1.1. Effects of Motivation

According to Çoroğlu (2002:105) motivation is "*the workers desire of doing and continuing the work*".

It is the art of motivating people and result of participation. Nevertheless, working with together is not easy. One should know how to motivate people. Money, despite the common thought, is not a strong motivating factor. In a research made in Japan, it is stated that high salary is in the bottom of the list, but the desire for more information and participation in the decision making process is in the top of the list when motivating factors are ranked (Hageman, 1995:42).

The individuals have biological and psychological requirements to be satisfied to continue their lives. The person is alarmed when he/she cannot meet these requirements and he/she takes action. This action is to satisfy the needs. If the action meets the needs, then the person is satisfied

In the organizations, the individual's primary and secondary needs should be satisfied. Otherwise, the person is stressed and his/her productivity declines. Furthermore, stress is a factor that negatively influences the motivation and doing the job properly and increases the accidents. Stress and motivation are inversely related. If there is not enough motivation, then stress occurs. In an environment with stress, there will not be motivation.

2.3.1.2. Emotional Factors

The difference between the individuals' thoughts and emotions in his/her inner world and his/her thoughts and emotions that he/she shows and says to the outside maintains a major stress source (Cüceloğlu, 2002:78).

Emotions can help improve our physiology or make it worse. If you can express your feelings in a constructive manner, then you learn and improve. Otherwise, you would open the door to the room full of many health problems. Expressing and leading the feelings in a constructive manner play a key role in helping you feel better emotionally (Rowshan, 1998:76).

Again, according to Rowshan (1998:76-96), the resources that one can utilize in developing and resuming emotional health are summarized as follows:

- The things that support you,
- Touching,

- Humor, comedy, and smile
- Managing the spiritual status,
- Love

2.3.1.3. Personality (A Type - B Type Behavioral Personalities)

Personality is another factor that plays an important role in the sensitivity of the person to stress. This has become particularly important with the distinction that is known as A- and B- type personalities. The personality concept, which includes invariable characteristics and behaviors, is used to explain the situation that separates the person from the others. Personality is the sum of the emotional structure, behaviors, interests, abilities and all the psychological characteristics (Ertekin, 1993:37-38).

A- and B- type personalities was first observed by two cardiologists, Meyer Friedman and Rosenman in 1974. The idea first appeared after an upholsterer, who was repairing the chairs in these cardiologists' waiting room, said that most if the chairs were torn from the front side. This led the cardiologists to deduce that most of the heart patients are very anxious and having hard time while sitting. Using this observation as a starting point and a basis for their clinical studies, Friedman and Rosenman have concluded that the patients are displaying to very different behavioral model types. Their research leads them to derive that these differences are in fact personality based (Moorhead and Griffin, 1992: 463).

Friedman and Rosenman, who classified the human personality from a different perspective, have studied many men and classified them into two groups as A-type and B-type personalities. The years-long research of these two surgeons aims at identifying which of the human characteristics are more likely to be affected from the stress and its negative impacts. First results showed that the conventional risk factors may explain only the half of the heart problems and that there would

also be some other factors. The heart problems observed in middle-aged Americans are in fact due to stress, behavioral characteristics and life style. (Baltaş and Baltaş, 2000:121-122).

Personality is as determinant for the individuals' being affected from the organizational stress sources as it is for the employees' behaviors within the organization. Typically, individuals differ in terms of their levels of tendency towards stress. If we happen to classify employees in terms of their tendency towards stress, we can characterize three types of employee character as A Type, B Type, and Mixed Type (Baltaş and Baltaş, 2000:222).

A Type individual is aggressive, impatient, and highly motivated for work. He/She has so many motivations and wants to be very successful in a very short period of time (Moorhead and Griffin, 1992: 463).

B Type individuals are exact opposites of A Types. They do not have strict rules, they are flexible. They do not have time problems. They are patient and self-confident. They are not so ambitious for success. They do not easily get angry or nervous. They enjoy what they are doing and work regularly. Unlike an A Type individual, a B type individual is laid back. They do not want to be involved in competition with others. Some individuals may reflect the characteristics of both types. Such people are called of mixed type.

Until so far, we have explained the stress factors faced by the industry or by other sector employees. It is no doubt that the same situation is observed even more for managers. This situation, which is referred to as manager abrasion in modern management science, showed that A type managers show their competitive sides by working more than the others but they make bad decisions since they decide too quickly. These people utilize their past experiences as they are more interested in quality and speed. They do not have time to find unique solutions. That is why it is easier to guess their behavior in advance than the B Types (Can, 1994:286).

2.3.1.4. Age Factor

One can discuss a correlation between the individual's age and his/her endurance towards stress. It is known that during menopause, andropause, and puberty the tolerance limits against stress declines and the endurance against stress reduces (Torun, 1997:44).

The changes in life can be gradual as aging or sudden as the death of the spouse. Medical scientists, affirm that the sudden changes in life create enormous amount of stress. These researchers indicated a significant correlation between the degree of the changes in life and the individuals' health levels (Artan, 1987:469).

2.3.1.5. Frustration

One of the factors that cause stress is frustration. The case of not achieving the aims of the motivated behaviors is called "frustration". In this case the motivations are not satisfied. The hatred and aggressiveness of a person who experienced frustration depend on three factors. Frustration differs depending on the individuals' endurance levels. Frustration is classified into two as internal and external. Internal frustration results from the imperfections in the organism. For example, a kid's with polio feeling low because of not being able to play soccer. External frustrations, on the other hand, can occur anytime. Drought, earthquakes, flood, and death may cause external frustration. For example, sexual perversion, being laid out are considered as external frustration (Ankay, 1998:74).

The most common reaction showed as a result of frustration as aggression. When people are aggressive, they reflect a frustration, which worried them a lot. One of the strongest frustrations that one can face in organizations is the management's preventing his/her promotion (Davis, 1988:562-584).

Providing a suitable work environment, necessary equipments for the job, and even the necessary education required by the job are among the duties of the manager to improve the employees' productivity (Davis and Newstrom, 1988:442-469).

2.3.1.6. Defense Mechanisms

The reactions against frustration are called defense mechanisms. The body learns to defend to protect itself against the psychological effects of his/her blocked targets. These defense mechanisms, which showed against frustration –one of the most important stress sources, can also be used to be protected from stress. The defense mechanisms that are showed against frustration are sublimation, identification, reinterpretation, flight into activity, aggression, rationalize, projection, reaction formation, repression, regression, withdrawal, humor, submission, altruism, blaming and counteract, autism, and day dream (Kaldırımçı, 1983:83-88).

According to one source the defense mechanisms are; displacement, denial, controlling, hypochondria, dissociation, somatization, conversion, bashfulness, isolation, avoidance, distortion, and obsessive things (Dubrin, 1974:108-109).

2.3.2. Organizational (Managerial) Stress Sources

Stress is a concept that also has to be considered from management perspective because, stress directly affects employees and determines their behavior, productivity, and relation with others. In this regard, it is required to analyze the stress factors, different phases of stress, and the measures to be taken to cope with the different steps of stress (Ataman, 2002:485).

It is possible to define an organization as a socially open system in which more than one person get together in order to satisfy a societal need (Pehlivan, 1998:137).

In a work environment, the individual, besides production, builds relation with others in the organization, starts adapting to norms and values of the organization. He/she joins several groups within the organization. These processes necessitates that the employee puts some efforts to adapt. In order to fully understand the view of the organizational stress, we should know that stress results from the interaction of two factors. These two factors are individual characteristics and organizational characteristics. These start the stress reaction in certain cases. At a point where there are stress stimulators factors to create a negative reaction in the individual, this reaction of the individual defines the resistance against stress. The magnitude of stress stimulators causes stress at a point where it exceeds the resistance capacity. Stress resistance is a quality, a personal characteristic. However, stress stimulators are the characteristics of work life and organization. Stress is a function of the interaction of the organizational and individual characteristics (Pehlivan, 2000:22-23).

Part of the employees in an organization (including managers) faces great difficulties due to continuously being in low-level anxiety and not being able to find sufficient coping and psychological support mechanisms. Another part, on the other hand, can manage even though they do not enjoy their lives and jobs. Only a very small portion of the employees enjoy their work and have a life style with a manageable stress (Myers, 1990:159).

In an organization, there should exist a rational coordination of the activities of a group of people through division of labor and hierarchy of authority and responsibility in order to succeed the common goals. Organizations consist of people, technology, and the structures and processes, which organize the relations of people with the others and with their duties. Here, process, stands for dynamics,

behavioral events, and interactions whereas structure stands for roles and relations (Balci, 1997:1-2).

Every organization can develop stress sources depending on the technology used, environmental factors, tendency and experience of its members, internal conflicts, the climate created by the organization, and other factors. The common point in organizations, besides these stress sources, is the existence of stress sources that is specific to an organization or to the work environment (Ertekin, 1993:7).

The stress sources that affect the employees in an organization are excessive work load, time limitations, low quality of supervision, the insufficiency of authority to meet the responsibility requirements, unsafe political environment, indefiniteness of roles, the incompatibility between the values of the organization and the individual, the incompatibility between the individual and his/her duties, conflict of roles, heavy load for the role, the anxiety caused by the responsibilities, work conditions, human relations, and alienation (Davis and Newstrom, 1988:422).

All this excess and fast work causes abrasion for managers. The symptoms of this are behaviors such as chronic exhaustion, always getting angry with others' demands, cynicism, and not liking people, and headache and ulcer (Can, 1994:286).

Blau (1981:281) summarizes the Managerial Stress Sources as in **Figure 1**.

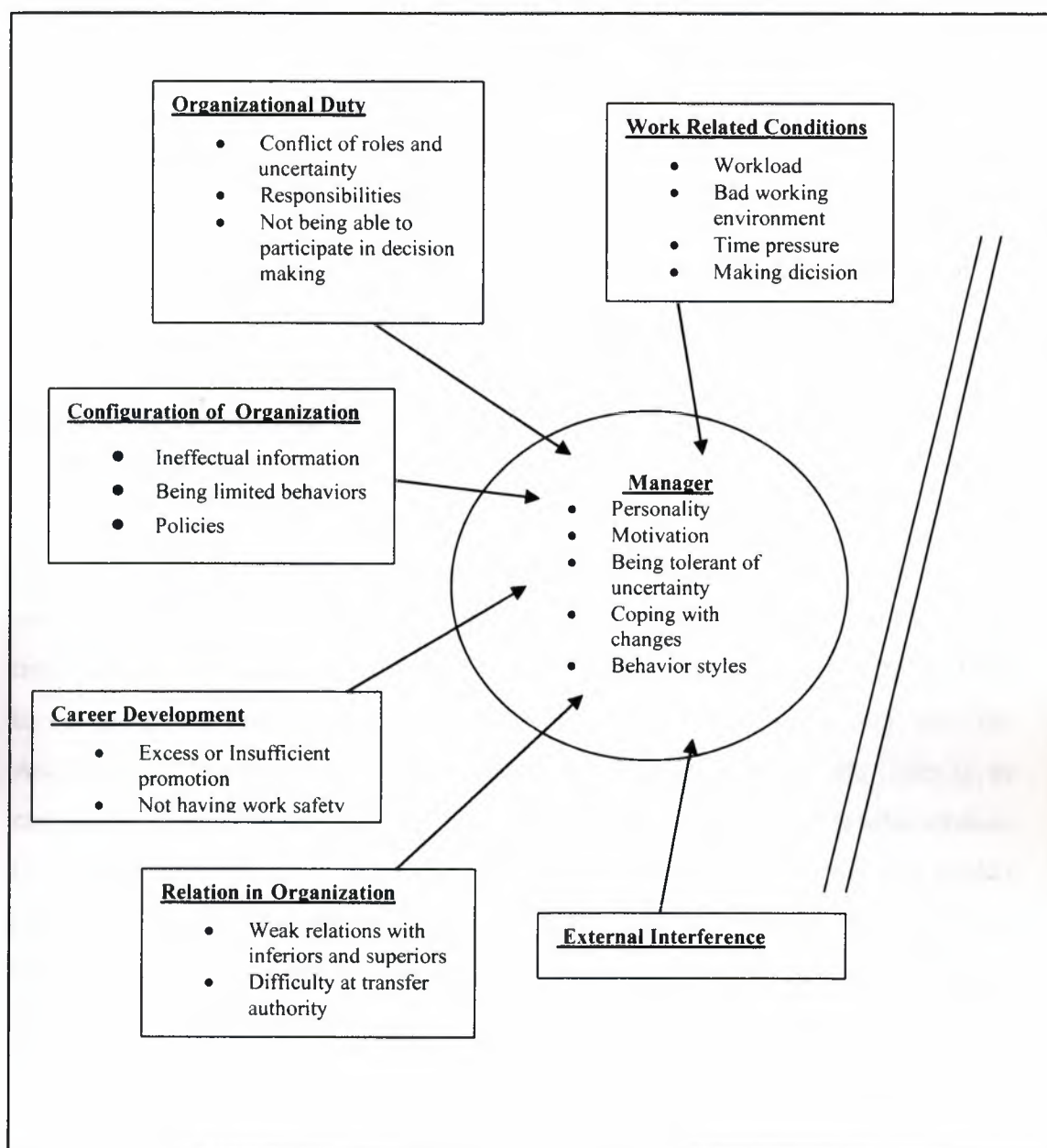


Figure 1. Managerial Stress Sources

Reference: Blau, G. (1981). *An Empirical Investigation of Job Stress, Social Support, Service Length and job Strain*. **Organizational Behavior and Human Performance** V.27. pp.281.

In a work place, managers face several stress sources. The major stress sources are the following:

2.3.2.1. Excessive Workload

Stress level is high for the people who are supposed to finish a lot of work in a very limited time. Excessive workload is one of the most important and most commonly observed stress sources among the work related stress sources. It is possible that the physical and psychological health of the individual is affected by excessive work (Şencan, 1986:119).

Workload can be considered in two groups: First, quantitative workload, and second is qualitative workload. Quantitative workload can be defined as the insufficiency of time to complete the necessary tasks, or having many different tasks to be completed in a limited time together with the tasks' being very physical. According to this, a working environment that requires some of the tasks to be completed by specific due dates, is a type of excessive burden that creates tension. On the other hand, qualitative workload is the unbalance between the quality required by the task and the qualities of the person who is supposed to complete the task to the disadvantage of the person. According to this, the person will find the task difficult if he/she does not have the necessary skills to do the task (Eroğlu, 2000:322-323).

Requiring more time and power, or requiring more than the individual's skills to do a task causes stress (Sanders et al., 1995, s.46).

Work dissatisfaction, fear, and increase in alcohol and tobacco consumption, angry reactions, hypertension, high cholesterol, and heart diseases are observed as a result of excessive workload or insufficient workload (Arıkanlı, 1998:17).

According to Vallerie and Cary (1990:23-24, excessive workload can be considered as a potential stress factor. In fact, sometimes, less workload is also assumed to be a stressor. Working under a very low workload also affects the individual's psychological health.

2.3.2.2. Unpleasant and Unsafe Work Environment

The desk, office or the work space are the factors that provide comfort for the employees.. It is known that the factors such as lighting, heat, and noise that determine the physical conditions of the work environment are known to affect employees' health and their physiological and psychological conditions (Aytaç, 2002:3).

The stress creating factors that we have mentioned break the individual's body balance and put him/her into anxiety. The research on the effects of the environmental conditions in the workplace shows that these factors cause kidney and skin diseases, and also increase the work accidents and absences (Taştan, 2002:1).

The high level of risk at the work space, and its including potential threats for the health, e.g., nuclear plants, mines, fire and police stations, can create stress sources, too (Cooper ve Davidson, 1987:106).

Inadequate work conditions are also important components of the work stress sources. Excessive heat, noise, excess or inadequate lighting, radiation and air pollution are the factors that affect working conditions. A work space that involves these factors maintains negative factors and creates stress (Schermerborn et. al., 1988:536; Helliriegel et. al., 1995:242).

Another important factor that creates stress in the work life is the dangers that may be exposed during work. Normally, in a work environment, dangers are either not present or at a minimum level. However, for some work types, the risk of work

accidents is relatively high. Every risk factor that threatens the physical and psychological health of the employees working in industries such as mining, metallurgy, construction, aviation, marine, energy and nuclear plants is a stress creating source. According to this, the situations such as falling, getting injured, being poisoned, being exposed to radiation and even dying, put the employees into stress and anxiety, even if they are just a possibility. People working under such conditions should fully concentrate on their tasks as a result of being under continuous stress and anxiety (Eroğlu, 2000:325).

2.3.2.3. The Relations with Inferiors and Superiors

The relations of the individual in the work place can be classified into three as his/her relations with his/her inferiors, superiors, and colleagues. These relations should be built on mutual trust and understanding. Otherwise, they create discontent for the individual (Şenyüz, 1999:17).

There is a chain of authority from the top management to the lowest level in an organization. The inferior should know his/her superior and the rules and policies that his/her superior follows. Hence, a full coordination can be provided within the organization from the lowest level to the top management (Fişek, 1979:61).

To direct the work of his/her inferiors is one of the most important tasks of a manager. The conflict between the use of authority by managers and the expectations of the inferiors in this regard is a stress creating (Balaban, 1998:7-79; Akt: Duymaz, 1999:10).

Here, managers are meant to give orders to their inferiors or explain them what needs to be done using different ways. The significance of the directing functions comes from the subject being humans. The manager does not only make plans, but also delivers the tasks to the inferiors and determines who has to do which task (Ertürk, 1995:121).

The work environment soon becomes unbearable and boring for the employee who is not appreciated by the managers and cannot find the types of relations at work. The desire to be appreciated is one of the basic human needs and it proves our existence as an (Işıkhan, 1998:63).

For example, if you think that your performance is not well appreciated by your manager and find it difficult to talk to him/her about this, you may still continue to work. However, one day, you may burst unexpectedly and cause your relations go worse (Şahin, 1994:28).

On the other hand, the negative and punishing behaviors that the superior shows to the inferior are also important stressors. The manager's "*let me give him/her a hard time*" feeling that develops as a reflection of superior-inferior relation is one of the stress creating factors for the employee. Such an employee is exposed to stress as he/she has to work harder than his co-workers since he/she has poor relations with the (Cam, 2004:5).

The mutual dissatisfaction between the inferior and the superior creates conflict, friction, and tension for both. Preventing conflicts, satisfying the expectations of the employees, balancing the relations between inferiors and superiors, and maintaining the mutual respect and love within the organization are among the most important duties of managers. Trying to perform these duties on one hand, and facing unexpected conflicts on the other creates stress for the managers and the employees.

2.3.2.4. Time Pressure (Meeting the Due Dates)

The time pressure in organizations is felt intensely especially for the managerial tasks. Managers are exposed to tension when they have to finish their tasks within the planned time. The main stress sources for the managers are long working hours, time pressure and related excessive work load. Working under time

pressure causes the managers to observe deficiencies in their relations with friends and family members (Balaban, 1998:7-79; Akt: Duymaz, 1999:7).

Careless plans, inefficient meetings and phone calls, and uncontrollable interruptions such as unexpected visits cause loss of time. This may create the feeling that everything is out of control. This anxiety causes the things seem to be much more threatening than they are. Being in continuous state of high alert absorbs the whole energy, thus less work can be finished in longer time (Şahin, 1994:111).

According to Norfolk (1989:90-95), competing against time and trying to finish so many tasks within a limited time period are accepted to create stress for managers. The following methods would reduce this type of stress:

- a. A manager should not let the time pressure to take him/her under its clutches.
- b. The manager should work regularly and at his/her normal pace.
- c. A manager should plan his/her time according to the importance of the tasks.
- d. A manager should pay attention to carefully plan some free time to have some rest within his/her daily routine.
- e. A manager should make flexible schedules.
- f. A manager should not forget that each day is lived only once.
- g. A manager should learn to concentrate on the task that he/she is doing at the time.

This entire heavy and paced work environment causes depreciation for the managers. The symptoms of this depreciation are chronic tiredness, always getting angry with others' demands, cynicism, not being able to love people, headache, and ulcer (Can, 1994:286).

2.3.2.5. Monotony

The monotony of the task and the individual's not being able to involve himself/herself in the processes of the task creates the feeling of alienation and this is a very common stress source. The impacts of monotony on the individual are psychological and social anomalies such as despair, adversity, tension, stress, apathy, passive resistance, and aggression (Eren, 1998:224).

The feelings of tiredness and boredom due to a task being repeated continuously and at the same speed are called monotony. Monotony is a source of complaints and dissatisfaction for the employees (Eren, 1984:199).

According to Eren (1984:200), the main sources of monotony are:

- a. Characteristics of the work,
- b. The sensitivity of the employee against monotony,
- c. The moral environment at the workspace,
- d. The psychology of the employee.

According to Erkan (1989:3435), the followings are observed as a result of monotone tasks:

- a. Get accustomed to,
- b. Reluctance,
- c. Attention deficit disorder,
- d. Decline of abilities,
- e. Tiredness,
- f. Weariness and exhaustion,
- g. Increase in the work mistakes and accidents,
- h. Slowing down in the work pace,
- i. Escaping from work.

A stable rhythm at work generally reduces the wearing of it. Rhythm also exists in the biological nature of humans. Day and night, sleep and sleepless and daily changes in the levels of some hormones are some examples. Rhythm means the existence of an order to complete a task. Thus, different work groups perform their tasks in an order. Rhythm increases productivity and reduces work accidents. Conversely, monotony and automation reduces productivity, sensitivity, and attention. It causes disorders in many conscious functions, e.g., perception, attention, memory, motor performance. Monotony is closely related to the complexity of the task and the time allocated for it. If a new worker has to complete a very complicated task in a very short period, then the functions such as thinking, perception, attention cannot function properly, awareness and attention reduces (Yüksel, 1991: 431; Ertekin, 1993:54).

2.3.2.6. Career Development and Status

The individual is exposed to stress, either small or big, during the career development process. In today's industrialized society, the individuals are furious about making a lot of money and having a high social status. Naturally, as a result of this, the individual finds himself/herself in a competitive environment. In such an environment, one needs to work very hard and posses high performances (Küçükaslan, 1994:21-23).

The stress that the employees had to bear because of their professional lives is related to career planning and development, which includes work safety, promotion, transfers, and the opportunities about professional development. Individuals spent enormous effort to promote in their organizations. This causes them to feel under pressure. Working hard or less will either help them promote or cause them to be employed at lower levels. The individual facing this fact will be under pressure and tension and will have to work under stress (Gümüştekin and Öztemiz, 2005:274-275).

The status perception of the employees or their being employed in a lower or higher status than they are affects their stress situations (Güney, 2000: 441).

Promotion is a stress creating factor for mid-level managers who have more promotion opportunities compared to high level managers. This involves the changes that would come along with promotion and the idea of not being given a deserved promotion.

2.3.2.7. Unfair Evaluations, Rewards, and Promotions

Another important stress factor related to work is work evaluation. Most people, in fact, do not like being evaluated by others because they know it is very difficult to evaluate people in an objective and adequate way. As a result of biased and inadequate evaluation a person can lose his job may not have the deserved promotion. That is why; evaluation is effective in the individual's future and organizational situation (Ertekin, 1993:52).

Excess promotion, on the other hand, is that a person, who achieved the summit of his/her abilities, is given a job that is above his/her abilities. The requirements of the job may exceed the individual's abilities. In such a situation, a manager can think of himself/herself as incompetent. As a result, he/she cannot meet the requirements of the job and spent excessive effort to cope with it. That causes him/her anxiety of keeping his/her position in the organization. This anxiety is a stress factor for the individual (Hellriegel et al. 1995:493).

Inadequate or rapid promotions, job insecurity, the thought of evaluations not being objective, blocking of the desire for success are stress factors for especially those who have high motivations for success (Palmer and Hyman, 1993:29)

The promotions based on unfair evaluations in an organization cause clashes among the people, thus cause stress. The earlier work and our surveys show that the

managers' promoting those people who have good personal relations with them but not have adequate knowledge, capabilities or experience, instead of deciding these promotions based on objective evaluations cause the employees to feel negative against both the managers and the people who are promoted and develop behaviors based on aggression against them. This situation causes stress for the other employees and results in absences by negatively affecting the will for working. Another result of such a promotion mechanism in organizations affects the people who may not be able to quit their jobs due to economical reasons. The psychology of these people is negatively affected because they have to keep working in such an environment and they face some physiological problems due to stress (Cam, 2004:4).

2.3.2.8. Conflict of Roles, Uncertainty of Tasks, and Contradictions

It is hard to make a clear definition of conflict because they occur in different situations and at different levels. Disagreement, opposition, discrepancy are the elements of conflict (Koçel, 1995: 409).

The role problems that employees of an organization face put them in stress and consequently create unhealthy, unhappy people who have no trust for the organization and no will to work. Thus, the organizations have to live with a group of unhealthy, weak, exhausted and reluctant people (Bumin and Şengül, 2000:571).

According to Yiğit (2000:71), the literature identifies that conflict of roles are observed in the following four situations:

1. Role conflict may occur as a result of the conflict between the requirements of the individual's roles in an organization and his/her values.
2. Role conflict may occur when the expectations of the people in the workplace on an individual do not coincide with the expectations of the people outside the workplace do not coincide.

3. It may occur when extra tasks those are above the capacity of the individual are demanded.
4. It may occur when an individual's demands and expectations do not coincide with another person's working in the same organization.

Role ambiguity is observed when the individual does not have adequate knowledge about his/her roles. If the work objectives are not clearly defined, in other words, if the individual does not know what to do exactly, then stress inevitable (Aytaç, 2002:2).

Role is the sum of all the behaviors that are defined according to what an individual can or cannot do within the limits of his/her status. When individual's rights and responsibilities are defined in a social group, his/her role is also defined. Role Conflict may occur when the individual has to realize more than one role at a time and he/she likes one role better than the other, and when the individual's characteristics are not compatible with his/her role. Role ambiguity is observed when the role is not well defined or well known. Ambiguities in issues such as span of individual's responsibilities, limits of his/her authority, and job security causes the role ambiguity (Erdoğan, 1994:89; Paksoy, 1986:103).

According to Katz and Khan (1997:202), conflicting task is the contradiction between two (or more) requirements that appear at the same time.

2.3.2.9. Abstention from Assuming Responsibility

The mostly responsible people in the organizations are managers. The responsibilities increase as we move higher in the hierarchy.

Assuming responsibilities of other people is a stress source that creates tension. If the responsibility of the professional development of other people is put on one person, and also if the nature of the job require that the person should bear many responsibilities, but also the person's authority is very limited, than the person

may feel himself/herself under stress. Related research shows that, the managers who are particularly responsible from other people are being exposed to stress intensely (Aytaç, 2002:3; Şahin, 1994:27-30).

Another important stress factor based on responsibility relation is that the individual is surrounded by so many people. This issue, which is evaluated within the stress factors due to hierarchical structures in organizational environment, creates the situation of new employees not knowing how to structure their relations with their superiors, creates confusion of responsibilities in employees' relations with their superiors, and causes stress for the individual who does not exactly know for whom he/she has to account (Işıkhani, 2002:64).

Another aspect of responsibility relation is mutual responsibilities among people. The employees may be under stress in a work environment, where some workers break work and bears their responsibilities on their co-workers. Even though the individuals do not have to bear such responsibilities, working in the same organization with such people, who always try to avoid working, will disturb them (Cam, 2004:6).

2.3.2.10. Organizational Goals and Policies

According to Perrow (1970, 134), the goal in organizations stands for both already achieved targets and the ones that are being chased. In this regard, the goals can be categorized into five:

- Social Goals,
- Output Goals,
- System Goals,
- Product Goals,
- Consumption Goals

Organizational goals are generally classified into two as general (or official) goals and implementation goals. General goals take place in the organizational bylaws and constitutions; and they are abstract ideals. The priorities in the implementation may differ; these goals typically have a narrower scope and are more solid. General goals are also called *strategic* goals and the implementation goals are also called *tactical* goals (Arıkanlı and Ulubaş, 2001:21).

Goals and plans also set standards for success. If these standards are clearly set, the employees can successfully be managed and their performances can be evaluated objectively. The management style so called "Management by objectives is born as a result of this (Eren, 1993:96).

Vision, in its literal meaning, refers to view, to see, ability to see, the ability to predict the future, and imagination. Mission is the existence reason of an organization and expresses the critical mission that the organization assumed (Çelik 1995:47-50).

In order to well manage the organizations, it is necessary to determine the goals first, to develop the policies to be followed, and to prepare an implementation plan. The success of the organizations depends on the plans and their implementation (Tortop et al., 1993:51).

2.3.2.11.Political Interference and Pressure

Defining goals or determining policies in public management is to determine what social problems are and how they are going to be solved. From a more general perspective, the process of defining the public policies, is a phenomenon, which involves many actors such as bureaucracy, political parties, legislators, media, and cabinet, and in which the political process and managerial process are mixed up (Emre, 1999:6).

Unfortunately, not having a management that is not affected by political pressures, and that shadowing the objectivity of the management, political influence and pressures, not only negatively affect the quality of the services but also result in unfair practices regarding employees. The existence of the conflict between selecting the managerial teams through political pressure or based on evaluating abilities, knowledge, and experiences of the candidates, is one of the contradictions that the Turkish nation has been observing (Yayla, 2003:461).

2.3.2.12. Insufficiency of Wages

According to Yiğit (2000:64), the fair wage system that the organizations should implement is based on three main principles:

- Wage must be paid according to the work done.
- If two people are doing the same work, they need to be paid the same.
- The wages should be comparable to the market wages and standards.

While top level managers are being paid very high in most organizations, this is not the case for mid-level managers. The thought of not being paid what is deserved and the insufficiency of the wages in meeting the requirements create stress for the managers (Pehlivan, 1995:25).

The wage system which displays a positive correlation with promotion highly affects the employee's life, both his/her life in and outside the organization.

2.3.2.13. Amount of Working Hours

Besides work conditions, the excessive working hours also increase the stress and decreases the individuals' performances.

Most managers work more than the employees. Especially in police department, long working hours are observed. Its results are tiredness, exhaustion, and stress (Pehlivan, 1995:25).

2.3.2.14. Insufficiency of Tools

Having to work with inadequate installation and tools puts both employees and managers in a difficult situation, especially in the public sector, because it negatively affects productivity. Thus, such demands are always transmitted to higher levels in the organizational hierarchy.

Technological advances are outperforming the abilities of the employees through rapid changes in the work environment. On the other hand, the need to be proficient in these new technologies threatens the individuals. This becomes a potential stress factor if necessary educations are not provided. Advanced technology causes the individual to feel that he/she cannot perform his duties (Tutar, 2000:222).

2.3.2.15. Difficulty in Making Decisions

The scope of decision making in management is the problems. The manager is the person who makes decisions, looks for solutions to the problems, and solves them (Açıkalın, 1994:52).

The managers have the most important role in the decision making process, which is an important management element. The decision's being right or wrong directly affects the productivity of the organization. The struggle for making the most appropriate decision is, alone, a stress source.

Since the managers are in a position to make decisions, which would impact the peoples' health and future, managers are known to belong to one of the highly

stressful professional groups. According to a study, which was performed on mid-level managers in Turkey, management is considered to be a high-stress-level profession. (Ertekin, 1993:117)

A manager should be determined while discussing a subject, a project, or an idea with the personnel. However, he/she also should listen to the personnel very carefully by always keeping in mind that the personnel may have a legitimate point. (Çoroğlu, 2002:86)

The decision making behavior of the manager will of course be different for the routine and non-routine cases, and for expected and unexpected problems. If the manager faces some unexpected problems, he/she might think that these problems may cause a crisis because the management had not anticipated these problems. These types of unanticipated problems may cause stress for the managers (Timur, 1990:25).

2.3.2.16. Not Being Able to Participate in Decision Making

In organizational environment, the employees usually have to do what managers would ask them rather than what the requirements of the job are. Due to this difference, the employees should also behave differently; and it causes stress. Generally, most managers do not like inferiors to be involved in decision making. Believing that inferiors would be challenging them in such situations, the managers consider it dangerous to develop relations with inferiors in this regard. This creates stress for inferiors (Güney, 2000: 437-438).

Involving the personnel in decision making process is as important as making decisions because through this involvement, one can utilize the abilities and entrepreneurship of the employees. The managers who do not prefer inferiors' participation in the decision making processes create stress for themselves as well as for employees.

Not asking the individual's opinions for the decisions, which directly affects the individual, and just dictating these decisions would diminish the trust of the individual to the organization. Not being informed of the reasons for the changes within the organization causes the individuals to be demoralized and shakes their control feelings through making them feel that their personalities are not given worth (Şahin, 1994:29).

Participation is defined to be the degree that an individual's impact in the decision making process within the organization that he/she works for. Not asking the individual's opinions for the decisions, which directly affects the individual, and just dictating these decisions would diminish the trust of the individual to the organization. Not being informed of the reasons for the changes within the organization causes the individuals to be demoralized and shakes their control feelings through making them feel that their personalities are not given worth (Şahin, 1994:29).

It impacts stress that the individual has no contribution in the decision making process at work. Particularly, everybody will experience stress in the situations where the employees' opinions are never asked for the decisions, which will directly affect them (Aytaç, 2002:3; Şenyüz, 1999:17).

Conflicts may occur during the decision making process. Existence of conflict is one of the most important signs that an organization is living. Thinking that conflicts are harmful may harm the organization. A school manager can earn a lot when he/she successfully manages the conflicts (Mullins, 1992:67).

2.3.2.17. Not Having Enough Authority

It is one of the most important stress creating factors in the organizations that the individual has very high responsibilities, or the individual's responsibilities are

anticipated to be higher than they actually are, despite the fact that the individual has very limited authority (Güney, 2000: 437-438).

2.3.2.18. Competition

Competition within the organization helps peoples' personal development. However, excessive competition makes the organization unbearable for the employees. The individuals compete with each other due to things such as money and promotion. This competition causes stress on the individual who loves his/her work and cares about his/her organization experiences (Taştan, 2002:8).

Increase in competition puts a high pressure especially on the managers. In today's world, satisfying both the internal customers, i.e., the employees, and the external customers, fast and efficient decision making, coping with uncertainty, managing different cultures increase managers' stress levels significantly (Ataman, 2002:489).

2.3.2.19. Not Being Encouraged

Mid-level managers and employees expect to be encouraged by the high level managers. Lack of encouragement creates stress by making these people think that they are useless.

According to Schafer (1987:323), always encouraging and supporting the employees, satisfying the needs of the personnel, supporting the group work among the employees, and encouraging teamwork are among the measures that can be taken against stress.

Positive incitements, which satisfy both the intellectual and emotional needs of the employees, are more effective than the negative motivations such as threatening and punishing (Hageman, 1995:42).

2.3.2.20. Losing Control

The idea of always having a full control of the organization creates stress for the managers. A study on a group of policemen, which tries to identify the most common factors that creates stress for policemen, indicates that the negative news that appear in the media causes more stress than a very dangerous arrest does because while the arrest is under their full control while the news are not (Rowshan, 1998:41).

2.3.2.21. Defining the Goals

Defining the organizational goals is among the managers' duties. A goal which is not likely to be achieved in the coming future causes stress for the managers. On the other hand, defining rational goals, which also coincide with the strategic goals of the organization, makes the organization more productive and successful and motivates the employees (Rowshan, 1998:150-151).

2.3.2.22. Anxiety of Losing the Job

Anxiety of losing his/her job can cause diminishing one's self-respect. The employees stress levels are particularly high, and this even affects their family lives, when there are severe economic crises, corporate mergers or shrinks. The cases such as high unemployment due to economic crises, lower wages, reduction in working hours, and the possibility of being laid off are among the stressors that are created by economic uncertainty (Taştan, 2002:6).

2.3.3. Environmental Stress Sources

There are many environmental stress factors. However, the physical environment is usually not considered to be one of these. That is why, it might not be possible to understand that the main cause of the symptoms that appear as a result of stress is physical environment (Braham, 1998:35).

According to Tutar (2000:250-251), the stress sources related to the environment in which the individual lives, are the stress sources outside his/her work life. These sources can be states as follows:

- a. Mid-age crisis,
- b. Family problems,
- c. Monotony,
- d. Economical problems,
- e. Political uncertainties,
- f. Social and cultural changes,
- g. Traffic problems in the town where the individual is working,
- h. Technological advances.

The employees have also a social life other than their life outside the work. The actions, which are demanded from the employee by his /her social environment, are characterized by the expectations of the others from the employee. There is a social pressure on the individual. This pressure may result from legal manners and also from customs and traditions (Başaran, 1982; Akt: Güçlü, 2001:100).

Rush and hastiness in daily life, rapid civilization and crowds are potential stress sources. The spouses may impact transmit their stress to each other. Moving from one city to another may also cause stress. Due to economic problems, nowadays, many people are working for more than one job, or both husbands and wives are working. This limits the time to be spent with the family very significantly and can be a stress source. Especially working women have to assume different roles

at home and at work and they experience role conflicts that causes stress (Luthans, 1995: 299).

There does not always have to be reason for the people to have stress. Not liking the current situation or continuous dissatisfaction can also be stress sources at times. In fact, most people always dream of living in a different place, working for something else, living with someone else, and having much more money and free time (Bland, 1999: 45).

Stress sources due to environmental factors also shape the organizational stress sources to some extent (Erdoğan, 1996:288).

One of the reasons of stress, which is sourced from the individual's relation with his/her environment and which creates negative results on the physical and psychological structure of the individual, is the discord between the roles that the individual assumes at work and at home (Aktan, 1999:39).

The environmental events may cause personal problems. These events should be defined and classified. The events that cause stress on people are called "life events". Divorce, marriage, employment, lay-off are some examples of such events (Özkalp and Sabuncuoğlu, 1994:35).

2.4. Stress Management

According to Pehlivan (1998:25), coping with stress or stress management is to protect the spiritual and physical health, and to provide a productive lifestyle. According to Warrick (1981:37), on the other hand, stress, which is one of the most important problems of our century, can motivate people towards perfection as well as I can create severe problems. The performance is affected when there is too little or too high stress.

Stress management contributes to achieving both the individual and organizational goals. It is very important for the success of the organizations that they know the stress creating sources and apply the individual and organizational stress management techniques. That is why, the primary duties of the organizations are to cope against stress so as to keep both the managers' and the employees' stresses at optimum levels and to work towards reducing the stress creating factors. Considering that most of the stress can be avoidable, it will provide to have a rewarding and peaceful life to reduce the effects of stress via individual and organizational methods and to utilize the services and the products, which are produced by healthy and happy individuals with team spirit (Bayrak, 1998:394).

A normal stress level can increase the interest and attention besides being motivating. However, when it increases too much, then lack of attention, low motivation, and several symptoms may occur (DeFrank and Ivancevich, 1998: 61).

Coping with stress is equivalent to tolerating the pressuring threats from the environment through intellectual and behavioral processes, keeping them under control, or removing those threats (Connor and Worley, 1991:61-67)

It is certain that, we should stay away from the harms caused by stress and the possible threats in order to have a healthy life, because there are many stressors within life and part of these stressors are necessary for success and are the reasons for development (Baltaş and Baltaş, 2000:98).

Reducing stress means to keep it at a controllable level by considering how dense it is. This does not happen with only your effort. You may seek help from other people or sources to relax and feel yourself better. However, the best is to make a plan, which will give you physical and intellectual peace, and to implement it (Kate, 1998:111).

Besides what is mentioned here, there are also some duties for the managers to reduce stress. According to Schafer (1987:323), some of these are:

1. Increasing the satisfaction and reducing turnovers by creating an attractive work environment.
2. Defining clear and compatible role expectations in order to minimize role conflicts and ambiguities.
3. To create a balance between change and continuity in the organization.
4. Encouraging employees by continuously supporting them, utilizing the employees by satisfying their needs, encouraging teamwork and promoting group loyalty.
5. Providing opportunities for all employees to participate in decision making
6. Supporting stress management services for employees under stress.
7. Providing opportunities for all employees to learn about stress sources and how to cope with them.

According to Durna (2004:194), there are four main approaches for stress management. These are:

1. Physiological approach,
2. Behavioral approach,
3. Psychological approach,
4. Environmental approach.

2.4.1. Physiological approach

The most commonly used physiological approach is the muscle relaxation technique developed by Edmund (Sdorow,1998:575). This technique includes consciously stretching and relaxing the large muscle groups. It is possible to learn the difference between the excessive stretch position of the muscles and the position after this stretch is relaxed. The degree of relaxation after a muscle is stretched and then released is proportional to the degree that the muscle is stretched. This technique consists of a group of exercises, which moves the large muscle groups in

the body, e.g., forehead, chin, neck, arms, hands, and legs (Baltaş and Baltaş, 2000: 196).

The second technique is called biological feedback technique. This is a technique during which the individual learns how to manage his/her autonomous activities, e.g., body temperature, sweat secretion, which he/she can be aware of through use of relevant gadgets, via an education program (Baltaş and Baltaş, 2000: 194).

Another technique, so called relaxation technique, provides physiological comfort for the body. This technique, which is also known as meditation, is implemented by sitting comfortably in a quiet place. The eyes are closed, and one concentrates on breathing from nose. After each breath, a relaxation phrase is repeated. One should feel relaxation while giving out each breath. At each time, the attention is dissipated and concentration is lost, thus the attention focuses simply on the rhythms of breathing (Hart, 1990:13).

Another way to protect against the harmful physiological effects of stress is called autogenic training. This technique, which is developed by two German doctors, Schulz and Luthe, has been tested on many illnesses and the positive results have been published (Baltaş and Baltaş, 2000:194).

The individual gives inculcations to himself/herself in this technique, which is similar to hypnosis. Focusing requires concentration. The person tries to systematically increase the awareness of warm and moral emotions in several parts of his/her body (Hart, 1990:13).

Another physiological approach is called imaginary relaxation technique. The foundations of the technique are built on utilizing imagination and reflecting relaxing activities in mind. Such mini mind journeys are made five or six times a day and the person tries to imagine a relaxing scene during these five-minute-long activities. It is

noted that these enjoying imaginations reduces heartbeat, bloodpressure, and adrenaline flow (Hart, 1990:13).

2.4.2. Behavioral Approach

Behavioral approach is the second approach in stress management. Time management is often recommended to cope with stress. The person who can manage his/her time efficiently is exposed to work and time pressure less than others (Moorhead and Griffin, 1992: 469).

Conflict analysis and improving discussion skills are the other methods. These techniques are very effective in reducing the stress resulting from relations with other people. Low-stress relation can be defined to be the one in which two people, no matter what, can satisfy their needs, develop effective contact, and manage to continue the relation without risking the other peoples' needs and giving the unnecessary stress (Hart, 1990:14).

Conflict analysis ability, is a factor that highly determines the ability of conforming high success with low stress. At every level, unnecessary and long-term conflicts are the major causes of personal stress. It is not possible to remove conflicts completely. People should try to look for the ways to resolve the problems and the conflicts resulting from personal differences without appealing to useless fights and struggles, which harms productivity. For example, the unnecessary fight can be avoided by clearly identifying the roles, the relations, the responsibilities, and the authority levels of the employees (Albrecht, 1988: 320-323).

It is for the benefit of everyone to keep the balance that is built within the organization. The social reconciliation, which is not formally defined, but felt by everyone, is fairly important for the success of the activities and continuation of personal relations (Durna, 2004:196).

2.4.3. Psychological Approach

Psychological approach to stress management is to target to teach people how to think of themselves despite themselves. At this point, it is important how to perceive the situations that puts the person in stress. In other words, stress is avoided or increased based on positive or negative thinking, respectively. For example, a person can find some positive results for himself/herself out of a fire. This fire may help him have a better job. From a different perspective, another person can perceive the same fire as a disaster or as a fatal loss (Hart, 1990:15).

People under tension are inclined to interpret the events pessimistically. They attribute unpleasant events to their inner, global, and stationary characteristics. In other words, these people look for the reasons of such events in their personal characteristics such not being smart enough. These people can show very little resistance against the unpleasant situations that life brings and are exposed to excess stress in such situations. Also, they cannot protect themselves against illnesses because of their weak health (Sdorow, 1998:571).

2.4.4. Environmental Approach

The last approach in stress management is called "*environmental approach*" which attempts to change the objective qualities of the external conditions and tries to make them less stressful. In this approach, people try to cope with stress by changing the conditions specific to the environment in which they are living. Environmental approach is applicable at home or at work. Changes in managerial applications or organizational structures, more clearly stated work descriptions, and work enrichment are examples of this approach (Hart, 1990:15-16).

In some organizations, a strong norm has developed against going for vacations or taking breaks. In the long term, such norms can cause stress. That is why; organizations should develop an organizational culture that provides a balance

between the activities required by the job and extracurricular activities. (Moorhead and Griffin, 1992: 471)

Many organizations are inclined to be overwhelmingly formal without ever paying attention to the human factor. Such a climate will create a high degree of stress. In order to cope with stress, the organizational structure should be built in a decentralized and organic manner so as to allow participation in decision making and multi directional communication. The structural changes in regard of this process will provide a more supporting climate for the employees, give them the feeling of having more control on their jobs, and reduce or remove the stress (Luthans, 1995: 313).

For most employees, it is very important to see themselves as an important part of the organization and to contribute to the organization. The activities that aim to build up teams within the organization can also help reducing or eliminating stress. It is known that a team's contribution is more than the sum of the contribution of its members. An efficient team can be successful by clearly identifying the goals, defining procedures solidly, suitable leadership, and efficient (Sutherland, 1995:26).

By sharing common values and mission, a team contributes positively to build a participating and a democratic structure in an organization. This way, the employees both provide social support in human relations and also achieve the advantage of utilizing personal ideas and efforts. Poor management is one of the major reasons for stress at work (Flanagan and Finger, 2000:12).

Managers' attitudes and behaviors towards employees and the leadership type that they implement carry a potential for stress. It will provide an important contribution to the struggle against stress within the organization that the managers know what kind of attitudes, behaviors, customs, and implementations causes stress for the employees (Hulett, 2003:72).

Besides personal or organizational measures, there are also some general principles to have a stress free life and work environment. The principles, which have to exist in a stress management program, can be summarized as follows (Crampton et al., 1995:16-18):

- To define and control the stress sources at the workplace,
- To help employees with learning about stressors that cause stress,
- To improve the goals,
- To have the support of top management,
- To talk to employees about the benefits of stress management,
- To help employees with learning about their stress tolerance levels,
- To teach employees how to fight against stress,
- To know the stress symptoms,

The success of a stress management mainly depends on the manager and the leader. That is why, the managers in an organization have to carry good managerial and leadership characteristics, because, a poor leader is a potential stress source.

2.5. Providing Social Support

One of the most efficient ways of avoiding stress is to have social support at all moments of life. Social support is a communication mechanism, which has emotional and intellectual effects. Social support phenomenon is one of the important pieces of stress management. Social support approach, provides a stronger bond between people and psychological support while it is making the participating management easier (Tutar, 2000: 289-290).

Emotional and social support also works as a buffer between stress and health. Two researchers named Holmes and Raye have made a study that analyzes the differences between the people those getting sick and not getting sick. This study

shows that the main difference between these two types of people is the social support levels that they have. There are many support areas that can be limited such as material support, communicative support, and emotional support. Emotional support, i.e., the feeling of knowing that other people care about you and want to listen to what you feel, is the most important of these in terms of stress management. Emotional support builds trust among people. Depending on this trust, people willingly accept to be open to be hurt by each other (Braham, 1998: 206).

Employees should participate more in social life and strengthen themselves against the negative effects of change in order to cope with stress. For this purpose, they should be supported with social support efforts at work. Managers should consider these social support efforts as an important technique to avoid from the negative impact of stress and eliminating them. These managers should know that employees working under stress do need social support efforts, which is an important stress management effort, and should pay attention to implement this strategy regardless of the stress source (Hindle, 1998:61).

The social support at workplace can be provided from professional consultants or social support personnel. The efficiency of the employees working under stress depends on the effective implementation of these efforts. Also, social support should be provided equally for everyone in order for those efforts to be successful (Ekinici and Ekici, 2003:110).

While managers can actively participate in fighting against their employees' stress, they can also employ social support personnel or appeal to professional consultants. Appealing to professional consultants is very helpful especially for the cases where the perception of the stress sources is sourcing from employees' imaginations or diversion of the reality, so that the employees' point of view can be changed.

2.6 The Impact of Stress on Performance and Productivity

The studies about measuring the employees' productivities and performances in the organizations, and scientific and methodological analysis of performance and performance evaluation concepts date back to Taylor's work measurement applications in the early 1900s. In Turkey, this line of work has a history of about 80 years and the early examples are for the public sector. The interest of the organizations in Turkey, especially those are in the private sector, on performance evaluation has grown with the advances in management sciences and modern management techniques. Performance, literally meaning completion of a job effectively, is defined as completing a task in accordance with the predefined targets and the ratio of how much the target is realized (Bingöl, 1990:70).

Performance is the comparison of the skills and qualities of the individual with the success criteria set for the task (Ataay, 1985:228).

Since the success of the organizations depends on their employees' performances, the importance of employee performance is crystal clear. In addition, the significance of performance is even more important since information regarding performance is used in organizational education and development activities, promotions and transfers, determining the wages, and developing bonus and reward mechanisms (Erdil, 1998:164-165).

The employees' being able to do a task successfully in accordance with the qualities and skills is known as individual performance. In order to be able to talk about an employee's performance, the employee should be given a task, which complies with the employee's skills, and there should be well defined success standards. (Erdoğan, 1991:164).

Any given stress source causes stress that is either positive or harmful. Positive and constructive stress leads to higher work performance while negative and harmful stress is an unwanted situation in organizations because of its negative

effects on performance. This should not mean that stress is never wanted in organizations. A medium level of stress is always useful because it leads to high performance (McAfee and Champagne, 1987:365).

According to Erdoğan (1991:178), the following factors affect performance in organizations:

- Organizational factors,
- Individual factors,
- External factors.

The organizational factors, which include the working conditions of the organization, physical conditions, organizational goals and problems that may arise from these goals, may positively or negatively affect the success of the employees. The stress sources, which include similar elements, either causes the employees to work under heavy stress and show low performance or work under moderate stress and have high performance. The most commonly faced problems affecting the employee performances in organizations are incorrectly planned labor division and time management problem associated with it, lack of necessary tools and equipment, insufficiency of the regulations, lack of communication, insufficient authority, and expectations that are over the employees' capabilities (Gümüştekin and Öztemiz, 2005:281).

The individual factors affecting the performance consist of demographics age, gender, and language, competitive dimensions such as ability, and psychological characteristics such as perceptions, behaviors, desires, and tendencies. The importance of these characteristics that affect the individual's work performance may vary depending on the structure of the job. Also, having better qualities has a positive impact on the work performance (Gümüştekin and Öztemiz, 2005:281).

Social affiliations such as family, clubs, and associations, economic factors such as income distribution and income level, political factors such as laws and

bylaws, and cultural factors such as education and religion, all together, constitute the external factors (Gümüştekin and Öztemiz, 2005:281).

Many other factors out of these three common elements, such as individual's characteristics, his/her private and work life, family structure, economic problems, problems with inferiors, superiors, and colleagues, country's problems, laws, rules, mental and physical problems, affect his/her life. These may result in both individual problems such as physiological illnesses, psychological problems, behavioral disorders, depression, and organizational problems such as low performance and productivity. (Gümüştekin and Öztemiz, 2005:281-282).

There are several well defined methods to measure the performance. Some of these have been developed at the early times and are still useful, and some have been developed recently with the aim of completing the missing parts of the early methods and overcoming the problems associated with the earlier methods.

According to Erdoğan (1991:212) and George and Gareth (1999:36-55); the most commonly used performance measurement scales are as follows:

- Graphical evaluation scale,
- Behavioral ranking scale,
- Behavioral observation scale,
- Management by goals,
- 360 degrees evaluation.

Other performance measurement methods: There are various methods that are used in practice and identified in the literature. These can be listed as :

- Grading method,
- Job dimension scales,
- Check-list method,

- Critical incident method,
- Forced distribution method,
- Ranking method,
- Compare by pairs method,
- Direct index method,
- Standards method,
- Methods with limited use,
- Psycho-technical test and Psychological analysis.

It is a commonly accepted fact that stress is the most important factor that affects the employee performance. In today's world, employees are aware of the stress sources that cause stress on them. Managers should provide a healthy work environment in order to reduce the stress on the employees and to create a successful and capable workforce (Gümüştekin and Öztemiz, 2005:282).

2.7. Organizational Stress and Its Relation with Performance

According to Sullivan and Bhagat (1992:353-359; the hypothesis that help explain the relation between stress and performance are as follows:

- A- The relation between stress and performance has an inverted-U shape. At low levels of stress, individuals are not stimulated enough for high productivity. Similarly, at high levels of stress, individuals spend their energies for coping with stress instead of improving their performances. At normal stress level, on the other hand, the performance is high. Under normal stress, individuals are not only driven to do their jobs but also try to improve their performances instead of spending their time for overcoming stress.

- B- This hypothesis suggests a positive correlation between stress and performance. At low stress levels, individuals won't even bother increasing their performances because of lack of competition. At medium stress levels, it is probable that an average performance will be observed due to partial competition. Conversely, high level of stress causes both optimal competition and optimal performance. The downside of this hypothesis is that it has some conceptual deficiencies. The most important of these deficiencies are that this hypothesis is unsuccessful at analyzing the non-functional roles of stress and it overlooks the personal differences. For example, ambitious people may perform well under competition, but the main factor is whether the individual's perception of the task being achievable or not. It is not possible for those to be successful under highly stressful and competitive environments who are not ambitious.
- C- This hypothesis suggests an inverse linear correlation between stress and performance. Stress is anticipated as non-functional for both individuals and organizations. People under stress waste their time by unwanted things such as trying to overcome stress, doing nothing, and sabotage. One of the biggest problems of this hypothesis is its unsuccessfulness in analyzing the results of stress. Experience of stress may guide people to be ready for important events and take measures.
- D- This hypothesis claims no relation between work stress and performance. Individuals are considered as logical mechanisms whose only concern is success because they are paid for it. According to this hypothesis, individuals ignore organizational stress and never let it prevent them from success.

Based on many studies investigated the relation between stress and performance, there are four possible hypothesis. This is because stress sources that result due to work environment, colleagues, organizational goals, targets,

expectations, and personal differences, affect individuals differently and thus their performances are affected differently.

According to Davis and Newstrom, (1988:462); Certo, (1992:367); Schermerborn and Diğerleri, (1988:536); Robbins, (1989:513); Kreitner and Kinicki, (1989:568); Werther and Davis, (1985:420); and Hugh and Feldman (1986:471); regardless of how the relation between stress and performance results, this relation is typically explained in the literature with the Inverted-U-stress/performance curve as shown in **Figure 2**.

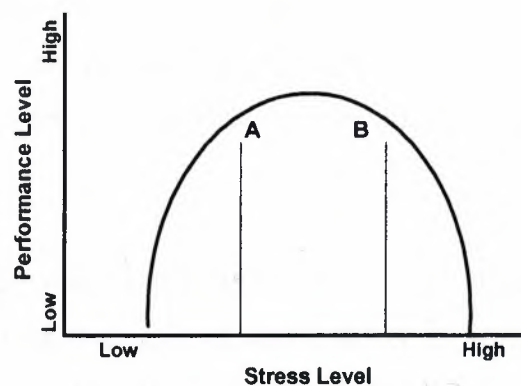


Figure 2. The Relation between Stress and Performance

Source: SCHERMERBORN Jr., Jhon.R., HUNT, J.G., ve OSBORN, Richard N.

Managing Organizational Behavior. New York: John Wiley & Sons, Inc.
Third Edition.1988, s.53.

According to this relation, very low and very high stress has negative affect on performance. It is considered as an advantage when the performance increases as we move from the low stress region to optimum stress level, and as a disadvantage when moving away from the optimum level of stress towards high stress. The optimum level of stress brings the performance to the desired level and at this point

the individuals become most productive. The optimum stress level vary from person to person based on their tolerability (Gümüştekin and Öztemiz, 2005:283).

The relation between the stress and performance levels of employees follows a similar trend to the relation between stress and productivity that was studied by Ertekin (1993:91). The relation between stress and productivity has the inverted-U curve as shown in **Figure 2**. According to this, when employee performance is at its peak, the productivity is also at its optimal.

Productivity decreases at very low and high stress levels. For example, a manager under excessive stress or a manager who is not ready for his/her position is either at the up or down parts of the inverted-U curve. These two types of managers are not in the optimum productivity region which lies in between A and B. Employees and managers are expected to be in this region (Gümüştekin and Öztemiz, 2005:279)

When the employees are outside the A-B region, the tasks should be refined, measures such as stress management and transfer of authorities. People can be creative and productive with optimum level of stress that is suitable for them. There is always a need for a certain level of excitement in order to have success. If this level is exceeded, then success rate decreases, people become more anxious, exhausted, and more inclined to making mistakes. That is why, time can be both stimulating and a barrier against success (Ertekin, 1993:91-97).

According to Pehlivan (1995:70) and Schermerborn et al. (1988:533); stress can have both constructive and destructive effects on performance. Constructive stress is positive for the individual and/or organization. Medium level of stress motivates the person to work more carefully and increases his/her energy and efforts. When stress is experienced at the medium level, individuals' performances increase, thus they will have more energy to utilize new opportunities and deal with potential problems.

Destructive stress causes the individuals and/or organizations not being able to do their work. Optimum level of stress improves productivity but high stress jeopardizes physical and mental health of the employees. Under excessive stress, people have higher risk of mistakes and accidents and less work satisfaction. Excessive stress not only affects peoples' performances but also under excessive stress, one faces all the negative results that stress causes.

According to Çetiner (1999:12); the effects of stress on the performance can be classified in two groups as individual and organizational effects. The examples of the effects of stress on the individual performance are the communication problems between the employees and customers, not being able to concentrate to work, failure in time management and being organized, difficulties in decision making, lack of motivation, decline in problem solving capabilities, and lack of vision.

The examples of the effects of stress on the organizational performance are increased turnover rates, increased absences, increased mistakes, loss of dedication to the organization, loss of team spirit, decrease in customer satisfaction, and decline in productivity (Gümüştekin and Öztemiz, 2005:284).

2.8. Domestic and International Research on Managerial Stress Management

In this section we summarize some of the relevant research on Managerial Stress Management:

- Ertekin (1993) applied the managerial stress survey on a random sample of 150 mid-level public sector administrators in his research that he performed at Turkey Middle-East Public Administration Institute. Based on the research, Ertekin concluded that "inferior-superior relation", "work's being monotonous", "insufficient salary", and "insufficient authority" causes stress.

- Özdemir (2002) applied managerial stress survey on 71 primary and middle school principals who work under Istanbul Uskudar Directory of National Education. "Political interference and pressure", "insufficient quality and quantity of employees", "lack of necessary tools and equipment", "excessive workload", "not being able to spend enough time for family and social life", "lack of opportunities for personal and professional development" are identified to be the most important of the stress sources.
- Artan's (1985) doctoral dissertation at Marmara University Social Sciences Institute on organizational stress sources and their effects on managers, aims at investigating the effects of organizational stress sources on the people living in today's Turkey's industrialized society. This research shows that top level managers do not consider the organizational stress sources as serious stress creating situations but low level managers are especially affected by "stressors resulting from roles" and they think that it causes a big barrier for their professional careers.
- Duymaz (1999), for his Masters Thesis at Ege University Health Sciences Institute, applied managerial stress survey on 159 nurses working in Eskisehir who have administrative roles. These nurses have indicated that "problems resulting from family and friends", "moving to another city (rotation)", "change of management", "lack of personnel", "working in risky environments", and "not being considered as a profession by doctors and other people" are of most significant stressors.
- Güney et al. (2002) compared in their research the stress sources for the managers working in public and private sectors. 100 top level managers have participated in this research. 50 of them were in public sector (Office of Prime Minister, Ministry of Finance, Ministry of Treasury and Foreign Trade, Ministry of Internal Affairs) and the other fifty of them work as top managers in several companies. Private sector managers evaluated "unfairness in

evaluating employee performances” as the most important stressor. On the other hand, public sector managers have indicated the same item as the biggest stress source. Public sector managers also evaluated the following stressors as most important in the respective order: “not being able to use the capabilities at work”, “not being able to see the pay-offs of the jobs done”, “having limited promotion opportunities”, and “insufficiency of the authority compared to responsibility”.

- Koch et al. (1982) applied Administrative Stress Index-ASI to 1156 School Administrators in Oregon in their research about work stress faced by administrators. In this research, the six stress sources proposed by McGrath were tested on the school administrators. The six stress sources are job related stress, role related stress, behavioral stress, stress resulting from the physical environment, and social environment, and stress resulting from the individual himself/herself.
- Cooper and Davidson’s (1982) research surveyed 135 top level female managers in England, and identified the most important physical and psychological stress symptoms indicated by these managers. According to this research, the following are the most commonly observed stress symptoms in female managers: “exhaustion”, “being angry”, “being anxious”, and “frustration”. “Migraine” is the most important illness that results from stress
- Cooper and Davidson (1987), observed that female managers are affected more than males from the stress due to career and family problems, according to their survey on managers in the U.S. and England. Also. Female subjects complain more about “psychosomatic problems”, “tension”, and “exhaustion” than males. While the complaints of the male subjects about the stressors are more physical, those of female subjects are mainly emotional.

- Puffer and Brakefield (1989) analyzed the effects of work complexity as a stressor and a stress reducing factor on 173 sales managers working in museum stores. The subjects' answers for coping with stress are classified into the following groups: active cognitive, active behavioral, cognitive avoidant, and behavioral avoidant. The results indicate that both stresses may come out as a result of the individual's past behaviors. The relations with simple tasks are stronger than those with complex tasks. It is found that simple tasks avoid low level of stress and difficult tasks avoid high level of stress.

CHAPTER III

THE METHOD

This chapter presents the design of the research, and explanations regarding sample space, data collection techniques and process, and data analysis.

3.1. Design of the Research

In order to achieve the research goals, a literature review on the sources of managerial stress is made, a survey, which we hope to explain the current situation, is made on the administrators of schools under the General Secondary Education and Professional and Technical Education Directory, and the findings of the research are analyzed via appropriate statistical methods.

3.2. Space and Sample

The space for the research consists of the administrators (principles and vice-principles) of schools (middle schools, high schools, professional high schools, and practice art schools) located in Nicosia and Famagusta districts under the TRNC National Education and Culture Ministry, General Secondary Education and Professional and Technical Education Directory.

The size of the sample is decided to be 98. However, 91 of the administrators have agreed to participate. Managerial Stress Survey is given to the participants and the results are collected. This survey aims at identifying the approaches of school administrators towards their stress sources.

Table 1 presents the frequencies and percentage distributions for the sample space.

Table 1.
Research Sample Space (N=91)

Number of Participants		Number of Administrators not Participated		Number of Surveys left out of Analysis		Number of Surveys Taken into Analysis	
Quantity n	Ratio %	Quantity n	Ratio %	Quantity N	Ratio %	Quantity n	Ratio %
91	92.85	7	7.15	0	0	91	100

As displayed in **Table 1**, 91 (92.85%) administrators out of 98 have participated in the survey and 7 (7.15%) of them either could not participate or refused to participate.

Table 2 shows the male-female distribution of the participants.

Table 2
Percentage Distribution of the Participating School Administrators
Based on Their Sexes

Sex	f	%
Female	48	52.7
Male	43	47.3
TOTAL	91	100.0

As displayed in **Table 2** 48 (52.7%) of the participants are female, and 43 (47.3%) of them are male.

Table 3 displays the frequencies and percentage distribution of the participants based on selected professional experience levels.

Table 3
Frequencies and Percentage Distribution of the Participants Based on Selected Professional Experience Levels

Professional Experience (years)	f	%
5 or less	4	4.4
6 – 10	5	5.5
11 – 15	17	18.7
16 – 20	28	30.8
21 – 25	23	25.3
16 or more	14	15.4
TOTAL	91	100.0

As displayed in **Table 3**, 4(4.4%) of the participants have 5 years or less experience, 5 (5.5%) have 6 to 10 years, 17 (18.7%) have 11 to 15 years, 28 (30.8%) have 16 to 20 years, 23 (25.3%) have 21 to 25 years, 14 (15.21%) have 26 or more years of professional experience.

Table 4 displays the frequencies and percentage distributions of the participants according to their administrative status.

As displayed in **Table 4**, 21 (23.1%) of the participants are principles and 70 (76.9%) of them are vice-principles.

Table 4
Frequencies and Percentage Distributions Based on the Participants Administrative Status

Administrative Status	f	%
Principle	21	23.1
Vice-Principle	70	76.9
TOTAL	91	100.0

The frequencies and percentages of the participating school administrators based on their respective directories is displayed in **Table 5**.

Table 5.
The Frequencies and Percentages Of The Participating School Administrators
Based On Their Respective Directories

Respective Directory	f	%
GSE Directory	69	75.8
PTE Directory	22	24.2
TOTAL	91	100.0

As displayed in **Table5**, 69 (75.8%) of the school managers are under the General Secondary Education Directory, and 22 (24.2%) are under Professional and Technical Education Directory.

3.3. Data Collection Technique

In this research, Managerial Stress Survey (Appendix 1) consisting of two parts, is used to collect data. In accordance with the research goals, he 44-question survey is adapted from the survey, which was developed by Ertekin (1993) at Turkey Middle Eastern Public Administration Institute (TMEPAI), after the required permissions are granted.

The first part of the survey form consists of four questions regarding the personal information of the participants. In the second part, there is the Managerial Stress Survey (MSS) consisting of 40 statements regarding the managerial stress sources that managers can face, which is prepared by Prof. Dr. Yücel Ertekin(1993) for mid-level public administrators according to Likert Scale, and proved to be valid and dependable. The grades for the survey vary from 40 to 200.

3.3.1. Part I – (Personal Information Form)

This part consists of questions regarding sex, professional experience, administrative status, and respective directory of the participants. This form is adapted from the Managerial Stress Survey (MSS), developed by Ertekin (1993) , through analyzing the TRNC National Education and Culture Ministry's organization structure.

3.3.2. Part II – Managerial Stress Survey (MSS)

It is a multiple choice survey of 40 items developed by Ertekin (1993) which aims that the managers understand the concept of stress better, know stress and identify the stress sources within the organization in order to initiate coping with stress. It also aims at understanding what the managers think about these stress sources.

3.4. Analysis of the Data

The survey which is prepared according to 5-point likert scale is designed so that the participants express their opinions for the respective items by selecting one of "Never", "Rarely", "Sometimes", "Frequently", and "Always" choices. In the light of the collected data, he structural validation and reliability analysis of the survey is performed and interpreted using SPSS 11.0 statistical software.

In the factor analysis, the eigenvalue coefficient is taken to be ≥ 1.5 , and factor analysis is done by using Principal Component Analysis (PCA). It is observed that the scale is composed of 5 significant factors. The ratio of these 5 factors' meeting the total variance is 56.7%.

In order to investigate the validity of the Managerial Stress Survey in this research, the item analysis and split test method, which are among the intra- (a.k.a. internal) consistency analyses. The Intra-Consistency Results for Managerial Stress Scale is presented in **Table 6**.

Table 6
Intra- Consistency Results for MSS

Low Scale	R	Low Scale	R
Item 1	0.7382	Item 21	0.6775
Item 2	0.6530	Item 22	0.6226
Item 3	0.6114	Item 23	0.6874
Item 4	0.6643	Item 24	0.5985
Item 5	0.5160	Item 25	0.5725
Item 6	0.6159	Item 26	0.5395
Item 7	0.5250	Item 27	0.6726
Item 8	0.4889	Item 28	0.6130
Item 9	0.4777	Item 29	0.6243
Item 10	0.4185	Item 30	0.6167
Item 11	0.3553	Item 31	0.6965
Item 12	0.3467	Item 32	0.5967
Item 13	0.4654	Item 33	0.3097
Item 14	0.5624	Item 34	0.4946
Item 15	0.4464	Item 35	0.5755
Item 16	0.4917	Item 36	0.4789
Item 17	0.5757	Item 37	0.4293
Item 18	0.5606	Item 38	0.5622
Item 19	0.5762	Item 39	0.5391
Item 20	0.4899	Item 40	0.5441

The Item Analysis values for Intra-Consistency Analysis vary from (R) 0,7382 to 0,3097. The significance levels for all items are $p < 0.05$. Sperman-Brown and Gutman Split-Half coefficients are computed according to Split Test Analysis Method. According to this, α coefficient of the first part of the scale is 0.8956 and that of the second part is 0.9168. The correlation coefficient between these two parts is derived to be $r = 0.8375$.

For the survey as a whole, we computed that Cronbach Alfa coefficient is 0.9483, Gutman Split-Half coefficient is 0,9100, and Sperman-Brown coefficient is 0.9116. Since all of these values are close to 1, this research is valid for the TRNC public middle school administrators.

Table 7
Factor Analysis and Item Analysis Results for General Stress Sources Factors
(Factor 1)

Item	Factor Common Variance	Factor Load Value	Item – Total Correlation
Item 1	0.730	0.740	0.8258
Item 2	0.798	0.765	0.7591
Item 3	0.603	0.585	0.6734
Item 4	0.747	0.742	0.7181
Item 5	0.437	0.482	0.5262
Item 6	0.439	0.357	0.5467
Item 14	0.455	0.489	0.5449
Item 15	0.403	0.585	0.4699
Item 27	0.646	0.543	0.6787
Item 28	0.576	0.641	0.6696
Item 31	0.600	0.436	0.6064
Item 32	0.538	0.525	0.6147
Cronbach Alfa Coefficient	0.9058		

Cronbach Alfa coefficient, which is an intra-consistency coefficient for each factor, and Item-Total Correlation Coefficients, which is related to the reliability of the items, are also computed.

Cronbach Alfa coefficient is 0.9058 for General Stress Sources Factors, 0.8577 for Social Stress Sources Factors, 0.8364 for Employee Related Stress Sources Factors, 0.8094 for Management Related Stress Sources Factors, and 0.7375 for Workload Related Stress Sources Factors.

Common factor variances vary between 0.388 and 0.798. Factor load values vary between 0.421 and 0.765. Item Total Correlations, on the other hand, vary between 0.4424 and 0.8258.

Table 8
Factor Analysis and Item Analysis Results for Social Stress Sources Factors
(Factor 2)

Item	Factor Common Variance	Factor Load Value	Item – Total Correlation
Item 19	0.575	0.594	0.6132
Item 20	0.534	0.544	0.4811
Item 23	0.626	0.485	0.6261
Item 25	0.45	0.385	0.5391
Item 26	0.66	0.755	0.7048
Item 36	0.548	0.679	0.6066
Item 37	0.608	0.664	0.5353
Item 38	0.485	0.469	0.5441
Item 39	0.429	0.421	0.4799
Item 40	0.418	0.464	0.5662
Cronbach Alfa Coefficient	0.8577		

Table 9
Factor Analysis and Item Analysis Results for Employee Related Stress Sources
Factors (Factor 3)

Item	Factor Common Variance	Factor Load Value	Item – Total Correlation
Item 7	0.493	0.514	0.5699
Item 8	0.562	0.564	0.5436
Item 13	0.561	0.675	0.5570
Item 16	0.574	0.428	0.4646
Item 29	0.722	0.716	0.7186
Item 30	0.816	0.793	0.7144
Item 35	0.508	0.558	0.5436
Cronbach Alfa Coefficient	0.8364		

Table 10
Factor Analysis and Item Analysis Results for Management Related Stress
Sources Factors (Factor 4)

Item	Factor Common Variance	Factor Load Value	Item – Total Correlation
Item 10	0.619	0.762	0.5997
Item 11	0.517	0.651	0.4841
Item 17	0.629	0.481	0.5097
Item 21	0.622	0.565	0.6448
Item 22	0.640	0.479	0.5994
Item 24	0.491	0.430	0.5354
Item 33	0.496	0.625	0.4714
Cronbach Alfa Coefficient	0.8094		

Table 11
Factor Analysis and Item Analysis Results for Workload Related Stress Sources
Factors (Factor 5)

Item	Factor Common Variance	Factor Load Value	Item – Total Correlation
Item 9	0.506	0.609	0.5859
Item 12	0.388	0.579	0.5657
Item 18	0.558	0.583	0.5286
Item 34	0.669	0.728	0.4424
Cronbach Alfa Coefficient	0.7375		

The Factor Analysis and Item Analysis Results for the testing the intra-consistency of the analysis on the factor basis are presented in **Table 7** for General Stress Sources Factors (Factor 1), in **Table 8** for Social Stress Sources Factors (Factor2), in **Table 9** for Employee Related Stress Sources Factors (Factor 3), in **Table 10** for Management Related Stress Sources Factors (Factor 4), and in **Table 11** for Workload Related Stress Sources Factors (Factor 5).

According to the values presented in **Table 7, Table 8, Table 9,ve Table 10** and **Table 11**, we identified and interpreted the levels of school administrators' approaches to stress sources.

The grade limits related to the levels of school administrators' approaches to stress sources, which are found by 5-point Likert Scale whose validity and reliability is already tested, are presented in **Table 12**.

Table 12
The Grade Limits Related to the Levels of School Administrators' Approaches
to Stress Sources

Choices	Grades	Grade Limits (\bar{X})
Never	1	1.00 – 1.79
Rarely	2	1.80 – 2.59
Sometimes	3	2.60 – 3.39
Frequently	4	3.40 – 4.19
Always	5	4.20 – 5.00

In the light of the studies related to the stress-performance relation evaluations by Davis and Newstrom, (1988:462); Certo,(1992:367); Schermerborn et al., (1988:536); Robbins, (1989:513); Kreitner and Kinicki,(1989:568); Werther and Davis, (1985:420); Hugh and Feldman'in (1986:471), and also after taking the opinions of the Thesis Advisor Associate Professor Aydın ANKAY, based on the information in **Table 12**, the following classification is done:

- $\bar{X} = 1.00 - 2.59$ Low Stress Region,
- $\bar{X} = 2.60 - 3.39$ Optimum Productivity Region (Medium Stress Region),
- $\bar{X} = 3.40 - 5.00$ High Stress Region.

CHAPTER IV

FINDINGS AND INTERPRETATIONS

This part of the research presents the findings and interpretations based on the findings, which are derived through analysis of the data collected by the data collection techniques in conjunction with the sub-problems of the research.

4.1. The Findings and Interpretations Regarding the School Administrators' Evaluations for the Factors (Factors 1-5)

In this part, the findings regarding the school administrators' evaluations for the stress sources are analyzed for each factor.

4.1.1. The Findings and Interpretations Regarding the School Administrators' Evaluations for the General Stress Sources Factor (Factor 1)

General Stress Sources Factor (Factor 1) includes the stress factors that are not included by Social Stress Factors, Employee Related Stress Factors, Management Related Stress Factors, and Workload Related Stress Factors.

The items belonging to Factor 1 are presented below:

- Item 1:** Imbalance between the missions and power
- Item 2:** Instability at the position
- Item 3:** Uncertainty at the position
- Item 4:** Political interference and pressure
- Item 5:** Difficulties in public relations

- Item 6:** Fighting and problems arising from relations with the superiors.
- Item 14:** Obligation to finish a specific task at a given time.
- Item 15:** Lack of necessary tools and equipment.
- Item 27:** Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations.
- Item 28:** The feeling that organizational goals and policies are not followed carefully.
- Item 31:** To avoid assuming responsibilities.
- Item 32:** The anxiety that successes will not be awarded

The statistical data regarding the school administrators' evaluations for the General Stress Sources Factor (Factor 1) are presented in **Table 13**.

Generally speaking, the arithmetic means of the school administrators' evaluations for the General Stress Sources Factor vary between 3.26 and 2.46. The point difference of the arithmetic means of the twelve stress sources that constitute the factor is 1.02. The fact that the factor's arithmetic mean is 2.68 shows that school administrators usually consider this factor within the Optimum Productivity Region, ($2.60 \leq \bar{X} \leq 3.39$).

"Lack of necessary tools and equipment" (I15) is selected first of the stress sources among the sources that constitute General Stress Sources Factor (Factor 1) by school administrators ($\bar{X} = 3.26$). The arithmetic mean of the item is in the Optimum Productivity Region. The other stress sources of Factor 1, whose arithmetic mean is in the Optimum Productivity Region, are listed below:

Table 13
Statistical Data for the General Stress Sources Factor (Factor 1)

Item	Items for the General Stress Sources Factor	N	\bar{X}	Ss	D
I 15	Lack of necessary tools and equipment	91	3.26	1.052	1
I 1	Imbalance between the missions and power	91	3.10	1.126	2
I 32	The anxiety that successes will not be awarded	91	2.80	1.352	3
I 2	Instability at the position	91	2.77	1.136	4
I 14	Obligation to finish a specific task at a given time	91	2.76	1.158	5
I 3	Uncertainty at the position	91	2.73	1.184	6
I 4	Political interference and pressure	91	2.63	1.532	7
I 5	Difficulties in public relations	91	2.57	0.896	8
I 27	Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations	91	2.56	1.204	9
I 28	The feeling that organizational goals and policies are not followed carefully	91	2.46	1.014	10
I 6	Fighting and problems arising from relations with the superiors	91	2.36	0.925	11
I 31	To avoid assuming responsibilities	91	2.24	1.177	12
	TOTAL	91	2.68	0.81	

“Imbalance between the missions and power” (I1) is ranked second with $\bar{X} = 3.10$, “The anxiety that successes will not be awarded” (I32) is ranked third with $\bar{X} = 2.80$, “Instability at the position” (I2) is ranked fourth with $\bar{X} = 2.77$, “Obligation to finish a specific task at a given time” (I14) is ranked fifth with $\bar{X} = 2.76$, “Uncertainty at the position” (I3) is ranked sixth with $\bar{X} = 2.73$, and “Political interference and pressure” (I4) is ranked with $\bar{X} = 2$.

Starting with rank eighth, the sources “Difficulties in public relations” (I5), “Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations” (I27), “The

feeling that organizational goals and policies are not followed carefully" (I28), "Fighting and problems arising from relations with the superiors" (I6), and "To avoid assuming responsibilities" (I31) are in the Low Stress Region, since their arithmetic means are less than 2.59.

School administrators evaluate "Difficulties in public relations" (I5) as ranked eighth with ($\bar{X} = 2.57$), "Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations" (I27) as ranked ninth with mean 2.56. "The feeling that organizational goals and policies are not followed carefully" (I28) is ranked tenth with $\bar{X} = 2.46$. The least of the stress creating sources among the General Stress Sources are chosen to be "Fighting and problems arising from relations with the superiors" (I6) with $\bar{X} = 2.36$, and "To avoid assuming responsibilities" (I31) with $\bar{X} = 2.24$.

As shown in **Table 13**, the most important of these stress sources is lack of necessary tools and equipment. This stress source is still ranked first when the other factors (Factors 1-5) are considered. However, this stress sources does not cause heavy stress since it is within the Optimum Productivity Level.

4.1.2. The Findings and Interpretations Regarding the School Administrators' Evaluations for the Social Stress Sources Factor (Factor 2)

Social Stress Sources Factor contains the stress sources, the school administrators' face during the social activities at school, or when they are ostracized, or during their attempts for career development, and which impacts their family and social lives.

The items for this factor are listed below:

- Item 19:** Being complained about
- Item 20:** Working in an unsafe environment
- Item 23:** Not being able to take required measures to improve the management on time
- Item 25:** Not being able to participate in decision making
- Item 26:** Being left out of communication channels, being ostracized
- Item 36:** Family problems' negatively affecting work
- Item 37:** Bringing home the problems at workplace
- Item 38:** Not having enough time for the family and social life
- Item 39:** Not having opportunities in/outside the country for professional development
- Item 40:** Work's being monotonous

The statistical data regarding the school administrators' evaluations for the Social Stress Sources Factor (Factor 2) are presented in **Table 14**.

The arithmetic means of the school administrators' evaluations for the Social Stress Sources Factor vary between 2.86 and 1.67. The point difference of the arithmetic means of the twelve stress sources that constitute the factor is 1.19. The fact that the factor's arithmetic mean is 2.20 shows that school administrators usually consider this factor within the Low Stress Region, ($1.00 \leq \bar{X} \leq 2.59$).

"Not having opportunities in/outside the country for professional development" (I39) is selected first of the stress sources among the sources that constitute Social Stress Sources Factor (Factor 2) by school administrators. The arithmetic mean for this source is 2.86. Since it is $\bar{X} > 2.59$, it lies in the Optimum Productivity Region and it is the only item among lying in this region Social Stress Sources Factor items

Table 14
Statistical Data for the Social Stress Sources Factor (Factor 2)

Item No	Items for the Social Stress Sources Factor	N	\bar{X}	Ss	D
I 39	Not having opportunities in/outside the country for professional development	91	2.86	1.111	1
I 40	Work's being monotonous	91	2.47	0.958	2
I 23	Not being able to take required measures to improve the management on time	91	2.40	1.053	3
I 25	Not being able to participate in decision making	91	2.37	1.007	4
I 20	Working in an unsafe environment	91	2.24	1.205	5
I 38	Not having enough time for the family and social life	91	2.23	0.895	6
I 26	Being left out of communication channels, being ostracized	91	2.13	1.195	7
I 19	Being complained about	91	1.85	0.802	8
I 36	Family problems' negatively affecting work	91	1.82	1.111	9
I 37	Bringing home the problems at workplace	91	1.67	0.883	10
	TOTAL	91	2.20	0.68	

Second ranked "Work's being monotonous" (I40) with $\bar{X} = 2.47$; third "Not being able to take required measures to improve the management on time" (I23) with $\bar{X} = 2.40$; fourth "Not being able to participate in decision making" (I25) with $\bar{X} = 2.37$; fifth "Working in an unsafe environment" (I20) with $\bar{X} = 2.34$; sixth "Not having enough time for the family and social life" (I38) with $\bar{X} = 2.23$; seventh "Being left out of communication channels, being ostracized" (I26) with $\bar{X} = 2.13$; eighth "Being complained about" (I19) with $\bar{X} = 1.85$; ninth "Family problems' negatively affecting work" (I36) with $\bar{X} = 1.82$; and tenth and last "Bringing home the problems at workplace" (I37) with $\bar{X} = 1.67$ lie in the Low Stress Region ($1.00 < \bar{X} < 2.60$).

It is interesting and open to interpretations that nine, almost all, of the stress creating factors in the Social Stress Sources Factors (Factor 2) are lying in the Low Stress Region.

4.1.3. The Findings and Interpretations Regarding the School Administrators' Evaluations for the Employee Related Stress Sources Factor (Factor 3)

Employee related stress sources factor includes the stress sources arising from school administrators' relations with teachers, clerks, and other inferior personnel.

The items for this factor are listed below:

- Item 7:** Fighting and problems arising from the relations with inferiors.
- Item 8:** Problems related to record and evaluation of the inferiors
- Item 13:** Having to work with personnel who are not sufficiently educated and prepared
- Item 16:** Problems arising among people related to competition and promotion
- Item 29:** Abundance of discordant behaviors among employees
- Item 30:** Existence of arguments and conflicts among employees
- Item 35:** Employees' not taking the work seriously

The statistical data regarding the school administrators' evaluations for the Employee Related Stress Sources Factor (Factor 3) are presented in **Table 15**.

The arithmetic means of the school administrators' evaluations for the Employee Related Stress Sources Factor vary between 3.01 and 2.13. The point difference of the arithmetic means of the twelve stress sources that constitute the factor is 0.88. The fact that the factor's arithmetic mean being 2.61 shows that school

administrators usually consider this factor within the Optimum Productivity Region, $(2.60 \leq \bar{X} \leq 3.39)$.

Table 15

Statistical Data for the Employee Related Stress Sources Factor (Factor 3)

Item No	Items for the Employee Related Stress Sources Factor (Factor 3)	N	\bar{X}	Ss	D
I 13	Having to work with personnel who are not sufficiently educated and prepared	91	3.01	1.016	1
I 29	Abundance of discordant behaviors among employees	91	2.91	0.996	2
I 30	Existence of arguments and conflicts among employees	91	2.78	1.016	3
I 7	Fighting and problems arising from the relations with inferiors	91	2.73	0.895	4
I 35	Employees' not taking the work seriously	91	2.42	1.023	5
I 16	Problems arising among people related to competition and promotion	91	2.33	0.943	6
I 8	Problems related to record and evaluation of the inferiors	91	2.13	1.024	7
	TOTAL	91	2.61	0.701	

When we analyze the items for employee related stress sources factor (Factor 3), we see that "Having to work with personnel who are not sufficiently educated and prepared" (I13) is considered to be the primarily important stress source by the school administrators. The arithmetic mean value for this item is 3.01 for our sample. This lies in the Optimum Productivity Region $(2.60 \leq \bar{X} \leq 3.39)$.

The other items that lie in the Optimum Productivity Region are "Abundance of discordant behaviors among employees" (I29), "Existence of arguments and conflicts among employees" (I30), and "Fighting and problems arising from the relations with inferiors" (I7).

School administrators evaluated "Abundance of discordant behaviors among employees" (I29) as second with $\bar{X} = 2.91$, "Existence of arguments and conflicts

among employees" (I30) as third $\bar{X} = 2.78$, and "Fighting and problems arising from the relations with inferiors" (I7) as fourth with $\bar{X} = 2.73$.

Starting from rank five, "Employees' not paying enough attention to their work" (I35), "Problems arising among people related to competition and promotion" (I16), and "Problems related to record and evaluation of the inferiors" (I8) are in the Low Stress Region since their arithmetic means are $\bar{X} < 2.60$.

"Employees' not paying enough attention to their work" (I35) is ranked fifth with $\bar{X} = 2.42$, "Problems arising among people related to competition and promotion" (I16) sixth with $\bar{X} = 2.33$, and "Problems related to record and evaluation of the inferiors" (I8) seventh with $\bar{X} = 2.13$.

4.1.4. The Findings and Interpretations Regarding the School Administrators' Evaluations for the Management Related Stress Sources Factor (Factor 4)

Management Related Stress Sources Factor (Factor 4), consists of stress sources that arise while the administrators are doing their administrative jobs regarding the personnel at the school (teacher, clerk, and other employees) and students.

The items for this factor are listed below:

- Item 10:** Overdose discipline and pressure
- Item 11:** Tight supervision and monitoring
- Item 17:** The feeling of being obstructed while doing his/her job
- Item 21:** Not having enough authority while making decisions
- Item 22:** Having difficulties in making decisions
- Item 24:** Not being able to criticize the administration's practices
- Item 33:** Taking risk in order to be able to accomplish a task

The statistical data regarding the school administrators' evaluations for the Administrative Stress Sources Factor (Factor 4) are presented in **Table 16**.

Table 16.

Statistical Data for the Management Related Stress Sources Factor (Factor 4)

Item No	Items for the Management Related Stress Sources Factor (Factor 4)	N	\bar{X}	Ss	D
I 21	Not having enough authority while making decisions	91	2.76	1.214	1
I 24	Not being able to criticize the administration's practices	91	2.58	1.065	2
I 33	Taking risk in order to be able to accomplish a task	91	2.58	1.174	3
I 17	The feeling of being obstructed while doing his/her job	91	2.40	1.214	4
I 10	Overdose discipline and pressure	91	2.16	1.065	5
I 22	Having difficulties in making decisions	91	2.15	1.174	6
I 11	Tight supervision and monitoring	91	2.08	0.941	7
	TOTAL	91	2.38	0.707	

The arithmetic means of the school administrators' evaluations for the Administrative Stress Sources Factor vary between 2.76 and 2.08. The point difference of the arithmetic means of the twelve stress sources that constitute the factor is 0.68. The fact that the factor's arithmetic mean being 2.38 shows that school administrators usually consider this factor within the Low Stress Region, ($1.00 \leq \bar{X} \leq 2.59$).

For the school administrators in our sample, "Not having enough authority while making decisions" (I21) is the most important stress creating source for this factor. The arithmetic mean value for this item is 2.76 for our sample. This lies in the Optimum Productivity Region ($2.60 \leq \bar{X} \leq 3.39$). That is the only item lying in the Optimum Productivity Region for this factor.

Second ranked “Not being able to criticize the administration’s practices” (I24) with $\bar{X} = 2.58$; third “Taking risk in order to be able to accomplish a task” (I33) with $\bar{X} = 2.58$; fourth “The feeling of being obstructed while doing his/her job” (I17) with $\bar{X} = 2.40$; fifth “Overdose discipline and pressure” (I10) with $\bar{X} = 2.16$; sixth “Having difficulties in making decisions” (I22) with $\bar{X} = 2.15$; and seventh “Tight supervision and monitoring” (I11) with $\bar{X} = 2.08$ lie in the Low Stress Region ($1.00 < \bar{X} < 2.60$).

4.1.5. The Findings and Interpretations Regarding the School Administrators’ Evaluations for the Workload Related Stress Sources Factor (Factor 5)

Workload related stress sources factor (Factor 5), includes the stress sources such related to the abundance of the school administrator’s work, the working hours’ being extremely long and tiring, having a big responsibility for the work, and the insufficiency of the rewards compared to the job.

The items for this factor are listed below:

- Item 9:** Insufficient salary and economical problems
- Item 12:** Long and tiring working hours
- Item 18:** Having a huge fiscal responsibility
- Item 34:** Excessive workload

The statistical data regarding the school administrators’ evaluations for the Workload Related Stress Sources Factor (Factor 5) are presented in **Table 17**.

Table 17.

Statistical Data for the Workload Related Stress Sources Factor (Factor 5)

Item No	Items for the Workload Related Stress Sources Factor (Factor 5)	N	\bar{X}	Ss	D
I 9	Insufficient salary and economical problems	91	2.76	1.148	1
I 12	Long and tiring working hours	91	2.65	1.089	2
I 34	Excessive workload	91	2.63	1.050	3
I 18	Having a huge fiscal responsibility	91	2.15	1.135	4
	TOTAL	91	2.54	0.825	

The arithmetic means of the school administrators' evaluations for the Workload Related Stress Sources Factor (Factor 5) vary between 2.76 and 2.54. The point difference of the arithmetic means of the twelve stress sources that constitute the factor is 0.22. The fact that the factor's arithmetic mean being 2.54 shows that school administrators usually consider this factor within the Low Stress Region, ($1.00 \leq \bar{X} \leq 2.59$).

For the school administrators in our sample, "Not having enough authority while making decisions" (I21) is the most important stress creating source for this factor. The arithmetic mean value for this item is 2.76 for our sample. This lies in the Optimum Productivity Region ($2.60 \leq \bar{X} \leq 3.39$). The other items that lie in the Optimum Productivity Region for this factor are "Long and tiring working hours" (I12) with $\bar{X} = 2.65$ and "Excessive workload" (I34) with $\bar{X} = 2.63$.

The last item for this factor, "Having a huge fiscal responsibility" (I18), is in the Low Stress Region ($1.00 \leq \bar{X} \leq 2.59$) with $\bar{X} = 2.15$.

4.2. Findings and Interpretations Regarding the School Administrators' Evaluations for the Stress Sources Based on the Administrators' Gender Parameter

In this section, we analyze the t-test results for school administrators' evaluations of stress sources based on the gender parameter, individually for each stress sources factor.

The t-test results based on the gender parameter for the General Stress Sources Factor (Factor 1) are presented in **Table 18**.

There is not statistically significant difference between male and female subjects for the following items: "Imbalance between the missions and power" (I1), "Instability at the position" (I2), "Uncertainty at the position" (I3), "Political interference and pressure" (I4), "Difficulties in public relations" (I5), Fighting and problems arising from relations with the superiors" (I6), "Obligation to finish a specific task at a given time" (I14), "Lack of necessary tools and equipment" (I15), "Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations" (I27), "The feeling that organizational goals and policies are not followed carefully" (I28), "To avoid assuming responsibilities" (I31), "The anxiety that successes will not be awarded" (I32). ($p > 0.05$)

Generally speaking for the General Stress Sources Factor (Factor 1), there is not a statistically significant difference between the male and female subjects' evaluations for this factor [$t_{(89)} = 0.42$, $p > 0.05$].

Table 18.
T-Test Results Based on the Gender Parameter for General Stress Sources
Factor (Factor 1)

	Items for the General Stress Sources Factor	Gender	N	\bar{X}	Ss	sd	t	p
I 1	Imbalance between the missions and power	Female	48	2.94	1.34	89	1.49	0.14
		Male	43	3.28	0.79			
I 2	Instability at the position	Female	48	2.79	1.22	89	0.20	0.84
		Male	43	2.74	1.04			
I 3	Uncertainty at the position	Female	48	2.81	1.29	89	0.75	0.45
		Male	43	2.63	1.04			
I 4	Political interference and pressure	Female	48	2.73	1.62	89	0.67	0.49
		Male	43	2.51	1.43			
I 5	Difficulties in public relations	Female	48	2.54	0.89	89	0.33	0.74
		Male	43	2.60	0.90			
I 6	Fighting and problems arising from relations with the superiors	Female	48	2.52	1.01	89	1.76	0.08
		Male	43	2.19	0.79			
I 14	Obligation to finish a specific task at a given time	Female	48	2.94	1.24	89	1.58	0.11
		Male	43	2.56	1.03			
I 15	Lack of necessary tools and equipment	Female	48	3.15	1.07	89	1.13	0.26
		Male	43	3,.40	1.02			
I 27	Not being able to allocate enough time for the main managerial/ organizational problems because spending excessive time for bureaucratic operations	Female	48	2.65	1.34	89	0.72	0.47
		Male	43	2.47	1.03			
I 28	The feeling that organizational goals and policies are not followed carefully	Female	48	2.52	1.03	89	0.58	0.55
		Male	43	2.40	1.03			
I 31	To avoid assuming responsibilities	Female	48	2.35	1.32	89	0.97	0.33
		Male	43	2.12	0.98			
I 32	The anxiety that successes will not be awarded	Female	48	2.71	1.45	89	0.70	0.48
		Male	43	2.91	1.23			
P<0.05	General Stress Sources Factor (Factor 1)	Female	48	2.72	0.93	89	0.42	0.67
		Male	43	2.64	0.65			

The t-test results based on the gender parameter for the Social Stress Sources Factor (Factor 2) are presented in **Table 19**.

There is not statistically significant difference between male and female subjects for the following items: Being complained about (I19), Working in an unsafe environment (I20), Being left out of communication channels, being ostracized (I26), Family problems' negatively affecting work (I36), Bringing home the problems at workplace (I37), Not having enough time for the family and social life (I38), Not having opportunities in/outside the country for professional development (I39), and Work's being monotonous(I40). ($p > 0.05$)

Generally speaking for the Social Stress Sources Factor (Factor 2), there is not a statistically significant difference between the male and female subjects' evaluations for this factor [$t_{(89)} = 1.22$, $p > 0.05$].

***Item 23. Not being able to take required measures to improve the management on time:** There is a statistically significant difference between the response of male and female subjects for this item. [$t_{(89)} = 2.05$, $p < 0.05$].

This item lies in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$) ($\bar{X} = 2.60$) based on the female subjects' responses, whereas it lies in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) with ($\bar{X} = 2.16$) for male subjects.

***Item 25. Not being able to participate in decision making:** There is a statistically significant difference between the response of male and female subjects for this item. [$t_{(89)} = 2.63$, $p < 0.05$].

This item also lies in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$) ($\bar{X} = 2.63$) based on the female subjects' responses, whereas it lies in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) with ($\bar{X} = 2.09$) for male subjects.

Table 19.
T-Test Results Based on the Gender Parameter for Social Stress Sources
Factor (Factor 2)

	Items for the Social Stress Sources Factor	Gender	N	\bar{X}	Ss	sd	t	p
I 19	Being complained about	Female	48	1.81	0.91	89	0.42	0.66
		Male	43	1.88	0.66			
I 20	Working in an unsafe environment	Female	48	2.27	1.26	89	0.24	0.80
		Male	43	2.21	1.14			
I 23	Not being able to take required measures to improve the management on time	Female	48	2.60	1.14	89	2.05	0.04*
		Male	43	2.16	0.89			
I 25	Not being able to participate in decision making	Female	48	2.63	1.10	89	2.63	0.01*
		Male	43	2.09	0.81			
I 26	Being left out of communication channels, being ostracized	Female	48	2.33	1.40	89	1.76	0.08
		Male	43	1.91	0.86			
I 36	Family problems' negatively affecting work	Female	48	1.79	1.18	89	0.29	0.76
		Male	43	1.86	1.03			
I 37	Bringing home the problems at workplace	Female	48	1.67	0.99	89	0.04	0.96
		Male	43	1.67	0.74			
I 38	Not having enough time for the family and social life	Female	48	2.23	0.97	89	0.01	0.98
		Male	43	2.23	0.81			
I 39	Not having opportunities in/outside the country for professional development	Female	48	2.96	1.16	89	0.92	0.35
		Male	43	2.74	1.04			
I 40	Work's being monotonous	Female	48	2.56	1.07	89	0.95	0.34
		Male	43	2.37	0.81			
	Social Stress Sources Factor (Factor 2)	Female	48	2.28	0.79	89	1.22	0.22
		Male	43	2.11	0.52			

P<0.05

The t-test results based on the gender parameter for the Employee Related Stress Sources Factor (Factor 3) are presented in **Table 20**.

Table 20.
T-Test Results Based on the Gender Parameter for Employee Related Stress Sources Factor (Factor 3)

	Items for the Employee Related Stress Sources Factor (Factor 3)	Gender	N	\bar{X}	Ss	sd	t	p
I 7	Fighting and problems arising from the relations with inferiors	Female	48	2,77	0,92	89	0,51	0,60
		Male	43	2,67	0,86			
I 8	Problems related to record and evaluation of the inferiors	Female	48	2,10	1,11	89	0,27	0,78
		Male	43	2,16	0,92			
I 13	Having to work with personnel who are not sufficiently educated and prepared	Female	48	3,19	1,08	89	1,78	0,07
		Male	43	2,81	0,90			
I 16	Problems arising among people related to competition and promotion	Female	48	2,42	1,06	89	0,94	0,34
		Male	43	2,23	0,78			
I 29	Abundance of discordant behaviors among employees	Female	48	2,98	1,04	89	0,68	0,49
		Male	43	2,84	0,94			
I 30	Existence of arguments and conflicts among employees	Female	48	2,88	1,08	89	0,95	0,34
		Male	43	2,67	0,91			
I 35	Employees' not taking the work seriously	Female	48	2,58	1,12	89	1,67	0,09
		Male	43	2,23	0,86			
	Employee Related Stress Sources Factor (Factor 3)	Female	48	2,70	0,81	89	1,28	0,20
		Male	43	2,51	0,54			

P<0.05

There is not statistically significant difference between male and female subjects for the following items: Fighting and problems arising from the relations with inferiors (I7), Problems related to record and evaluation of the inferiors (I8), Having to work with personnel who are not sufficiently educated and prepared(I13), Problems arising among people related to competition and promotion (I16), Abundance of discordant behaviors among employees (I29) , Existence of arguments and conflicts among employees(I30), and Employees' not taking the work seriously(I35). ($p>0.05$)

Generally speaking for the Social Stress Sources Factor (Factor 2), there is not a statistically significant difference between the male and female subjects' evaluations for this factor [$t_{(89)} = 1.28, p>0.05$].

The t-test results based on the gender parameter for the Management Related Stress Sources Factor (Factor 4) are presented in **Table 21**.

There is not a significant difference between the responses of male and female subjects for the following items ($p>0.05$): Overdose discipline and pressure (I10), Tight supervision and monitoring (I11), The feeling of being obstructed while doing his/her job (I17), Not having enough authority while making decisions (I21), Having difficulties in making decisions (I22), Not being able to criticize the administration's practices (I24), Taking risk in order to be able to accomplish a task (I33).

Generally speaking for the Administrative Stress Sources Factor (Factor 4), there is not a statistically significant difference between the male and female subjects' evaluations for this factor [$t_{(89)} = 0.98, p>0.05$].

Table 21.
T-Test Results Based on the Gender Parameter for Management Related
Stress Sources Factor (Factor 4)

	Items for the Management Related Stress Sources Factor (Factor 4)	Gender	N	\bar{X}	Ss	sd	t	p
I 10	Overdose discipline and pressure	Female	48	2,13	1,00	89	0,41	0,68
		Male	43	2,21	0,94			
I 11	Tight supervision and monitoring	Female	48	2,25	1,04	89	1,89	0,06
		Male	43	1,88	0,79			
I 17	The feeling of being obstructed while doing his/her job	Female	48	2,50	1,07	89	1,14	0,25
		Male	43	2,28	0,76			
I 21	Not having enough authority while making decisions	Female	48	2,79	1,32	89	0,27	0,78
		Male	43	2,72	1,09			
I 22	Having difficulties in making decisions	Female	48	2,25	1,04	89	1,09	0,27
		Male	43	2,05	0,72			
I 24	Not being able to criticize the administration's practices	Female	48	2,71	2,71	89	1,21	0,22
		Male	43	2,44	2,44			
I 33	Taking risk in order to be able to accomplish a task	Female	48	2,56	1,25	89	0,17	0,86
		Male	43	2,60	1,09			
	Management Related Stress Sources Factor (Factor 4)	Female	48	2,54	0,82	89	0,98	0,32
		Male	43	2,31	0,50			

P<0,05

The t-test results based on the gender parameter for the Workload Related Stress Sources Factor (Factor 5) are presented in **Table 22**.

There is not a significant difference between the responses of male and female subjects for the following items ($p>0.05$): Insufficient salary and economical problems (I9), Having a huge fiscal responsibility (I18), Excessive workload (I34).

Table 22
T-Test Results Based on the Gender Parameter for Workload Related
Stress Sources Factor (Factor 5)

	Items for the Workload Related Stress Sources Factor (Factor 5)	Gender	N	\bar{X}	Ss	sd	t	p
I 9	Insufficient salary and economical problems	Female	48	2.65	1.22	89	0.99	0.32
		Male	43	2.88	1.05			
I 12	Long and tiring working hours	Female	48	2.42	0.98	89	0.21	0.03*
		Male	43	2.91	1.15			
I 18	Having a huge fiscal responsibility	Female	48	2.19	1.31	89	0.30	0.76
		Male	43	2.12	0.90			
I 34	Excessive workload	Female	48	2.60	1.08	89	0.21	0.83
		Male	43	2.65	1.02			
	Workload Related Stress Sources Factor (Factor 5)	Female	48	2.46	0.89	89	1.02	0.30
		Male	43	2.63	0.75			

P<0.05

***Item 12. Long and Tiring Working Hours:** The arithmetic mean of the female administrators' answers ($\bar{X}=2.42$) lies in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) while that of male administrators' answers ($\bar{X}=2.88$) is in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$).

For this item, there is a statistically significant difference based on the gender parameter. [$t_{(89)}=0.21$, $p<0.05$].

Generally speaking for the Administrative Stress Sources Factor (Factor 4), there is not a statistically significant difference between the male and female subjects' evaluations for this factor [$t_{(89)}=1,02$, $p>0,05$].

4.3. Findings and Interpretations Regarding the School Administrators' Evaluations for the Stress Sources Based on the Administrators' Professional Seniority Parameter

In this section, we analyze the variations of the school administrators' evaluations for the stress factors based on the professional seniority parameter using one-sided ANOVA test and Variation Analysis.

The statistically meaningful items based on the school administrators' answers to the survey will be interpreted based on the results of the LSD Test.

The Variance Analysis Results based on the professional seniority parameter for the school administrators' evaluations for the General Stress Sources Factor (Factor 1) are presented in **Table 23**.

There is not a statistically significant difference between different professional seniority groups for the following items: "Imbalance between the missions and power" (I1), "Instability at the position" (I2), "Uncertainty at the position" (I3), "Difficulties in public relations" (I5), Fighting and problems arising from relations with the superiors" (I6), "Obligation to finish a specific task at a given time" (I14), "Lack of necessary tools and equipment" (I15), "Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations" (I27), "The feeling that organizational goals and policies are not followed carefully" (I28), "To avoid assuming responsibilities" (I31), "The anxiety that successes will not be awarded" (I32). ($p>0.05$)

Table 23.

The Variance Analysis Results based on the professional seniority parameter for the school administrators' evaluations for the General Stress Sources Factor (Factor 1)

Items For the General Stress Sources Factor		Proff. Seniority	N	\bar{X}	Ss	Variance Source	Sum of Squares	Sd	Mean Square	F	p
ITEM 1	Imbalance between the missions and power	Less than 5 yrs	4	2,75	0,50	Inter Groups	13,563	5	2,713	2,29	0,05
		6-10 yrs	5	4,20	1,09						
		11-15 yrs	17	3,06	1,08	Intra Group	100,547	85	1,183		
		16-20 yrs	28	3,21	1,22						
		21-25 yrs	23	3,22	0,79	TOTAL	114,110	90	-----		
		More than 26 yrs	14	2,43	1,28						
ITEM 2	Instability at the position	Less than 5 yrs	4	2,25	0,50	Inter Groups	13,350	5	2,670	2,20	0,06
		6-10 yrs	5	2,25	0,89						
		11-15 yrs	17	2,94	0,89	Intra Group	102,804	85	1,209		
		16-20 yrs	28	3,00	1,36						
		21-25 yrs	23	2,78	1,04	TOTAL	116,154	90	-----		
		More than 25 yrs	14	2,00	0,96						
ITEM 3	Uncertainty at the position	Less than 5 yrs	4	2,25	0,50	Inter Groups	10,407	5	2,081	1,52	0,18
		6-10 yrs	5	3,00	1,22						
		11-15 yrs	17	2,82	1,18	Intra Group	115,725	85	1,361		
		16-20 yrs	28	2,89	1,22						
		21-25 yrs	23	2,91	1,12	TOTAL	126,132	90	-----		
		More than 25 yrs	14	2,00	1,17						
ITEM 4	Political interference and pressure	Less than 5 yrs	4	1,75	0,95	Inter Groups	28,701	5	5,740	2,67	0,02*
		6-10 yrs	5	3,80	1,78						
		11-15 yrs	17	3,35	1,49	Intra Group	182,595	85	2,148		
		16-20 yrs	28	2,75	1,53						
		21-25 yrs	23	2,22	1,44	TOTAL	211,297	90	-----		
		More than 25 yrs	14	2,00	1,30						
ITEM 5	Difficulties in public relations	Less than 5 yrs	4	2,00	1,41	Inter Groups	4,093	5	0,819	1,02	0,41
		6-10 yrs	5	3,00	1,22						
		11-15 yrs	17	2,65	1,05	Intra Group	68,193	85	0,802		
		16-20 yrs	28	2,71	0,85						
		21-25 yrs	23	2,52	0,73	TOTAL	72,286	90	-----		
		More than 25 yrs	14	2,29	0,72						
ITEM 6	Fighting and problems arising from relations with the superiors	Less than 5 yrs	4	3,25	0,95	Inter Groups	8,067	5	1,613	8,067	0,89
		6-10 yrs	5	3,20	1,09						
		11-15 yrs	17	2,41	0,61	Intra Group	68,966	85	0,811		
		16-20 yrs	28	2,21	0,95						
		21-25 yrs	23	2,30	0,70	TOTAL	77,033	90	-----		
		More than 25 yrs	14	2,14	1,23						

P<0,05

Items For the General Stress Sources Factor		Proff. Seniority	N	\bar{X}	Ss	Variance Source	Sum of Squares	Sd	Mean Square	F	p
ITEM 14	Obligation to finish a specific task at a given time	Less than 5 yrs	4	2,00	1,41	Inter Groups	9,671	5	1,934	1,48	0,20
		6-10 yrs	5	3,20	1,78						
		11-15 yrs	17	2,35	0,93	Intra Group	111,010	85	1,306		
		16-20 yrs	28	3,11	1,22						
		21-25 yrs	23	2,74	0,96	TOTAL	120,681	90	-----		
		More than 25 yrs	14	2,64	1,15						
ITEM 15	Lack of necessary tools and equipment	Less than 5 yrs	4	2,50	0,57	Inter Groups	6,569	5	1,314	1,19	0,31
		6-10 yrs	5	4,00	1,22						
		11-15 yrs	17	3,35	1,16	Intra Group	93,101	85	1,095		
		16-20 yrs	28	3,39	1,10						
		21-25 yrs	23	3,09	0,94	TOTAL	99,670	90	-----		
		More than 25 yrs	14	3,14	0,94						
ITEM 27	Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations	Less than 5 yrs	4	2,00	0,81	Inter Groups	6,764	5	1,353	0,93	0,46
		6-10 yrs	5	3,20	1,78						
		11-15 yrs	17	2,29	1,16	Intra Group	123,654	85	1,455		
		16-20 yrs	28	2,75	1,23						
		21-25 yrs	23	2,65	1,19	TOTAL	130,418	90	-----		
		More than 25 yrs	14	2,29	1,06						
ITEM 28	The feeling that organizational goals and policies are not followed carefully	Less than 5 yrs	4	2,00	0,81	Inter Groups	4,526	5	0,905	0,87	0,50
		6-10 yrs	5	2,60	1,14						
		11-15 yrs	17	2,71	1,04	Intra Group	88,090	85	1,036		
		16-20 yrs	28	2,36	0,95						
		21-25 yrs	23	2,65	1,07	TOTAL	92,65	90	-----		
		More than 25 yrs	14	2,14	1,02						
ITEM 31	To avoid assuming responsibilities	Less than 5 yrs	4	2,25	0,95	Inter Groups	10,049	5	2,010	1,49	0,20
		6-10 yrs	5	3,20	1,78						
		11-15 yrs	17	2,59	1,22	Intra Group	114,632	85	1,349		
		16-20 yrs	28	2,25	1,04						
		21-25 yrs	23	2,00	1,08	TOTAL	124,681	90	-----		
		More than 25 yrs	14	1,86	1,23						
ITEM 32	The anxiety that successes will not be awarded	Less than 5 yrs	4	2,25	1,89	Inter Groups	15,860	5	3,172	1,81	0,11
		6-10 yrs	5	3,80	1,64						
		11-15 yrs	17	2,76	1,43	Intra Group	148,579	85	1,748		
		16-20 yrs	28	2,61	1,10						
		21-25 yrs	23	3,26	1,35	TOTAL	164,440	90	-----		
		More than 25 yrs	14	2,29	1,26						
	General Stress Sources Factor (Factor 1) P<0,05	Less than 5 yrs	4	2,27	0,55	Inter Groups	70,864	5	14,17	1,88	0,10
		6-10 yrs	5	3,38	1,27						
		11-15 yrs	17	2,77	0,72	Intra Group	640,858	85	7,53		
		16-20 yrs	28	2,77	0,89						
		21-25 yrs	23	2,69	0,60	TOTAL	711,723	90	-----		
		More than 25 yrs	14	2,26	0,77						

Item 4. Political Interference and Pressure: There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 2.67$, $p < 0.05$].

Generally speaking about the General Stress Sources Factor (Factor 1), there is not a statistically significant difference between the school administrators' evaluations of this factor based on their professional seniority. [$F_{(5-85)} = 1.88$, $p > 0.05$].

The Variance Analysis Results based on the professional seniority parameter for the school administrators' evaluations for the Social Stress Sources Factor (Factor 2) are presented in **Table 24**.

There is not statistically significant difference between male and female subjects for the following items: Being complained about (I19), Working in an unsafe environment (I20), "Not being able to take required measures to improve the management on time" (I23), "Not being able to participate in decision making" (I25), Being left out of communication channels, being ostracized (I26), Family problems' negatively affecting work (I36), Bringing home the problems at workplace (I37), Not having enough time for the family and social life (I38), and Work's being monotonous (I40). ($p > 0.05$)

Item 39. Not having opportunities in/outside the country for professional development: There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 2.57$, $p < 0.05$].

Generally speaking about the Social Stress Sources Factor (Factor 2), there is not a statistically significant difference between the school administrators' evaluations of this factor based on their professional seniority. [$F_{(5-85)} = 0.61$, $p > 0.05$].

Table 24.

The Variance Analysis Results based on the professional seniority parameter for the school administrators' evaluations for the Social Stress Sources Factor (Factor 2)

Items For the Social Stress Sources Factor		Proff. Seniroty	N	\bar{X}	Ss	Variance Source	Sum of Squares	Sd	Mean Square	F	p
ITEM 19	Being complained about	Less than 5 yrs	4	2,25	1,50	Inter Groups	5,838	5	1,168	1,90	0,10
		6-10 yrs	5	1,00	0,00						
		11-15 yrs	17	1,82	0,80	Intra Group	52,008	85	0,612		
		16-20 yrs	28	2,04	0,96						
		21-25 yrs	23	1,87	0,45	TOTAL	57,846	90	-----		
		More than 25 yrs	14	1,64	0,63						
ITEM 20	Working in an unsafe environment	Less than 5 yrs	4	3,25	0,95	Inter Groups	6,424	5	1,285	0,87	0,49
		6-10 yrs	5	3,25	1,09						
		11-15 yrs	17	2,35	0,78	Intra Group	124,257	85	1,462		
		16-20 yrs	28	2,11	1,37						
		21-25 yrs	23	2,35	1,33	TOTAL	130,681	90	-----		
		More than 25 yrs	14	1,93	1,14						
ITEM 23	Not being able to take required measures to improve the management on time	Less than 5 yrs	4	2,00	0,81	Inter Groups	3,803	5	0,761	0,67	0,64
		6-10 yrs	5	2,80	1,30						
		11-15 yrs	17	2,41	0,93	Intra Group	95,955	85	1,129		
		16-20 yrs	28	2,50	1,20						
		21-25 yrs	23	2,13	1,05	TOTAL	99,758	90	-----		
		More than 25 yrs	14	2,57	0,85						
ITEM 25	Not being able to participate in decision making	Less than 5 yrs	4	1,50	1,00	Inter Groups	7,576	5	1,515	1,53	0,18
		6-10 yrs	5	3,00	1,00						
		11-15 yrs	17	2,24	0,90	Intra Group	83,720	85	0,985		
		16-20 yrs	28	2,57	0,99						
		21-25 yrs	23	2,17	0,98	TOTAL	91,297	90	-----		
		More than 25 yrs	14	2,50	1,09						
ITEM 26	Being left out of communication channels, being ostracized	Less than 5 yrs	4	1,50	0,57	Inter Groups	11,505	5	2,301	1,67	0,15
		6-10 yrs	5	1,20	0,44						
		11-15 yrs	17	2,47	1,41	Intra Group	116,913	85	1,375		
		16-20 yrs	28	2,32	1,27						
		21-25 yrs	23	2,22	1,16	TOTAL	128,418	90	-----		
		More than 25 yrs	14	1,71	0,82						

P<0,05

Items For the Social Stress Sources Factor		Proff. Seniorty	N	\bar{X}	Ss	Variance Source	Sum of Squares	Sd	Mean Square	F	p
ITEM 36	Family problems' negatively affecting work	Less than 5 yrs	4	1,00	0,00	Inter Groups	10,945	5	2,189	1,85	0,11
		6-10 yrs	5	1,40	0,54						
		11-15 yrs	17	1,76	0,83	Intra Group	100,242	85	1,179		
		16-20 yrs	28	2,25	1,50						
		21-25 yrs	23	1,83	0,98	TOTAL	11,187	90	-----		
		More than 25 yrs	14	1,43	0,64						
ITEM 37	Bringing home the problems at workplace	Less than 5 yrs	4	1,00	0,00	Inter Groups	4,289	5	0,858	1,10	0,36
		6-10 yrs	5	1,40	0,54						
		11-15 yrs	17	1,59	0,79	Intra Group	65,821	85	0,774		
		16-20 yrs	28	1,93	1,08						
		21-25 yrs	23	1,65	0,83	TOTAL	70,110	90	-----		
		More than 25 yrs	14	1,57	0,75						
ITEM 38	Not having enough time for the family and social life	Less than 5 yrs	4	2,25	0,50	Inter Groups	3,961	5	0,792	0,98	0,43
		6-10 yrs	5	2,00	1,00						
		11-15 yrs	17	2,06	0,82	Intra Group	68,193	85	0,802		
		16-20 yrs	28	2,54	0,88						
		21-25 yrs	23	2,13	0,96	TOTAL	72,154	90	-----		
		More than 25 yrs	14	2,07	0,91						
ITEM 39	Not having opportunities in/outside the country for professional development	Less than 5 yrs	4	3,25	1,25	Inter Groups	14,609	5	2,922	2,57	0,03*
		6-10 yrs	5	3,80	1,64						
		11-15 yrs	17	3,41	0,93	Intra Group	96,534	85	1,136		
		16-20 yrs	28	2,71	1,08						
		21-25 yrs	23	2,57	0,99	TOTAL	11,143	90	-----		
		More than 25 yrs	14	2,50	1,01						
ITEM 40	Work's being monotonous	Less than 5 yrs	4	2,75	0,50	Inter Groups	5,285	5	1,057	1,16	0,33
		6-10 yrs	5	2,80	0,44						
		11-15 yrs	17	2,76	0,97	Intra Group	77,396	85	0,911		
		16-20 yrs	28	2,54	1,10						
		21-25 yrs	23	2,13	0,81	TOTAL	82,681	90	-----		
		More than 25 yrs	14	2,36	1,00						
	Social Stress Sources Factor (Factor 2)	Less than 5 yrs	4	2,07	0,50	Inter Groups	145,296	5	29,059	0,61	0,69
		6-10 yrs	5	2,16	0,55						
		11-15 yrs	17	2,28	0,48	Intra Group	4042,520	85	47,559		
		16-20 yrs	28	2,35	0,89						
		21-25 yrs	23	2,10	0,51	TOTAL	4187,824	90	-----		
		More than 25 yrs	14	2,02	0,36						

P<0,05

The Variance Analysis Results based on the professional seniority parameter for the school administrators' evaluations for the Employee Related Stress Sources Factor (Factor 3) are presented in Table 25.

Table 25.

The Variance Analysis Results based on the professional seniority parameter for the school administrators' evaluations for the Employee Related Stress Sources Factor (Factor 3)

Items For the Employee Related Stress Sources Factor		Proff. Seniorty	N	\bar{X}	Ss	Variance Source	Sum of Squares	Sd	Mean Square	F	p
ITEM 7	Fighting and problems arising from the relations with inferiors	Less than 5 yrs	4	2,25	0,50	Inter Groups	13,726	5	2,745	3,99	0,00*
		6-10 yrs	5	3,80	1,30						
		11-15 yrs	17	2,65	0,70	Intra Group	58,406	85	0,687		
		16-20 yrs	28	3,04	0,83						
		21-25 yrs	23	2,57	0,66	TOTAL	72,132	90	-----		
		More than 25 yrs	14	2,21	1,05						
ITEM 8	Problems related to record and evaluation of the inferiors	Less than 5 yrs	4	1,50	0,57	Inter Groups	10,885	5	2,177	2,21	0,06
		6-10 yrs	5	3,00	1,87						
		11-15 yrs	17	2,24	1,20	Intra Group	83,532	85	0,983		
		16-20 yrs	28	1,96	0,69						
		21-25 yrs	23	2,43	0,99	TOTAL	94,418	90	-----		
		More than 25 yrs	14	1,71	0,91						
ITEM 13	Having to work with personnel who are not sufficiently educated and prepared	Less than 5 yrs	4	2,25	0,50	Inter Groups	7,646	5	1,529	1,52	0,19
		6-10 yrs	5	3,80	1,78						
		11-15 yrs	17	2,88	0,78	Intra Group	85,343	85	1,004		
		16-20 yrs	28	2,93	0,97						
		21-25 yrs	23	2,96	0,92	TOTAL	92,989	90	-----		
		More than 25 yrs	14	3,36	1,15						
ITEM 16	Problems arising among people related to competition and promotion	Less than 5 yrs	4	1,50	0,57	Inter Groups	4,735	5	0,947	1,06	0,38
		6-10 yrs	5	2,80	2,04						
		11-15 yrs	17	2,35	0,86	Intra Group	75,375	85	0,887		
		16-20 yrs	28	2,21	0,73						
		21-25 yrs	23	2,39	0,72	TOTAL	80,110	90	-----		
		More than 25 yrs	14	2,50	1,22						

P<0,05

Items For the Employee Related Stress Sources Factor		Proff. Seniorty	N	\bar{X}	Ss	Variance Source	Sum of Squares	Sd	Mean Square	F	p
ITEM 29	Abundance of discordant behaviors among employees	Less than 5 yrs	4	2,75	0,50	Inter Groups	8,699	5	1,740	1,83	0,11
		6-10 yrs	5	3,80	1,30						
		11-15 yrs	17	3,00	0,79	Intra Group	80,598	85	0,948		
		16-20 yrs	28	3,11	0,99						
		21-25 yrs	23	2,70	1,02	TOTAL	89,297	90	-----		
		More than 25 yrs	14	2,50	1,01						
ITEM 30	Existence of arguments and conflicts among employees	Less than 5 yrs	4	2,25	0,50	Inter Groups	9,351	5	1,870	1,93	0,09
		6-10 yrs	5	3,60	1,67						
		11-15 yrs	17	3,12	0,85	Intra Group	82,254	85	0,968		
		16-20 yrs	28	2,82	1,05						
		21-25 yrs	23	2,65	0,98	TOTAL	91,604	90	-----		
		More than 25 yrs	14	2,36	0,74						
ITEM 35	Employees' not taking the work seriously	Less than 5 yrs	4	1,75	0,50	Inter Groups	13,779	5	2,756	2,91	0,01*
		6-10 yrs	5	3,60	1,67						
		11-15 yrs	17	2,41	0,79	Intra Group	80,353	85	0,945		
		16-20 yrs	28	2,57	1,03						
		21-25 yrs	23	2,00	0,67	TOTAL	94,132	90	-----		
		More than 25 yrs	14	2,57	1,22						
	Employee Related Stress Sources Factor (Factor 3)	Less than 5 yrs	4	2,03	0,21	Inter Groups	281,897	5	56,379	2,53	0,03*
		6-10 yrs	5	3,48	1,60						
		11-15 yrs	17	2,66	0,50	Intra Group	1889,48	85	22,229		
		16-20 yrs	28	2,66	0,66						
		21-25 yrs	23	2,52	0,52	TOTAL	2171,38	90	-----		
		More than 25 yrs	14	2,45	0,68						

P<0,05

There is not statistically significant difference between male and female subjects for the following items: Problems related to record and evaluation of the inferiors (I8), Having to work with personnel who are not sufficiently educated and prepared (I13), Problems arising among people related to competition and promotion (I16), Existence of arguments and conflicts among employees (I30). ($p>0.05$)

***Item 7. Fighting and problems arising from the relations with inferiors:**

There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 3,99$, $p<0,05$]

***Item 35. Employees' not taking the work seriously:** There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 2.91$, $p < 0,05$].

***Employee Related Stress Sources Factor (Factor 3):** There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 2.53$, $p < 0,05$].

Table 26.

The Variance Analysis Results based on the professional seniority parameter for the school administrators' evaluations for the Management Related Stress Sources Factor (Factor 4)

Items For the Management Related Stress Sources Factor		Proff. Seniorty	N	\bar{X}	Ss	Variance Source	Sum of Squares	Sd	Mean Square	F	p
ITEM 10	Overdose discipline and pressure	Less than 5 yrs	4	3,25	1,25	Inter Groups	7,522	5	1,504	1,66	0,15
		6-10 yrs	5	2,20	0,83						
		11-15 yrs	17	1,82	0,72	Intra Group	77,005	85	0,906		
		16-20 yrs	28	2,07	0,94						
		21-25 yrs	23	2,22	1,08	TOTAL	84,527	90	-----		
		More than 25 yrs	14	2,36	0,92						
ITEM 11	Tight supervision and monitoring	Less than 5 yrs	4	2,50	1,00	Inter Groups	6,676	5	1,335	1,53	0,18
		6-10 yrs	5	2,00	1,00						
		11-15 yrs	17	1,76	0,66	Intra Group	73,786	85	0,868		
		16-20 yrs	28	1,86	0,97						
		21-25 yrs	23	2,30	1,06	TOTAL	80,462	90	-----		
		More than 25 yrs	14	2,43	0,85						
ITEM 17	The feeling of being obstructed while doing his/her job	Less than 5 yrs	4	2,25	0,50	Inter Groups	2,190	5	0,438	0,48	0,79
		6-10 yrs	5	3,00	1,87						
		11-15 yrs	17	2,29	0,58	Intra Group	77,568	85	0,913		
		16-20 yrs	28	2,43	1,03						
		21-25 yrs	23	2,35	0,83	TOTAL	79,758	90	-----		
		More than 25 yrs	14	2,36	1,00						
ITEM 21	Not having enough authority while making decisions	Less than 5 yrs	4	3,50	1,00	Inter Groups	5,258	5	1,052	0,70	0,62
		6-10 yrs	5	3,40	1,67						
		11-15 yrs	17	2,82	1,07	Intra Group	127,424	85	1,499		
		16-20 yrs	28	2,61	1,19						
		21-25 yrs	23	2,65	1,22	TOTAL	132,681	90	-----		
		More than 25 yrs	14	2,71	1,32						

Items For the Management Related Stress Sources Factor		Proff. Seniorty	N	\bar{X}	Ss	Variance Source	Sum of Squares	Sd	Mean Square	F	p
ITEM 22	Having difficulties in making decisions	Less than 5 yrs	4	2,25	0,50	Inter Groups	1,696	5	0,339	0,40	0,84
		6-10 yrs	5	2,00	0,70						
		11-15 yrs	17	2,24	1,14	Intra Group	72,150	85	0,849		
		16-20 yrs	28	2,21	1,06						
		21-25 yrs	23	2,22	0,73	TOTAL	73,846	90	-----		
		More than 25 yrs	14	1,86	0,66						
ITEM 24	Not being able to criticize the administration's practices	Less than 5 yrs	4	1,75	1,75	Inter Groups	11,893	5	2,379	2,24	0,06
		6-10 yrs	5	3,80	1,64						
		11-15 yrs	17	2,47	0,94	Intra Group	90,239	85	1,062		
		16-20 yrs	28	2,50	0,88						
		21-25 yrs	23	2,48	0,84	TOTAL	102,132	90	-----		
		More than 25 yrs	14	2,86	1,29						
ITEM 33	Taking risk in order to be able to accomplish a task	Less than 5 yrs	4	2,75	1,50	Inter Groups	7,618	5	1,524	1,11	0,36
		6-10 yrs	5	1,80	1,30						
		11-15 yrs	17	2,76	1,09	Intra Group	116,514	85	1,371		
		16-20 yrs	28	2,32	1,09						
		21-25 yrs	23	2,70	1,06	TOTAL	124,132	90	-----		
		More than 25 yrs	14	2,93	1,43						
	Management Related Stress Sources Factor (Factor 4)	Less than 5 yrs	4	2,60	0,95	Inter Groups	49,225	5	9,845	0,38	0,85
		6-10 yrs	5	2,60	1,01						
		11-15 yrs	17	2,31	0,53	Intra Group	2163,347	85	25,451		
		16-20 yrs	28	2,28	0,78						
		21-25 yrs	23	2,41	0,60	TOTAL	2212,571	90	-----		
		More than 25 yrs	14	2,50	0,70						

$P < 0,05$

The Variance Analysis Results based on the professional seniority parameter for the school administrators' evaluations for the Management Related Stress Sources Factor (Factor 4) are presented in **Table 26**.

There is not a significant difference between the responses of male and female subjects for the following items ($p > 0.05$): Overdose discipline and pressure (I10), Tight supervision and monitoring (I11), The feeling of being obstructed while doing his/her job (I17), Not having enough authority while making decisions (I21), Having difficulties in making decisions (I22), Not being able to criticize the

administration's practices (I24), Taking risk in order to be able to accomplish a task (I33).

Management Related Stress Sources Factor (Factor 4): There is not a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 0.38, p > 0,05$].

The Variance Analysis Results based on the professional seniority parameter for the school administrators' evaluations for the Workload Related Stress Sources Factor (Factor 5) are presented in **Table 27**.

There is not a significant difference between the responses of male and female subjects for the following items ($p > 0.05$): Insufficient salary and economical problems(I9), "Having a huge fiscal responsibility" (I18), Excessive workload (I34).

*** Item 12 Long and tiring working hours:** There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 2.39, p < 0,05$].

Workload Related Stress Sources Factor (Factor 5): There is not a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 1,00, p > 0,05$].

In order to analyze the differences of the significances for those items, for which a significant difference was identified in the ANOVA variance test analysis between the administrators' evaluations based on their professional seniority, we performed LSD test. Next, we present and interpret the results for the LSD test.

Table 27

The Variance Analysis Results based on the professional seniority parameter
for the school administrators' evaluations for the Workload Related Stress

Sources Factor (Factor 5)

Items For Workload Rel.		Proff.				Variance	Sum of		Mean		
Stress Sources Factor		Seniorty	N	\bar{X}	Ss	Source	Squares	Sd	Square	F	p
ITEM 9	Insufficient salary and economical problems	Less than 5 yrs	4	3,00	0,00	Inter Groups	4,173	5	0,835	0,62	0,68
		6-10 yrs	5	3,40	1,67						
		11-15 yrs	17	2,47	1,17	Intra Group	114,508	85	1,347		
		16-20 yrs	28	2,75	1,20						
		21-25 yrs	23	2,87	1,21	TOTAL	118,681	90	-----		
		More than 25 yrs	14	2,64	0,84						
ITEM 12	Long and tiring working hours	Less than 5 yrs	4	3,50	1,00	Inter Groups	13,155	5	2,631	2,39	0,04*
		6-10 yrs	5	1,80	0,83						
		11-15 yrs	17	2,18	0,80	Intra Group	93,592	85	1,101		
		16-20 yrs	28	2,68	1,18						
		21-25 yrs	23	3,00	1,12	TOTAL	106,747	90	-----		
		More than 25 yrs	14	2,64	0,92						
ITEM 18	Having a huge fiscal responsibility	Less than 5 yrs	4	1,75	0,95	Inter Groups	9,653	5	1,931	1,54	0,18
		6-10 yrs	5	3,20	1,78						
		11-15 yrs	17	1,76	0,75	Intra Group	106,193	85	1,249		
		16-20 yrs	28	2,21	1,28						
		21-25 yrs	23	2,30	0,92	TOTAL	115,846	90	-----		
		More than 25 yrs	14	2,00	1,17						
ITEM 34	Excessive workload	Less than 5 yrs	4	3,25	1,25	Inter Groups	8,387	5	1,677	1,56	0,17
		6-10 yrs	5	2,20	1,09						
		11-15 yrs	17	2,29	1,16	Intra Group	90,910	85	1,070		
		16-20 yrs	28	2,96	1,03						
		21-25 yrs	23	2,43	0,66	TOTAL	99,297	90	-----		
		More than 25 yrs	14	2,64	1,27						
	Workload Related Stress Sources Factor (Factor 5)	Less than 5 yrs	4	2,85	0,62	Inter Groups	55,009	5	11,002	1,00	0,42
		6-10 yrs	5	2,65	1,23						
		11-15 yrs	17	2,17	0,72	Intra Group	930,815	85	10,951		
		16-20 yrs	28	2,65	0,90						
		21-25 yrs	23	2,65	0,73	TOTAL	985,824	90	-----		
		More than 25 yrs	14	2,48	0,80						

P<0,05

The results are summarized in **Table 28**.

Item4. Political Interference and Pressure: There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 2.67$, $p < 0,05$].

According to the LSD Test, school administrators of 6-10 years of professional seniority consider this item in the high stress region ($3.40 \leq \bar{X} \leq 5.00$) since the statistical mean of their answers is ($\bar{X} = 3,80$). Administrators' with less than 5 years of seniority, 21-25 years of seniority, and 26 years and more seniority consider this item in the low stress region ($1,00 \leq \bar{X} \leq 2,59$) with their answers having arithmetic means ($\bar{X} = 1.75$), ($\bar{X} = 2.22$), ($\bar{X} = 2.00$), respectively.

Administrators with 11-15 years of seniority, whose answers have a mean of ($\bar{X} = 3,35$), consider this item in the optimum productivity region ($2,60 \leq \bar{X} \leq 3,39$). 21-25 years cluster, with a 1.13 difference ($\bar{X} = 2,22$), 26 years and more cluster, with a 1.35 difference ($\bar{X} = 2,00$), consider this item in the low stress region ($1,00 \leq \bar{X} \leq 2.59$).

Table 28.

LSD Test Results Based on the Professional Seniority Parameter

	Item	Seniority (1)	Seniority (2)	Difference of means	Std. Error	p
Item 4	Political interference and pressure	6-10 yrs ($\bar{x} = 3,80$)	Less than 5 yrs ($\bar{x} = 1,75$)	2,05	0,98	0,040
			21-25 yrs ($\bar{x} = 2,22$)	1,58	0,72	0,031
			26 yrs and more ($\bar{x} = 2,00$)	1,80	0,76	0,021
		11-15 yrs ($\bar{x} = 3,35$)	21-25 yrs ($\bar{x} = 2,22$)	1,13	0,46	0,018
			26 yrs and more ($\bar{x} = 2,00$)	1,35	0,52	0,012

P < 0,05

Item 7	Fighting and problems arising from the relations with inferiors	6-10 yrs (x=3,80)	Less than 5 yrs (x=2,25)	1,55	0,55	0,007
			11-15 yrs (x=2,65)	1,15	0,42	0,008
			21-25 yrs (x=2,57)	1,23	0,40	0,003
			26 yrs and more (x=2,21)	1,59	0,43	0,000
		16-20 yrs (x=3,04)	21-25 yrs (x=2,57)	0,47	0,23	0,047
			26 yrs and more (x=2,21)	0,82	0,27	0,003
Item 12	Long and Tiring working hours	6-10 yrs (x=1,80)	Less than 5 yrs (x=3,50)	-1,70	0,70	0,018
			21-25 yrs (x=3,00)	-1,20	0,51	0,023
		11-15 yıl (x=2,18)	Less than 5 yrs (x=3,50)	-1,32	0,58	0,026
			21-25 yıl (x=3,00)	-0,82	0,33	0,016
Item 35	Employees' not taking the work seriously	6-10 yrs (x=3,60)	Less than 5 yrs (x=1,75)	1,85	0,65	0,006
			11-15 yrs (x=2,41)	1,19	0,49	0,018
			16-20 yrs (x=2,57)	1,03	0,47	0,032
			21-25 yıl (x=2,00)	1,60	0,48	0,001
			26 yrs and more (x=2,57)	1,03	0,50	0,045
		16-20 yrs (x=2,57)	21-25 yrs (x=2,00)	0,57	0,27	0,040
Item 39	Not having opportunities in/outside the country for professional development	6-10 yrs (x=3,80)	16-20 yrs (x=2,71)	1,09	0,51	0,039
			21-25 yrs (x=2,57)	1,23	0,52	0,021
			26 yrs and more (x=2,50)	1,30	0,55	0,022
		11-15 yıl (x=3,41)	16-20 yrs (x=2,71)	0,70	0,32	0,036
			21-25 yrs (x=2,57)	0,85	0,34	0,015
			26 yrs and more (x=2,50)	0,91	0,38	0,020
Factor 3	Employee Related Stress Sources Factor (Factor 3)	6-10 yrs (x=3,48)	Less than 5 yrs (x=2,03)	-1,45	0,45	0,002
			11-15 yrs (x=2,66)	0,82	0,34	0,019
			16-20 yrs (x=2,66)	0,82	0,32	0,014
			21-25 yrs (x=2,52)	0,95	0,33	0,005
			26 yrs and more (x=2,45)	1,02	0,35	0,004

P<0,05

***Item 7. Fighting and problems arising from the relations with inferiors:**

There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 3.99$, $p < 0.05$]

In the LSD Test, school administrators with 6-10 years of experience considered this item in the high stress region ($3.40 \leq \bar{X} \leq 5.00$) since the statistical mean of their answers is $\bar{X} = 3.80$. Administrators with less than 5 years of experience, with a difference of 1.55 points ($\bar{X} = 2.25$), 11-15 years of experience group, with a difference of 1.23 points ($\bar{X} = 2.57$), and 26 years and more group, with a difference of 1.59 ($\bar{X} = 2.21$), considered this item in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) and created a statistically significant difference.

In the LSD Test, school administrators with 16-20 years of experience considered this item in the optimum stress region ($2.60 \leq \bar{X} \leq 3.39$) since the statistical mean of their answers is $\bar{X} = 3.04$. 11-15 years of seniority group, with a difference of 0.47 points ($\bar{X} = 2.57$), and 26 years and more group, with a difference of 0.83 ($\bar{X} = 2.21$), considered this item in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) and created a statistically significant difference.

***Item 12 Long and tiring working hours:** There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 2.39$, $p < 0.05$].

In the LSD Test, school administrators with 6-10 years of experience considered this item in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) since the statistical mean of their answers is $\bar{X} = 1.80$. Administrators with less than 5 years of experience, with a difference of 1.70 points ($\bar{X} = 3.50$), considered this item in the high stress region ($3.40 \leq \bar{X} \leq 5.00$); 21-25 years of experience group, with a

difference of 1.20 points ($\bar{X} = 3.00$), considered this item in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$) and created a statistically significant difference.

School administrators with 11-15 years of experience considered this item in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) since the statistical mean of their answers is $\bar{X} = 2.18$. Administrators with less than 5 years of experience, with a difference of 1.32 points ($\bar{X} = 3.50$), considered this item in the high stress region ($3.40 \leq \bar{X} \leq 5.00$); 21-25 years of experience group, with a difference of 0.82 points ($\bar{X} = 3.00$), considered this item in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$) and created a statistically significant difference.

***Item 35. Employees' not taking the work seriously:** There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 2.91$, $p < 0.05$].

In the LSD Test, school administrators with 6-10 years of experience considered this item in the high stress region ($3.40 \leq \bar{X} \leq 5.00$) since the statistical mean of their answers is $\bar{X} = 3.60$. Administrators with less than 5 years of experience, with a difference of 1.85 points ($\bar{X} = 1.75$), 11-15 years group, with a difference of 1.19 ($\bar{X} = 2.41$), 16-20 years group, with a difference of 1.03 points ($\bar{X} = 2.57$), 21-25 years group, with a difference of 1.60 points ($\bar{X} = 2.00$), 26 years or more group, with a difference of 1.03 points ($\bar{X} = 2.57$); considered this item in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) and created a statistically significant difference.

The arithmetic means of the answers of the 16-20 years group ($\bar{X} = 2.57$) and 21- 25 years group ($\bar{X} = 2.00$) created a significant difference with 0.57 points although they both lie in the low stress region ($1.00 \leq \bar{X} \leq 2.59$).

***Item 39. Not having opportunities in/outside the country for professional development:** There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 2.57$, $p < 0.05$].

In the LSD Test, school administrators with 6-10 years of experience considered this item in the high stress region ($3.40 \leq \bar{X} \leq 5.00$) since the statistical mean of their answers is $\bar{X} = 3.80$. Administrators in the 16-20 years of seniority group considered this item in the optimum productivity region with a 1.09 points difference ($\bar{X} = 2.71$). 21-25 years group, with a difference of 1.23 ($\bar{X} = 2.57$), 26 years or more group, with a difference of 1.30 points ($\bar{X} = 2.50$); considered this item in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) and created a statistically significant difference.

School administrators with 11-15 years of experience considered this item in the high stress region ($3.40 \leq \bar{X} \leq 5.00$) since the statistical mean of their answers is $\bar{X} = 3.41$. Administrators in the 16-20 years of seniority group considered this item in the optimum productivity region with a 0.70 points difference ($\bar{X} = 2.71$). 21-25 years group, with a difference of 0.84 ($\bar{X} = 2.57$), 26 years or more group, with a difference of 0.91 points ($\bar{X} = 2.50$); considered this item in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) and created a statistically significant difference.

Employee Related Stress Sources Factor (Factor 3): There is a statistically significant difference between the school administrators' responses for this item based on the professional seniority parameter. [$F_{(5-85)} = 2.53$, $p < 0.05$].

In the LSD Test, school administrators with 6-10 years of experience considered this factor in the high stress region ($3.40 \leq \bar{X} \leq 5.00$) since the statistical mean of their answers is $\bar{X} = 3.48$. Administrators in the less than 5 years of seniority group, with a 1.45 points difference ($\bar{X} = 2.03$), 21-25 years group, with a

difference of 0.96 ($\bar{X} = 2.52$), 26 years or more group, with a difference of 1.03 points ($\bar{X} = 2.45$); considered this item in the low stress region ($1.00 \leq \bar{X} \leq 2.59$) and created a statistically significant difference. Administrators in the 11-15 years of seniority group and in 16-20 years of seniority group, considered this factor in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$) with a point difference of 0.88 points from that of 6-10 years ($\bar{X} = 2.60$).

4.4. Findings and Interpretations Regarding the School Administrators' Evaluations for the Stress Sources Based on the Administrators' Statuses Parameter

In this section, we analyze the t-test results for school administrators' evaluations of stress sources based on the status parameter, individually for each stress sources factor.

The t-test results based on the status parameter for the General Stress Sources Factor (Factor 1) are presented in **Table 29**.

According to t-test results presented in **Table 29**, the evaluations of 21 principals and 70 vice-principals for the General Stress Sources Factor (Factor 1) based on the status parameter are as follows: There is not statistically significant difference between male and female subjects for the following items: "Imbalance between the missions and power" (I1), "Instability at the position" (I2), "Uncertainty at the position" (I3), "Difficulties in public relations" (I5), Fighting and problems arising from relations with the superiors" (I6), "Obligation to finish a specific task at a given time" (I14), "Lack of necessary tools and equipment" (I15), "Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations" (I27), "The feeling that organizational goals and policies are not followed carefully" (I28), and "The anxiety that successes will not be awarded" (I32). ($p > 0.05$).

Table 29.

**T-Test Results Based on the Status Parameter for General Stress Sources Factor
(Factor 1)**

	Items for the General Stress Sources Factor	Status	N	\bar{X}	Ss	sd	t	p
I 1	Imbalance between the missions and power	Principal	21	3,00	1,00	89	0,49	0,62
		Vice-Principal	70	3,13	1,16			
I 2	Instability at the position	Principal	21	2,52	0,98	89	1,24	0,22
		Vice-Principal	70	2,84	1,17			
I 3	Uncertainty at the position	Principal	21	2,43	1,12	89	1,36	0,18
		Vice-Principal	70	2,81	1,19			
I 4	Political interference and pressure	Principal	21	2,05	1,39	89	2,11	0,04*
		Vice-Principal	70	2,80	1,53			
I 5	Difficulties in public relations	Principal	21	2,29	0,71	89	1,93	0,06
		Vice-Principal	70	2,66	0,93			
I 6	Fightings and problems arising from relations with the superiors	Principal	21	2,14	0,91	89	1,25	0,21
		Vice-Principal	70	2,43	0,92			
I 14	Obligation to finish a specific task at a given time	Principal	21	2,43	0,74	89	1,94	0,05
		Vice-Principal	70	2,86	1,243			
I 15	Lack of necessary tools and equipment	Principal	21	3,48	0,98	89	1,10	0,27
		Vice-Principal	70	3,20	1,07			
I 27	Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations	Principal	21	2,43	1,12	89	0,60	0,55
		Vice-Principal	70	2,60	1,23			
I 28	The feeling that organizational goals and policies are not followed carefully	Principal	21	2,33	1,19	89	0,58	0,56
		Vice-Principal	70	2,50	0,95			
I 31	To avoid assuming responsibilities	Principal	21	1,81	0,92	89	2,25	0,03*
		Vice-Principal	70	2,37	1,21			
I 32	The anxiety that successes will not be awarded	Principal	21	3,10	1,30	89	1,16	0,25
		Vice-Principal	70	2,71	1,36			
	General Stress Sources Factor (Factor 1)	Principal	21	2,50	0,68	89	1,35	1,18
		Vice-Principal	70	2,74	0,84			

P<0,05

***Item 4. political interference and pressure:** There is a statistically significant difference between the arithmetic means of the answers of principals and vice-principals for this item. [$t_{(89)} = 2.11$, $p < 0.05$].

Although the arithmetic mean of the vice-principals' answers for this item ($\bar{X} = 2.80$) is in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$), that of the principals' answers ($\bar{X} = 2.05$) is in the low stress region ($1.00 \leq \bar{X} \leq 2.59$).

***Item 31. To avoid assuming responsibilities:** There is a statistically significant difference between the arithmetic means of the answers of principals and vice-principals for this item. [$t_{(89)} = 2.25$, $p < 0.05$].

The arithmetic mean of both the principals' answers ($\bar{X} = 1.81$) and the vice-principals' answers ($\bar{X} = 2.32$) for this item are in the low stress region ($1.00 \leq \bar{X} \leq 2.59$).

Generally speaking for the General Stress Sources Factor (Factor 1), there is not a statistically significant difference between the principals' and vice principals' evaluations for this factor [$t_{(89)} = 1.35$, $p > 0.05$].

The t-test results based on the status parameter for the Social Stress Sources Factor (Factor 2) are presented in **Table 30**.

According to t-test results presented in **Table 30**, the evaluations of 21 principals and 70 vice-principals for the Social Stress Sources Factor (Factor 2) based on the status parameter are as follows:

Table 30.
T-Test Results Based on the Status Parameter for Social Stress Sources
Factor (Factor 2)

	Items for the Social Stress Sources Factor	Status	N	\bar{X}	Ss	sd	t	p
I 19	Being complained about	Principal	21	1,81	0,51	89	0,31	0,75
		Vice-Principal	70	1,86	0,87			
I 20	Working in an unsafe environment	Principal	21	2,00	1,18	89	1,06	0,29
		Vice-Principal	70	2,31	1,21			
I 23	Not being able to take required measures to improve the management on time	Principal	21	2,05	0,86	89	1,97	0,06
		Vice-Principal	70	2,50	1,08			
I 25	Not being able to participate in decision making	Principal	21	2,19	1,12	89	0,87	0,38
		Vice-Principal	70	2,43	0,97			
I 26	Being left out of communication channels, being ostracized	Principal	21	1,95	1,95	89	0,82	0,41
		Vice-Principal	70	2,19	1,21			
I 36	Family problems' negatively affecting work	Principal	21	1,57	0,97	89	1,29	0,20
		Vice-Principal	70	1,90	1,14			
I 37	Bringing home the problems at workplace	Principal	21	1,62	0,74	89	0,34	0,73
		Vice-Principal	70	1,69	0,92			
I 38	Not having enough time for the family and social life	Principal	21	2,52	0,92	89	1,67	0,10
		Vice-Principal	70	2,14	0,87			
I 39	Not having opportunities in/outside the country for professional development	Principal	21	2,57	1,07	89	1,37	0,17
		Vice-Principal	70	2,94	1,11			
I 40	Work's being monotonous	Principal	21	1,90	0,62	89	4,10	0,00*
		Vice-Principal	70	2,64	0,97			
	Social Stress Sources Factor (Factor 2)	Principal	21	2,02	0,64	89	1,47	0,14
		Vice-Principal	70	2,26	0,68			

P<0,05

There is not statistically significant difference between male and female subjects for the following items: Being complained about (I19), Working in an unsafe environment (I20), Not being able to participate in decision making (I25), Being left out of communication channels, being ostracized (I26), Family problems' negatively affecting work (I36), Bringing home the problems at workplace (I37), Not having enough time for the family and social life (I38), Not having opportunities in/outside the country for professional development (I39). ($p > 0.05$)

***Item 4. Political interference and pressure:** There is a statistically significant difference between the arithmetic means of the answers of principals and vice-principals for this item. [$t_{(89)} = 4.10$, $p < 0.05$].

While the arithmetic mean of the vice-principals' answers for this item ($\bar{X} = 2.64$) is in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$), that of the principals' answers ($\bar{X} = 1.90$) is in the low stress region ($1.00 \leq \bar{X} \leq 2.59$).

Generally speaking for the General Stress Sources Factor (Factor 1), there is not a statistically significant difference between the principals' and vice principals' evaluations for this factor [$t_{(89)} = 1.47$, $p > 0.05$].

The t-test results based on the status parameter for the Employee Related Stress Sources Factor (Factor 3) are presented in **Table 31**

According to t-test results presented in **Table 31**, the evaluations of 21 principals and 70 vice-principals for this factor based on the status parameter are as follows:

There is not statistically significant difference between male and female subjects for the following items: Fighting and problems arising from the relations

with inferiors (I7), Problems related to record and evaluation of the inferiors (I8), Having to work with personnel who are not sufficiently educated and prepared(I13), Problems arising among people related to competition and promotion (I16), Abundance of discordant behaviors among employees (I29) , Existence of arguments and conflicts among employees(I30), and Employees' not taking the work seriously(I35). ($p>0.05$)

Table 31.
T-Test Results Based on the Status Parameter for Employee Related
Stress Sources Factor (Factor 3)

	Items for the Employee Related Stress Sources Factor (Factor 3)	Status	N	\bar{X}	Ss	sd	t	p
I 7	Fighting and problems arising from the relations with inferiors	Principal	21	2,62	0,74	89	0,70	0,48
		Vice-Principal	70	2,76	0,93			
I 8	Problems related to record and evaluation of the inferiors	Principal	21	2,24	0,99	89	0,55	0,58
		Vice-Principal	70	2,10	1,03			
I 13	Having to work with personnel who are not sufficiently educated and prepared	Principal	21	3,00	1,04	89	0,05	0,95
		Vice-Principal	70	3,01	1,01			
I 16	Problems arising among people related to competition and promotion	Principal	21	2,14	0,72	89	1,22	0,22
		Vice-Principal	70	2,39	0,99			
I 29	Abundance of discordant behaviors among employees	Principal	21	2,62	0,97	89	1,56	0,12
		Vice-Principal	70	3,00	0,99			
I 30	Existence of arguments and conflicts among employees	Principal	21	2,62	1,07	89	0,79	0,43
		Vice-Principal	70	2,83	0,99			
I 35	Employees' not taking the work seriously	Principal	21	2,33	0,96	89	0,44	0,65
		Vice-Principal	70	2,44	1,04			
	Employee Related Stress Sources Factor (Factor 3)	Principal	21	2,51	0,67	89	0,80	0,42
		Vice-Principal	70	2,64	0,71			

P<0,05

Generally speaking for the Employee Related Stress Sources Factor (Factor 3), there is not a statistically significant difference between the principals' and vice principals' evaluations for this factor [$t_{(89)} = 0,80$, $p > 0,05$].

Table 32.
T-Test Results Based on the Status Parameter for Management Related Stress Sources Factor (Factor 4)

	Items for the Management Related Stress Sources Factor (Factor 4)	Status	N	\bar{X}	Ss	sd	t	p
I 10	Overdose discipline and pressure	Principal	21	2,00	0,83	89	0,98	0,33
		Vice-Principal	70	2,21	1,00			
I 11	Tight supervision and monitoring	Principal	21	1,90	0,83	89	1,03	0,30
		Vice-Principal	70	2,13	0,97			
I 17	The feeling of being obstructed while doing his/her job	Principal	21	2,10	0,70	89	2,02	0,04*
		Vice-Principal	70	2,49	0,98			
I 21	Not having enough authority while making decisions	Principal	21	2,29	1,05	89	2,24	0,03*
		Vice-Principal	70	2,90	1,22			
I 22	Having difficulties in making decisions	Principal	21	1,90	0,70	89	1,70	0,09
		Vice-Principal	70	2,23	0,95			
I 24	Not being able to criticize the administration's practices	Principal	21	2,43	1,02	89	0,77	0,44
		Vice-Principal	70	2,63	1,07			
I 33	Taking risk in order to be able to accomplish a task	Principal	21	2,67	1,19	89	0,36	0,71
		Vice-Principal	70	2,56	1,17			
	Management Related Stress Sources Factor (Factor 4)	Principal	21	2,18	0,56	89	1,74	0,08
		Vice-Principal	70	2,44	0,73			

$P < 0,05$

The t-test results based on the status parameter for the Management Related Stress Sources Factor (Factor 4) are presented in **Table 32**.

According to t-test results presented in **Table 32**, the evaluations of 21 principals and 70 vice-principals for the Management Related Stress Sources Factor (Factor 4) based on the status parameter is as follows:

There is not a significant difference between the responses of male and female subjects for the following items ($p > 0.05$): Overdose discipline and pressure (I10), Tight supervision and monitoring (I11), Having difficulties in making decisions (I22), Not being able to criticize the administration's practices (I24), Taking risk in order to be able to accomplish a task (I33).

***Item 17. The feeling of being obstructed while doing his/her job:** There is a statistically significant difference between the arithmetic means of the answers of principals and vice-principals for this item. [$t_{(89)} = 2.02$, $p < 0.05$].

The arithmetic mean of both the principals' answers ($\bar{X} = 2.10$) and the vice-principals' answers ($\bar{X} = 2.49$) for this item are in the low stress region ($1.00 \leq \bar{X} \leq 2.59$).

***Item 21. Not having enough authority while making decisions:** There is a statistically significant difference between the arithmetic means of the answers of principals and vice-principals for this item. [$t_{(89)} = 2.24$, $p < 0.05$].

According to the status parameter, this item is considered in the low stress region by the principals ($1.00 \leq \bar{X} \leq 2.59$) with an arithmetic mean of ($\bar{X} = 2.29$), and considered in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$) by the vice-principals with an arithmetic mean of ($\bar{X} = 2.90$) of their scores.

Generally speaking for the Management Related Stress Sources Factor (Factor 4), there is not a statistically significant difference between the principals' and vice principals' evaluations for this factor [$t_{(89)}=1.74$, $p>0,05$].

The t-test results based on the status parameter for the Workload Related Stress Sources Factor (Factor 5) are presented in **Table 33**.

Table 33
T-Test Results Based on the Status Parameter for Workload Related Stress Sources Factor (Factor 5)

	Items for the Workload Related Stress Sources Factor (Factor 5)	Status	N	\bar{X}	Ss	sd	t	p
I 9	Insufficient salary and economical problems	Principal	21	2,86	1,19	89	0,43	0,66
		Vice-Principal	70	2,73	1,14			
I 12	Long and tiring working hours	Principal	21	2,81	1,20	89	0,71	0,47
		Vice-Principal	70	2,60	1,05			
I 18	Having a huge fiscal responsibility	Principal	21	2,38	1,16	89	1,02	0,31
		Vice-Principal	70	2,09	1,12			
I 34	Excessive workload	Principal	21	2,57	1,02	89	0,27	0,78
		Vice-Principal	70	2,64	1,06			
	Workload Related Stress Sources Factor (Factor 5)	Principal	21	2,65	0,88	89	0,64	0,52
		Vice-Principal	70	2,51	0,81			

P<0,05

There is not a significant difference between the responses of principal and vice-principal subjects for the following items ($p>0.05$): Insufficient salary and economical problems (I9), Having a huge fiscal responsibility (I18), Excessive workload (I34).

Generally speaking for the Workload Related Stress Sources Factor (Factor 5), there is not a statistically significant difference between the principals' and vice principals' evaluations for this factor [$t_{(89)}=0.64$, $p>0,05$].

4.5. Findings and Interpretations Regarding the School Administrators' Evaluations for the Stress Sources Based on the Administrators' Respective Directories Parameter

In this section, we analyze the t-test results for school administrators' evaluations of stress sources based on the administrators' respective directory parameter, individually for each stress sources factor.

The t-test results based on the respective directory parameter for the General Stress Sources Factor (Factor 1) are presented in **Table 34**.

According to t-test results presented in **Table 34**, the evaluations of 69 administrators working under General Secondary Education (GSE) Directory and 22 administrators working under Professional and Technical Education (PTE) Directory for the General Stress Sources Factor (Factor 1) based on the respective directory parameter are as follows:

There is not statistically significant difference between the responses of administrators working under different directories for the following items: "Imbalance between the missions and power" (I1), "Instability at the position" (I2), "Uncertainty at the position" (I3), "Difficulties in public relations" (I5), Fighting and problems arising from relations with the superiors" (I6), "Obligation to finish a specific task at a given time" (I14), "Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations" (I27), "The feeling that organizational goals and policies are not followed carefully" (I28), "The anxiety that successes will not be awarded" (I32). ($p>0.05$).

Table 34.

**T-Test Results Based on the Respective Directory Parameter for General Stress
Sources Factor (Factor 1)**

	Items for the General Stress Sources Factor	Resp. Directory	N	\bar{X}	Ss	sd	t	p
I 1	Imbalance between the missions and power	GSE	69	2,97	1,12	89	2,01	0,05
		PTE	22	3,50	1,05			
I 2	Instability at the position	GSE	69	2,65	1,12	89	1,75	0,08
		PTE	22	3,14	1,12			
I 3	Uncertainty at the position	GSE	69	2,65	1,16	89	1,00	0,32
		PTE	22	2,95	1,25			
I 4	Political interference and pressure	GSE	69	2,43	1,51	89	2,17	0,03*
		PTE	22	3,23	1,47			
I 5	Difficulties in public relations	GSE	69	2,54	0,96	89	0,80	0,42
		PTE	22	2,68	0,64			
I 6	Fighting and problems arising from relations with the superiors	GSE	69	2,26	0,93	89	1,99	0,05
		PTE	22	2,68	0,83			
I 14	Obligation to finish a specific task at a given time	GSE	69	2,74	1,19	89	0,29	0,76
		PTE	22	2,82	1,05			
I 15	Lack of necessary tools and equipment	GSE	69	3,09	0,98	89	2,79	0,00*
		PTE	22	3,82	1,09			
I 27	Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations	GSE	69	2,59	1,26	89	0,52	0,59
		PTE	22	2,45	1,01			
I 28	The feeling that organizational goals and policies are not followed carefully	GSE	69	2,36	1,02	89	1,76	0,08
		PTE	22	2,77	0,92			
I 31	To avoid assuming responsibilities	GSE	69	2,10	1,25	89	2,58	0,01*
		PTE	22	2,68	0,78			
I 32	The anxiety that successes will not be awarded	GSE	69	2,65	1,33	89	1,91	0,06
		PTE	22	3,27	1,31			
P<0,05	General Stress Sources Factor (Factor 1)	GSE	69	2,58	0,83	89	2,42	0,02*
		PTE	22	3,00	0,64			

***Item 4. Political interference and pressure:** There is a statistically significant difference between the responses of the administrators who are working under GSE Directory and PTE Directory [$t_{(89)} = 2.17, p < 0.05$].

Although the arithmetic mean of the administrators' answers, who are under PTE Directory, for this item ($\bar{X} = 3.23$) is in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$), that of the administrators' answers, who are under the GSE Directory, is ($\bar{X} = 2.05$) in the low stress region ($1.00 \leq \bar{X} \leq 2.59$).

***Item 15. Lack of necessary tools and equipment:** There is a statistically significant difference between the responses of the administrators who are working under GSE Directory and PTE Directory [$t_{(89)} = 2.79, p < 0.05$].

While the arithmetic mean of the administrators' answers, who are under GSE Directory, for this item ($\bar{X} = 3.09$) is in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$), that of the administrators' answers, who are under the PTE Directory, is ($\bar{X} = 3.82$) in the high stress region ($3.40 \leq \bar{X} \leq 5.00$).

***Item 31. To avoid assuming responsibilities:** There is a statistically significant difference between the responses of the administrators who are working under GSE Directory and PTE Directory [$t_{(89)} = 2.58, p < 0.05$].

While the arithmetic mean of the administrators' answers, who are under GSE Directory, for this item ($\bar{X} = 2.10$) is in the low stress region ($1.00 \leq \bar{X} \leq 2.59$), that of the administrators' answers, who are under the PTE Directory, is ($\bar{X} = 2.68$) in the optimum productivity stress ($2.60 \leq \bar{X} \leq 3.39$).

General Stress Sources Factor (Factor 1): There is a statistically significant difference between the responses of the administrators who are working under GSE Directory and PTE Directory for this factor [$t_{(89)} = 2.42, p < 0.05$].

While the arithmetic mean of the administrators' answers, who are under GSE Directory, for this item ($\bar{X} = 2.58$) is in the low stress region ($1.00 \leq \bar{X} \leq 2.59$), that of the administrators' answers, who are under the PTE Directory, is ($\bar{X} = 3.00$) in the optimum productivity stress ($2.60 \leq \bar{X} \leq 3.39$).

The t-test results based on the respective directory parameter for the Social Stress Sources Factor (Factor 2) are presented in **Table 35**.

According to t-test results presented in **Table 35**, the evaluations of 69 administrators working under General Secondary Education (GSE) Directory and 22 administrators working under Professional and Technical Education (PTE) Directory for the Social Stress Sources Factor (Factor 2) based on the respective directory parameter are as follows:

There is not statistically significant difference between the responses of administrators working under different directories for the following items: Being complained about (I19), Working in an unsafe environment (I20), Not being able to take required measures to improve the management on time (I23), Not being able to participate in decision making (I25), Being left out of communication channels, being ostracized (I26), Family problems' negatively affecting work (I36), Bringing home the problems at workplace (I37), Not having enough time for the family and social life (I38), and Work's being monotonous(I40). ($p > 0.05$)

***Item 39. Not having opportunities in/outside the country for professional development:** There is a statistically significant difference for this item between the responses of the administrators who are working under GSE Directory and PTE Directory [$t_{(89)} = 2.07$, $p < 0.05$].

Table 35
T-Test Results Based on the Respective Directory Parameter for Social
Stress Sources Factor (Factor 2)

	Items for the Social Stress Sources Factor	Resp. Directory	N	\bar{X}	Ss	sd	t	p
I 19	Being complained about	GSE	69	1,84	0,86	89	0,14	0,88
		PTE	22	1,86	0,56			
I 20	Working in an unsafe environment	GSE	69	2,22	1,27	89	0,38	0,70
		PTE	22	2,32	0,99			
I 23	Not being able to take required measures to improve the management on time	GSE	69	2,41	1,08	89	0,17	0,86
		PTE	22	2,36	0,95			
I 25	Not being able to participate in decision making	GSE	69	2,38	1,08	89	0,65	0,94
		PTE	22	2,36	0,72			
I 26	Being left out of communication channels, being ostracized	GSE	69	2,14	1,26	89	0,21	0,83
		PTE	22	2,09	0,97			
I 36	Family problems' negatively affecting work	GSE	69	1,84	1,18	89	0,29	0,77
		PTE	22	1,77	0,87			
I 37	Bringing home the problems at workplace	GSE	69	1,70	0,94	89	0,57	0,56
		PTE	22	1,59	0,66			
I 38	Not having enough time for the family and social life	GSE	69	2,17	0,92	89	1,16	0,25
		PTE	22	2,41	0,79			
I 39	Not having opportunities in/outside the country for professional development	GSE	69	2,72	1,09	89	2,07	0,04*
		PTE	22	3,27	1,07			
I 40	Work's being monotonous	GSE	69	2,48	1,03	89	0,12	0,90
		PTE	22	2,45	0,67			
	Social Stress Sources Factor (Factor 2)	GSE	69	2,18	0,73	89	0,44	0,65
		PTE	22	2,25	0,47			

P<0,05

The arithmetic mean of the administrators' answers both working under GSE ($\bar{X} = 2.72$) and working under MTE ($\bar{X} = 3.27$) for this item are in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$).

Generally speaking for the Social Stress Sources Factor (Factor 2), there is not a statistically significant difference between the administrators' evaluations working under different directories [$t_{(89)} = 0.44$, $p > 0.05$].

The t-test results based on the respective directory parameter for the Employee Related Stress Sources Factor (Factor 3) are presented in **Table 36**.

There is not statistically significant difference between the responses of administrators working under different directories for the following items: Problems related to record and evaluation of the inferiors (I8), Having to work with personnel who are not sufficiently educated and prepared (I13), Problems arising among people related to competition and promotion (I16), Abundance of discordant behaviors among employees (I29), Existence of arguments and conflicts among employees (I30) and Employees' not taking the work seriously (I35). ($p > 0.05$)

Item 7 Fighting and problems arising from the relations with inferiors:

There is a statistically significant difference for this item between the responses of the administrators who are working under GSE Directory and PTE Directory [$t_{(89)} = 2.26$, $p < 0.05$].

The arithmetic mean of the administrators' answers both working under GSE ($\bar{X} = 2.61$) and working under MTE ($\bar{X} = 3.09$) for this item are in the optimum productivity region ($2.60 \leq \bar{X} \leq 3.39$).

Generally speaking for the Employee Related Stress Sources Factor (Factor 3), there is not a statistically significant difference between the administrators' evaluations working under different directories [$t_{(89)} = 1.78$, $p > 0,05$].

Table 36.
T-Test Results Based on the Respective Directory Parameter for
Employee Related Stress Sources Factor (Factor 3)

	Items for the Employee Related Stress Sources Factor (Factor 3)	Resp. Directory	N	\bar{X}	Ss	sd	t	p
I 7	Fighting and problems arising from the relations with inferiors	GSE	69	2,61	0,87	89	2,26	0,03*
		PTE	22	3,09	0,86			
I 8	Problems related to record and evaluation of the inferiors	GSE	69	2,04	1,07	89	1,71	0,09
		PTE	22	2,41	,796			
I 13	Having to work with personnel who are not sufficiently educated and prepared	GSE	69	2,99	1,02	89	0,42	0,67
		PTE	22	3,09	1,01			
I 16	Problems arising among people related to competition and promotion	GSE	69	2,29	1,00	89	0,83	0,41
		PTE	22	2,45	0,73			
I 29	Abundance of discordant behaviors among employees	GSE	69	2,86	1,01	89	1,02	0,31
		PTE	22	3,09	0,92			
I 30	Existence of arguments and conflicts among employees	GSE	69	2,70	0,99	89	1,38	0,17
		PTE	22	3,05	1,04			
I 35	Employees' not taking the work seriously	GSE	69	2,38	1,03	89	0,67	0,50
		PTE	22	2,55	1,01			
	Employee Related Stress Sources Factor (Factor 3)	GSE	69	2,50	0,73	89	1,78	0,08
		PTE	22	2,81	0,56			

P<0,05

The t-test results based on the respective directory parameter for the Stress Management Related Sources Factor (Factor 4) are presented in **Table 37**.

Table 37
T-Test Results Based on the Respective Directory Parameter for
Management Related Stress Sources Factor (Factor 4)

	Items for the Management Related Stress Sources Factor (Factor 4)	Resp. Directory	N	\bar{X}	Ss	sd	t	p
I 10	Overdose discipline and pressure	GSE	69	2,07	0,91	89	1,47	0,15
		PTE	22	2,45	1,10			
I 11	Tight supervision and monitoring	GSE	69	2,13	0,90	89	0,87	0,38
		PTE	22	1,91	1,06			
I 17	The feeling of being obstructed while doing his/her job	GSE	69	2,36	1,01	89	0,73	0,46
		PTE	22	2,50	0,67			
I 21	Not having enough authority while making decisions	GSE	69	2,65	1,30	89	1,87	0,06
		PTE	22	3,09	0,81			
I 22	Having difficulties in making decisions	GSE	69	2,06	0,88	89	1,78	0,08
		PTE	22	2,45	0,91			
I 24	Not being able to criticize the administration's practices	GSE	69	2,51	1,10	89	1,32	0,19
		PTE	22	2,82	0,90			
I 33	Taking risk in order to be able to accomplish a task	GSE	69	2,46	1,19	89	1,85	0,07
		PTE	22	2,95	1,04			
	Management Related Stress Sources Factor (Factor 4)	GSE	69	2,32	0,73	89	1,78	0,08
		PTE	22	2,59	0,59			

P<0,05

There is not a significant difference between the responses of administrators working under different directories for the following items ($p>0.05$): Overdose

discipline and pressure (I10), Tight supervision and monitoring (I11), The feeling of being obstructed while doing his/her job (I17), Not having enough authority while making decisions (I21), Having difficulties in making decisions (I22), Not being able to criticize the administration's practices (I24), Taking risk in order to be able to accomplish a task (I33).

Generally speaking for the Management Related Stress Sources Factor (Factor 4), there is not a statistically significant difference between the administrators' evaluations working under different directories [$t_{(89)}=1.78$, $p>0,05$].

The t-test results based on the respective directory parameter for the Workload Related Stress Sources Factor (Factor 5) are presented in **Table 38**.

Table 38
T-Test Results Based on the Respective Directory Parameter for
Workload Related Stress Sources Factor (Factor 5)

	Items for the Workload Related Stress Sources Factor (Factor 5)	Resp. Directory	N	\bar{X}	Ss	sd	t	p
I 9	Insufficient salary and economical problems	GSE	69	2,70	1,10	89	0,48	0,40
		PTE	22	2,95	1,29			
I 12	Long and tiring working hours	GSE	69	2,67	1,09	89	0,28	0,78
		PTE	22	2,59	1,09			
I 18	Having a huge fiscal responsibility	GSE	69	2,14	1,20	89	0,15	0,87
		PTE	22	2,18	0,90			
I 34	Excessive workload	GSE	69	2,68	1,02	89	0,83	0,41
		PTE	22	2,45	1,14			
	Workload Related Stress Sources Factor (Factor 5)	GSE	69	2,54	0,82	89	0,00	0,99
		PTE	22	2,54	0,85			

P<0,05

There is not a significant difference between the responses of administrators working under different directories for the following items ($p>0.05$): Insufficient salary and economical problems (I9), Long and tiring working hours (I12), Having a huge fiscal responsibility (I18), Excessive workload (I34).

Generally speaking for the Workload Related Stress Sources Factor (Factor 5), there is not a statistically significant difference between the administrators' evaluations working under different directories [$t_{(89)}=0.00$, $p>0.05$].

CHAPTER V

CONCLUSION AND SUGGESTIONS

In this chapter, we present the conclusions based on the results, which we derived by analyzing the research question, and several suggestions that we propose based on our findings.

5.1. Conclusions

We achieved the following conclusions in result of our research:

- The school administrators' evaluations of the factors determined the General Stress Sources as the most important factor, and Employee Related Stress Sources as the second most important factor. When we look at the administrators' overall consideration of all the stress sources, we see that these two factors cause medium (optimum) level of stress. The other factors are ranked as Workload Related, Administrative, and Social Stress Sources. However, these factors are in the low stress region.
- "Lack of necessary tools and equipment" is considered to be the most important stress creating item by the overall evaluations of the administrators in the sample. "Imbalance between the missions and power" and "Having to work with personnel who are not sufficiently educated and prepared" are ranked second and third, respectively. However, neither of these items cause high level of stress.
- All the items in the Social Stress Sources are in the low stress region, except for "Not having opportunities in/outside the country for professional development" item, which lies in the optimum stress region.

- The female administrators in our sample affected more than the male administrators for not being able to participate in decision making; and they indicated that they cannot express their ideas about the practices that relate to the school administration.
- In addition, we observed that female administrators are exposed to higher stress compared to male administrators because of not being able to take the necessary measures to improve the administration.
- Male administrators think that they suffer from stress because of long and tiring working hours. In fact, this causes stress for most of the administrators. While this item is causing less stress for the administrators with 6-10 and 11-15 years of professional seniority, it causes significantly high stress for those who have just recently become administrators and have an experience less than 5 years.
- For all administrators in our sample space, the imbalance between the missions and power causes important stress. In fact, this stress source was considered the highest level of stress source by the administrators with 6-10 years of professional experience among all the other stress sources.
- One of the most important stress creating factors for the administrators in 6-10 and 11-15 years of professional seniority groups is political interference and pressure. This stress source is more effective on the vice-principals than the principals. It also has more affect on the administrators working under Professional and Technical Education Directory, than the ones working under General Secondary Education Directory.
- All of the administrators in the sample indicated that not enough professional development opportunities, neither within the country nor abroad, are available. This creates more stress for the young administrators who would like to develop

themselves professionally and aim at making careers, and especially for those working under Professional and Technical Education Directory.

- For the administrators with 6-10 and 16-20 years of professional seniority, the conflicts and problems arising from the relations with inferiors is considered to be an important stress source. It causes excessive stress especially for the young administrators with only 6 to 10 years of experience. It is more obvious at the administrators working under Professional and Technical Education Directory. Besides, problems and conflicts arising among the employees also create significant stress for these administrators.
- Again, the administrators in the 6-10 years of seniority group indicated that the experience more stress than the others when employees don't take their work seriously. Generally, employee related stress sources create high level of stress on this group of administrators.
- Avoiding responsibilities create more stress on the vice-principals than the principals. Along with this, work's being monotonous, not having enough authority to make decisions, and feeling obstructed while doing his/her job create more stress on the vice-principals. However, these sources do not affect administrators excessively.
- Lack of necessary tools and equipment create important stress on all school administrators. This stress source particularly creates high stress on the administrators working under Professional and Technical Education Directory.

In today's world, most managers are working in very different environments full with uncertainties. Especially, when the stress creating factors are such that the employees cannot control, then the managers and employees encounter difficulties in adapting and motivating themselves in such circumstances. One should cope with stress, effectively. However, there is not a common method for this that applies to

everyone. The stress sources that affect individuals may differ according to the time and place at which the research is done. In every part of the world, the stress sources and their impact levels are different.

With this research, we have identified the stress sources that affect the school administrators in TRNC and the levels they impact people.

The following suggestions should be taken into account in order to cope with the stress sources that affect school administrators.

5.2. Suggestions

- Like in developed countries, in TRNC, there should exist education policies, which are developed by aiming at reflecting the country's own culture and vision.
- Unfortunately, not having an administration not influenced from political interferences and this' shadowing the objectivity of administration, political interference and pressure, both affecting the quality of the activities and cause unfair judgments on employees. The conflict between the turnovers among the administrators resulting from political interference and the use of knowledge and experience is among the conflicts that Turkish nation has been suffering. (Yayla, 2003:461).

Regardless of at which degree it is effective, political interference is causing school administrators become unsuccessful by inhibiting their administrative effectiveness and independence. Political pressure on the delegations, assignments, and decisions at schools should be stopped completely and political institutions, nongovernmental organizations, and unions should stop using education programs as a means of propaganda. Also, legal regulations should be made so as to protect the school administrators against political pressure and interferences.

- The tools and equipments that schools own should be new and adequate –both quantity-wise and quality-wise- enough to help achieving organizational goals. Especially for the schools that are providing technical and professional education, necessary tools and machines, which are used in classrooms and workshops, should be made ready for the use of schools and modernized according to the needs of the day.

The policies, which are developed for information technologies, should aim at building actively learning schools. In order to be able to bring the schools, the most strategically important component of the education system, to a more effective level, each school should be transformed into organizational structures which can learn and use information technologies. (Çelik, 1998:835)

- If the administrators cannot build healthy relations with their inferiors, then problems and conflicts will rise. This, in fact, is a measure of the level of success for an administrator in managing the organization. Administrators' being fair to the employees in their evaluations and assignments regardless of the employees' religion, nationality, language, and political views, appreciating their successes, and approaching to their employees with positive manner will significantly reduce the conflicts between the administrators and employees.

Building good relations with the employees is important in stress management. Keeping employees informed about their jobs and the conditions that may have potential influence on their situation will give the employees a confident feeling in keeping themselves under self-control and improve their loyalty to the organization (Crampton. et. al., 1995: 17-18).

The negative attitude of the administrators to their inferiors and punishing behaviors are among the important stressors that create stress on the employees. The feeling of "*let me give him/her a hard time*", which arises in the context of superior-inferior relations, is one of the stress creating factors for the employees.

Having to work harder than his/her colleagues because of this type of negative relations with his/her superior may cause stress on the employee (Cam, 2004:5).

Clearly defined work definitions and tables will reduce the effects of stress at workplaces. Organizational culture may also contribute to stress management. For example, an organizational culture built on collaboration, coordination, mutual understanding and trust, and openness will reduce stress. In contrast, if in the organization, there is no teamwork and collaboration, everyone is behaving selfishly, and instead of collaborating people are competing with each other, then these situations will cause stress. When individuals join an organization, they should adapt to the common values and norms of the organization and should identify within their sub-groups within the organization. The processes that the individual has to go through during this adaptation process also determines the individual's stress level (Güney, 2000: 440-441).

- Having well defined and clear career opportunities and paths within the organization has a positive impact on the employee. For this reason, the individual's knowing the career paths and the structure of the organization, and structuring his/her career development potential accordingly, helps the individual stay away from stress in his/her family and work life (Palmer and Hyman, 1993:23)

If the career paths in the schools are defined clearly for the teachers and administrators and these are understood well by the employees, then the employees will motivate themselves to work towards their career goals. For those teachers and administrators who want to make good careers in their professions, academic career opportunities both in and outside the TRNC should be provided. Along with this, the number of training programs should be increased for all teachers of different branches, especially for professional and technical teachers, so that they can gain enough knowledge and experience. If administrators have a more clear idea about their future based on the work they do, they will have less stress.

- It is important that an individual has an input the decisions made for the organization he/she is involved in. Of course, sometimes an administrator hesitates to decide. This happens when the time is insufficient or when he/she does not want to be involved in that particular matter. However, he/she will be angry and stressed when he/she is left out of the decision making process in a matter in which he/she wanted to be involved. This is true especially for the cases which affects the individual (Şahin, 1994:27-30; Akt: Duymaz, 1999:8)

The school administrators', particularly the female administrators', feeling worthless as a result of being left out of the decision making processes, especially in the administrative processes, is an important stress source. One should not forget that obsessing the administrators by preventing them to express their opinions about the administrative matters will create results that hinder the organizational integration. That is why, it should be made possible that the administrators express their opinions freely, and their opinions should be taken into account seriously.

- When the school administrators are obstructed while performing their jobs, they may develop reactions to the extent of not doing their jobs. Administrators should be protected and supported against the threats and obstructions.
- The working hours for the employees at schools are the class hours. However, school administrators have to work longer hours than other employees at schools. Tiredness, exhaustion, and stress, naturally arise as a result of this. When excessive work is added to this, stress levels can reach to excessive amounts. This causes that the individual cannot spare enough time with his/her family and social life. In order to minimize these negative impacts, working hours and compensation benefits for extra hours should be re-arranged. Also, if the employee thinks that his/her compensation is adequate to pay for the effort he/she

spends, and knows that his/her salary is going to be paid on time, then he/she will work more peacefully and be exposed to less stress.

- Administrators' not being able to take the necessary measures on time may cause important matter to exit the agenda. This will affect the flow of the processes at the school and harm the discipline. Having to deal with this problem is known to be an important stress source. To constitute the school people with adequately experienced and able people is the most effective method of dealing with this stress source. In addition, division of work should be done among all employees at all levels so that the tasks are done on time.
- Not having enough authority will cause school managers to be insufficient in making necessary decisions and implementing them. This will harm the work of the organization. To overcome this, the administrators should have adequate authority to be able to make decisions and have them implemented.

If a manager is expected to be successful, then he/she should be equipped with the authority that the job requires. Organizations can achieve certain goals only if there are well defined authority-responsibility relations. Having limited authority will prevent the administrator to do his/her job. Having too much authority, on the other hand, may cause problems, sometimes. (Özalp, 1975:49)

- Work's being monotonous, inevitably causes stress on the employees and administrators. Non-routine tasks will reduce the effects of stress sources. Carefully designed job descriptions, is an effective method coping with work stress. The individual should be given more responsibility by enriching the work contents, provided opportunities for success and promotion. This way, a variety of capabilities will be defined, so that people will be given tasks that are more relevant to their capabilities

According to Yüksel (1991:431), some of the measures to overcome work's being monotonous are:

- Having small task forces,
 - Change of duties within the group,
 - Changes in the working periods,
 - Asking for employees' opinions for planned changes,
 - Providing music broadcast.
- Assuming responsibility creates tension on the individual. Research show that especially managers with high responsibilities are under high stress. Helping the manager to build his/her self-confidence by developing a dialogue with him/her will help the manager to reduce these negative effects to a minimum level. Self-confidence has an important role motivating managers to assume responsibilities. Capable, knowledgeable, and experienced managers will restrain less from taking responsibilities. That is why these factors should be taken into account while delegating responsibilities. Responsibility should be delegated equally to those doing the same work.
 - A participating administration style, which delegates responsibilities and authorities fairly, behaves objectively and fairly in promotions and rewardings, and approaching inferiors with love and respect will be successful at coping with stress (Durna, 2004:198)

Considering that optimum level of stress increases the productivity and positively affects the employees' motivations, conscious and effective stress management strategies should be implemented in order to keep stress in the organizational life at the optimum level. It should not be forgotten that managers have very important roles in realizing this goal (Yılmaz and Ekici, 2003:18).

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APPENDIX

1. **Managerial Stress Survey (MSS)..... 152**
2. **General Secondary Education Department
Management's Permission Approvement to Make
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3. **Professional and Tecnical Education Department
Management's Permission Approvement to Make
ThisResearch..... 157**

APPENDIX – 1**MANAGERIAL STRESS SURVEY (MSS)****PART – 1**

1. Gender ?
 - a) ☐ Male
 - b) ☐ Female

2. Professional Seniority?
 - a) ☐ 5 years and less
 - b) ☐ 6 - 10 yrs
 - c) ☐ 11 - 15 yrs
 - d) ☐ 16 - 20 yrs
 - e) ☐ 21 - 25 yrs
 - f) ☐ 26 yrs and more

3. What is your current administrative status ?
 - a) ☐ Principal
 - b) ☐ Vice Principal

4. Under which directory are you working for ?
 - a) ☐ General Secondary Education Directory
 - b) ☐ Professional and Technical Education Directory

PART - 2

Below listed are several situations that may be faced by managers in their daily lives and may create stress. Of course, It does not mean that all these items will create a very high level of stress for every manager. Also, the situations listed below can be anticipated differently by each manager. That is why, personality characteristics are also important. A situation can be considered as "very important" by a person, while another person may consider it as "less important". Please read all the items carefully, and mark an X in the parenthesis allocated for the choice that suits you the best. You should mark only one of the choices for each item. There is no correct or incorrect answer. Your ideas are important.

- | | | |
|-----|---|---------------------|
| 1. | Imbalance between the missions and pover | () () () () () |
| 2. | Instability at the position | () () () () () |
| 3. | Uncertainty at the position | () () () () () |
| 4. | Political interference and pressure | () () () () () |
| 5. | Difficulties in public relations | () () () () () |
| 6. | Fighting and problems arising from relations
with the superiors | () () () () () |
| 7. | Fighting and problems arising from the relations with
inferiors | () () () () () |
| 8. | Problems related to record and evaluation of the inferiors | () () () () () |
| 9. | Insufficient salary and economical problems | () () () () () |
| 10. | Overdose discipline and pressure | () () () () () |
| 11. | Tight supervision and monitoring | () () () () () |
| 12. | Long and tiring working hours | () () () () () |
| 13. | Having to work with personnel who are not sufficiently
educated and prepared | () () () () () |
| 14. | Obligation to finish a specific task at a given time | () () () () () |
| 15. | Lack of necessary tools and equipment | () () () () () |

MANAGERIAL STRESS SOURCES

	NEVER	RARELY	SOMETIMES	FREQUENTLY	ALWAYS
16. Problems arising among people related to competition and promotion	()	()	()	()	()
17. The feeling of being obstructed while doing his/her job	()	()	()	()	()
18. Having a huge fiscal responsibility	()	()	()	()	()
19. Being complained about	()	()	()	()	()
20. Working in an unsafe environment	()	()	()	()	()
21. Not having enough authority while making decisions	()	()	()	()	()
22. Having difficulties in making decisions	()	()	()	()	()
23. Not being able to take required measures to improve the management on time	()	()	()	()	()
24. Not being able to criticize the administration's practices	()	()	()	()	()
25. Not being able to participate in decision making	()	()	()	()	()
26. Being left out of communication channels, being ostracized	()	()	()	()	()
27. Not being able to allocate enough time for the main managerial/organizational problems because spending excessive time for bureaucratic operations	()	()	()	()	()
28. The feeling that organizational goals and policies are not followed carefully	()	()	()	()	()
29. Abundance of discordant behaviors among employees	()	()	()	()	()
30. Existence of arguments and conflicts among employees	()	()	()	()	()
31. To avoid assuming responsibilities	()	()	()	()	()
32. The anxiety that successes will not be awarded	()	()	()	()	()
33. Taking risk in order to be able to accomplish a task	()	()	()	()	()

MANAGERIAL STRESS SOURCES

	NEVER	RARELY	SOMETIMES	FREQUENTLY	ALWAYS
34. Excessive workload	()	()	()	()	()
35. Employees' not taking the work seriously	()	()	()	()	()
36. Family problems' negatively affecting work	()	()	()	()	()
37. Bringing home the problems at workplace	()	()	()	()	()
38. Not having enough time for the family and social life	()	()	()	()	()
39. Not having opportunities in/outside the country for professional development	()	()	()	()	()
40. Work's being monotonous	()	()	()	()	()
41. Please write below if you think there are other stress creating factors due to your profession					
.....					

APPENDIX – 2



**KUZEY KIBRIS TÜRK CUMHURİYETİ
MİLLİ EĞİTİM VE KÜLTÜR BAKANLIĞI
GENEL ORTAÖĞRETİM DAİRESİ MÜDÜRLÜĞÜ**

Sayı: G.O.Ö.D 35/2005

11.01.2005

Osman Sütpınar
Karpaz Meslek Lisesi
Kımyalı.

İlgi: 06.01.2005 tarihli başvurunuz hk.

Başvurunuz incelenmiş olup Lefkoşa ve Magosa bölgesi okullarındaki yöneticilere uygulamak istediğiniz “Yöneltil Stres” konulu anket sorularının uygulanması Müdürlüğümüzce uygun görülmüştür.

Ancak testi uygulamadan önce, Müdürlüğümüzle istişare bulunup, anketin hangi okullarda, ne zaman uygulanacağı birlikte saptanmalıdır.

Anket uygulandıktan sonra sonuçların Talim ve Terbiye Dairesi Müdürlüğü’ne ulaştırılması gerekmektedir.

Bilgilerinize saygı ile rica ederim.


Yeter ARSLAN
Müdür .

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Lefkoşa-KIBRIS

APPENDIX – 3



**KUZEY KIBRIS TÜRK CUMHURİYETİ
MİLLİ EĞİTİM VE KÜLTÜR BAKANLIĞI
MESLEKİ TEKNİK ÖĞRETİM DAİRESİ MÜDÜRLÜĞÜ**

Sayı:MTÖ.0.00-13-05/ 22

10 Ocak 2005

Sayın Osman Sütpınar
Karpaz Meslek Lisesi
Kumyalı.

Müdürlüğümüze yaptığınız başvuruda Lefkoşa ve Gazimağusa bölgesi okullarınızda görev yapan yöneticilere yönelik “Yönetmel Stres” konulu anket uygulaması yapma istemiyle izin talebinde bulundunuz.

Talebinizle ilgili olarak Talim ve Terbiye Dairesi Müdürlüğü’nce yapılan incelemede, anket uygulamanız uygun görülmüştür. Ancak, anket uygulanmadan önce anketin uygulanacağı okulların müdürlükleri ile istişarede bulunup anketin ne zaman uygulanacağı birlikte saptanmalıdır. Keza, anket uygulandıktan sonra da sonuçlarının Talim ve Terbiye Dairesi Müdürlüğü’ne de ulaştırılması gerekmektedir.

Bilgi edinmenizi ve gereğini saygı ile rica ederim.


Tamer Akcan
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