REPUBLIC OF TURKEY
BAHÇEŞEHİR UNIVERSITY

THE EFFECTS OF STRESS ON PERFORMANCE AND BURNOUT: A STUDY OF INFORMATION TECHNOLOGIES WORKERS

Master's Thesis

BEGÜM DEMİRCİ

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GRADUATE SCHOOL OF SOCIAL SCIENCES INSTITUTE
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Thesis Supervisor: Prof. ELA ÜNLER

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Name and Surname Of The Student : Begüm Demirci

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This thesis has been approved by the Institute of Social Sciences which has fulfilled the necessary conditions as Master thesis.

Assoc. Dr. Burak KÜNTAY

Institute Director

I certify that this thesis has fulfilled the necessary requirements as Master thesis.

Assoc. Prof. Fla Örler

Program Coordinator

This thesis was read by us, quality and content as a Master's thesis has been seen and accepted as sufficient.

Jury Members	**Signature**
Thesis Advisor Doç. Dr. Fla Örler	.....
Members Prof. Dr. Ahmet Erkus	.....
Members Dr. Öğretim Üyesi E. Beyza Bayerçelik	.....

DEDICATION

“Everything we see in the world is the creative work of a women. “

Mustafa Kemal Atatürk

Dedicated to all women who have the courage to create their own power.

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ABSTRACT

THE EFFECTS OF STRESS ON PERFORMANCE AND BURNOUT: A STUDY OF INFORMATION TECHNOLOGIES WORKERS

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Stress has rapidly become one of the most important problems throughout the business world and in daily life where, in recent years, it has come to be accepted that stress affects many factors. Of these, performance and burnout are strongly impacted, and, for this reason, it is paramount to understand the effect of stress on them.

In this study, the concepts of stress, performance, and burnout were examined before analysis of the stress-performance and stress-burnout relationships was given.

In the research section, the effects of stress on performance and burnout were investigated, where the results of surveys completed by 176 participants working in the information technologies sector were analyzed according to the literature.

As a result of this research, it is understood that stress has a partial effect on performance and burnout.

Key Words: Effects of Stress, Performance, Burnout, Information Technologies

ÖZET

STRESIN PERFORMANS VE TÜKENMIŞLIK ÜZERINDEKI ETKISI BILIŞIM TEKNOLOJILERI ÇALIŞANLARI ÜZERINDE BIR ARAŞTIRMA

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Stres günümüz iş dünyasının ve günlük hayatın en önemli sorunlarından bir tanesi haline gelmiştir. Son yıllarda ise stresin birçok faktöre etkisinin olduğu kabul edilmektedir. Bu faktörlerden olan performans ve tükenmişlik de stresten oldukça etkilenmektedir ve bu nedenle stresin performans ve tükenmişlik üzerindeki etkisini bilmek önem arz etmektedir.

Bu çalışmada stres, performans ve tükenmişlik kavramlarının açıklanmasının ardından, stres-performans ve stres-tükenmişlik ilişkisi hakkında bilgiler verilmiştir.

Çalışmanın araştırma bölümünde ise stresin performans ve tükenmişlik üzerindeki etkisi incelenmiştir. Bilişim sektöründe çalışan kişilerin oluşturdu 176 adet katılımcı üzerinde anket çalışması yapılmıştır. Sonuçlar literatüre uygun bir şekilde analiz edilmiştir.

Araştırma sonucunda stresin kısmen performans ve tükenmişlik üzerinde etkisi olduğu anlaşılmıştır.

Anahtar Kelimeler: Stresin Etkileri, Performans, Tükenmişlik, Bilgi Teknolojileri

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ABBREVIATIONS

GAS	:	General Adaptation Syndrome
OCB	:	Organizational Citizenship Behavior
COR	:	Conservation of Resources Theory

SYMBOLS

Regression coefficient	:	R2

1. INTRODUCTION

In this modern world of rapid technological, economic, political, and cultural change, progress can be a double-edged sword as innovation and convenience increase alongside loss of individual health and happiness. Resulting from concern for those attempting to adapt to this accelerated pace of change, the notion of stress emerged.

Considered a disease of the 20th century, stress is an adjustment process which presses upon on the psychological and physiological structures of individuals, affecting their emotions, thoughts, behavior, performance, and relationships with others (Karafakı 2014). Beyond a simple personal issue or general societal condition, stress permeates the professional world where it has an obvious effect on individual performance and burnout.

The aim of this study is to answer the question of how the "modern illness" of stress affects performance and burnout. To this end, the study prepared using related sources in the literature contains nine parts, including an application together with an examination of the concepts. The purpose of conducting the application on individuals working in information technology is that the volume of research done in this developing sector is insufficient. Furthermore, it is desirable to investigate how performance and burnout are affected by stress in a sector where it is reported as being very common for stress to be experienced.

This paper first highlights academic literature regarding stress, addresses the concepts of performance and burnout, and discusses several characteristics of research in this field.

Secondly, a review of literature pertaining to the relationship between stress and performance and, additionally, stress and burnout is conducted and summarized.

Subsequent sections are devoted to the survey-based research conducted on information technology workers on the subject of stress and its effect on performance and burnout. These sections address the methodology, report the results, as well as analyze all data to offer conclusions and suggestions on the subject of the study, with all obtained findings presented under the heading "results".

All references such as books and articles cited in and used for the preparation of this paper are listed in the "resources" section, with a sample survey form included in the "appendices".

2. THE DEFINITION OF STRESS, PERFORMANCE, AND BURNOUT

The first part of the study includes the definition of stress, performance and burnout as found in literature.

2.1 THE DEFINITION OF STRESS

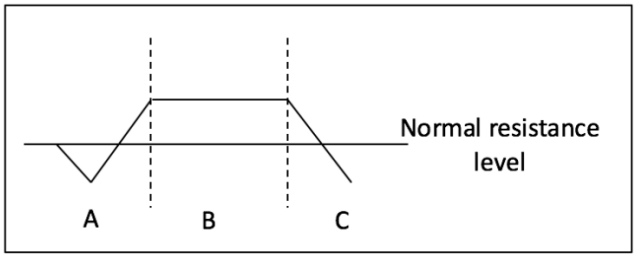
There are numerous reasons for people to become both physically and psychologically exhausted, including but not limited to the acceleration of globalization, the increase of technological developments, the intensification of competition, and the increase of unemployment as a result of economic crises. The stress caused directly and indirectly by these factors is one of the most important problems affecting modern life (Özdemir 2008, p.4). Although people often experience some form of stress in their daily life, it is difficult to form a complete description of this phenomenon due to its expression as a mental state. Accordingly, varied definitions have been put forward about stress.

Regarded as a disease of modern societies, in its most basic form, stress is defined as "an emotional and physical response to threats in the environment" (Kulaksız 2016, p.16). Although this explanation is widely regarded to be adequate in general, it has proven to be incomplete through the expansion and branching-out of the definition of stress in recent years. As an individual may be faced with problems resulting from the effects of stress in a multitude of situations, it stands to reason that a one-dimensional characterization of stress is inaccurate and must instead be explained through multiple issues and theories.

The word “stress" first came into use in the fourteenth century as a term meaning bother and complication, followed much later by its first scientific use by physicist and biologist Robert Hooke in the seventeenth century (Güler 2008, p.3). Hooke (1679) defines the term "load" as the weight on the structure, with "stress" as the load, and “strain" as the deterioration resulting from the mutual influence of the load and stress on the structure. Through incremental changes in its use pertaining to disciplines such as physiology, psychology and sociology, stress came to mean external loads or demands on systems (Lazarus 1993, p.2).

Through his early work pertaining to the human body's ability to react and adapt to any demand placed upon it, Hans Selye (1936) became the first person to offer such a definition of human stress (Taşbaşı 2002, p.8). He further refined this definition as a general reaction of the body to its repression, calling stimulants which resulted in a stress reaction "stressor" (Jones and Bright 2001, p.5). After an extended duration of studies, Selye developed the General Adaptation Syndrome (GAS) which is used to describe the body's short-term and long-term reactions to stress.

Figure 2.1: General adaptation syndrome (GAS)



Selye (1936) suggests that there are three stages associated with changes in the endocrine (hormone) and nervous systems in the GAS process: alarm, resistance, and exhaustion (Jones and Bright 2001, p.5). During the alarm phase, which encompasses the body's first reactions, stressors are noticed, and biochemical processes are executed, resulting in an increased readiness of the body to protect itself, such as through elevated blood pressure. When a person complies with the affecting stress, the body passes out of the resistance stage but if the presence of these causative agents still persists after a certain period of time, the body begins to weaken and passes into the exhaustion stage. It is in this last stage that the body becomes vulnerable to diseases (Şahin 1995, p.2).

Although the GAS remains the main subject of some scientifically-accepted studies, research on stress has proceeded and continues to develop due to the relatively short historical background of the definition of stress. This is especially true regarding expansion beyond just the field of medicine, as in the theories of Selye (1936), and toward a wider scope.

One of the most well-known and fundamental approaches to the scientific study of psychology was presented by Lazarus (Ekmekçi 2008, p.8), who defined stress as a "particular relationship between the person and the environment, appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being"

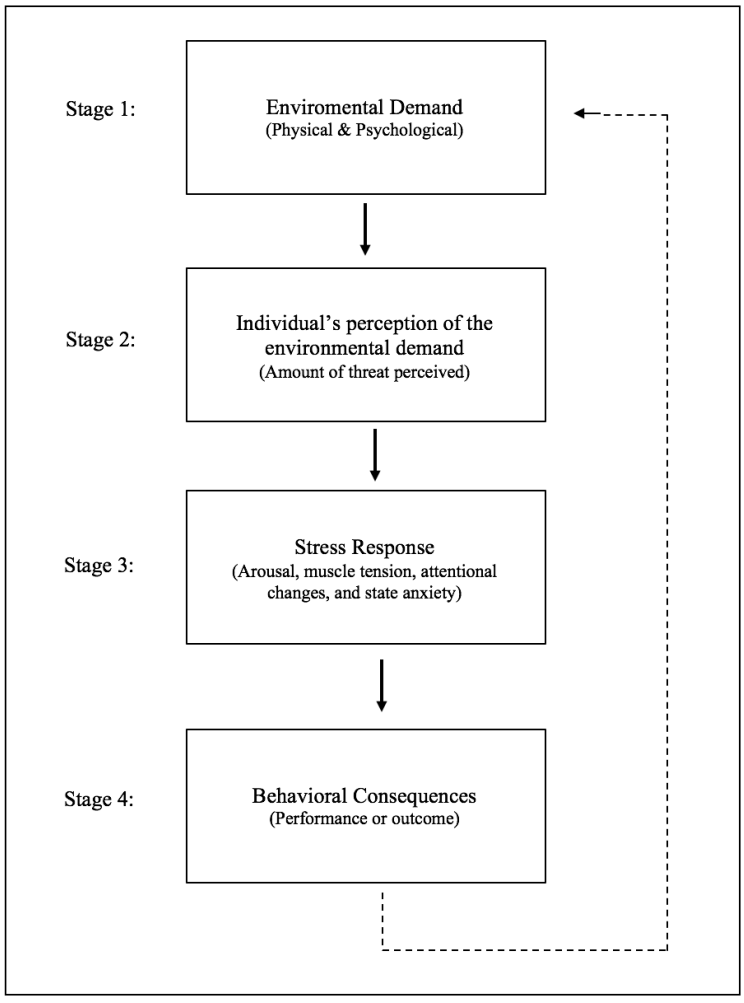
(Folkman and Lazarus 1980, p.21). This characterization of stress is further built-upon by Lazarus.

McGrath (1970), defined it as a "substantial imbalance between demand (physical or psychological) and response capability, under conditions where failure to meet the demand has important consequences" (McGrath 1970). He thus characterized stress as a socio-psychological process:

i. A physical or psychological demand is placed on the individual.
ii. The individual perceives the demand and decides how to react to it.
iii. The individual gives the initial reaction to the perceived demand.
iv. Behavioral consequences arise after these reactions.

McGrath's stress process is shown below (Figure 2.2):

Figure 2.2: McGrath's (1970) stress process



Resource: Tiryaki, Ş., 2002. Sporda Şiddetin Ortaya Çıkışı. Ulusal Spor Bilimleri Kongresi. 2002 Antalya.

In summary, stress can be described as a physiological and psychological reaction to an unanticipated condition. Although it may be initially perceived as a wholly negative concept, stress cannot be entirely characterized as such due to the wide variety of stress responses, some of which can be positive.

2.1.1 Types of Stress

By and large, stress is perceived to be a negative word. Owing to its multitude of well-known negative effects, most people logically assume that one can only feel stress in deprecating circumstances. However, among the various types of stress, some can have a positive influence on people and, consequently, it would not be accurate to characterize it as an entirely unfortunate term.

Under the subject of types of stress there are a multitude of diversifications, each of which lends credence to the notion that stress has both positive and negative types. The first comprehensive research on the concept of stress varieties was conducted by Hans Selye. Selye (1936), a pioneer in the understanding of physiological stress, defined stress as a set of physiological responses. In the following years, Selye (1976) divided the term into two main categories, denoting the stress associated with positive health status to be “Eustress" and the stress associated with negative health status to be “Distress" (Güler 2008, p.4). Due to their status as negative stress patterns, chronic and acute stress are categorized as distress.

2.1.1.1 Eustress (positive stress)

Positive types of stress are called eustress (Vaz 2006). A word stemming from the Greek prefix “eu-” meaning “good”, giving it the literal definition “good stress”. The term was coined by Selye (1974) in an attempt to create a subgroup which would help to differentiate between the wide variety of stressors and manifestations of stress. Furthermore, Milsum (1985) considers eustress as an ideal which can occur in response to the condition of a well-functioning homeostatic system.

When it remains at an appropriate level between too little and too much stress (Altıntaş 2003), eustress can have a positive impact on an individual, resulting in an increase in innovation and motivation, a boost in performance, a reduction in absenteeism, and higher overall efficiency and organizational relations. Additionally, positive stress can eliminate

negative stress. With eustress playing a stimulating and encouraging role for an individual (Yiğit 2000, p.10), it is a significant contributor to human growth, the development of competence and self-mastery, and can act as a trigger for the enhancement of a person's working performance.

2.1.1.2 Distress (negative stress)

Having been introduced by Selye in 1974 alongside the term "eustress" to distinguish between adaptive (positive) and non-adaptive (negative) effects of stress reactions, distress is used in psychological literature to refer to a broad range of negative psychological states observed in adults, adolescents, and children. Most commonly, this umbrella term is used as a proxy for internalizing symptoms, such as anxiety and depression. (Steele, Phipps, and Srivastava 1999).

Characterized as a non-adaptive state, distress is observed when an individual cannot cope with stress, leading to negative effects. An exemplification of this phenomenon could be observed after an individual is promoted and consequently envied by their colleagues. While some would use their envy as a motivator which could lead to future success (eustress), others may become consumed by their envy, become demotivated, and subsequently exhibit reduced performance and future consequences (distress).

Although there is no doubt that Selye (1976) made significant contributions to the development and popularization of the concept of stress, it has now been understood that physiological stress reactions are much more complicated than Selye suggests, with distress having been further categorized as either acute or chronic.

2.1.1.2.1 Acute Stress (short-term stress)

Stress which is felt suddenly is called acute stress (McPheat 2010). Having a negative impact on an individual's well-being, acute stress is naturally a type of distress but, as its effects are not persistent and long-term, it is less harmful than chronic stress. The symptoms of acute stress include a brief increase in heart rate and blood pressure, possibly followed by a tension headache and a momentarily strong emotional response like anger or fear (McPheat 2010). Unlike chronic stress, recovery is fast and normal activities can be subsequently resumed, as in the case of a student who experiences a bout of stress at the beginning of an exam but is then able to calm down and concentrate for the remainder.

2.1.1.2.2 Chronic Stress (long-term stress)

As the second type of distress, chronic stress can be observed when repeated episodes of acute stress become the norm for an individual, becoming a state of normalcy as opposed to occasionally-seen episodes (McPheat 2010). Due to the fact that chronic or persistent stress occurs over a long period of time and does not have a quick or easy solution, individuals will face greater negative health effects than from acute stress as bodily systems become slowly destabilized. This level of stress and subsequent destabilization will often result in numerous symptoms which are very dangerous for the health and well-being of an individual at both a personal and professional level (Nekzada and Tekeste 2013).

2.1.2 The Causes of Stress

As no two individuals experience situations identically, so too are they impacted by stress in a multitude of different ways. What may trigger a positive eustress response in one individual could lead to distress experienced as either a brief episode of acute stress or a persistent chronic stress response in another. Having defined stress as the "nonspecific response of the body to any demand", Selye (1936) defined a stressor as any substance that produces stress at any given time; if a situation affects a person in a way that they feel stress, it is called a stressor (Selye 1936). As basically any event or situation in a person's environment that causes stress, stressors are real or perceived difficulties for the ability of an organism to service its real or perceived needs (Greenberg, Carr and Summers 2002). In these perceived difficulties, each individual can be affected differently, and, for this reason, a stressor is defined in literature in a multitude of ways that are both subject-specific and general.

Robbins (2003, p.564) grouped potential sources of stress into three categories: individual, organizational, and environmental. It should not be forgotten, however, that factors causing stress are numerous and it is therefore difficult to set limitations. Accordingly, due to their varying effects on different individuals, not all stressors in the aforementioned categories may actually cause stress in every individual.

2.1.2.1 Individual causes

The rate of influence of stress sources differs from person to person, with some research showing that even miniscule changes in one's life can be a high-level source of stress

(Ekmekçi 2008, p.10). Individual needs, capacity, and character constitute individual sources of stress. One common source of personal stress is family problems; relationships among family members, the rearing and/or education of children, spouses bringing work problems home, divorce, and death are frequently observed stressors in this category (Eren Gümüştekin and Öztemiz 2005, p.277).

In some cases, the source of individual stress can actually be the person themself, as some people interpret events and situations in a more stress-provoking way. A person's perception of their environment, their reaction to changes, and relations with surroundings are related to their personality (Özcan, Alper, Ciğer and Algür 2010). Self-interpretation is also among the stress factors. Due to the fact that personality varies with age, a person's age can also be regarded as an individual cause of stress. To illustrate this point, it can be observed that although an individual may become less able to cope with environmental and psychological stress as they age, they frequently experience a decrease in ambition, responsibilities to fulfill, and the pressure to succeed after a certain age (Ekmekçi 2008, p.11). In other words, while age itself is unlikely to indicate the level of stress experienced by an individual, it can be predictive of the nature of one's stress.

Economic issues are frequently a cause of individual stress; if the wage that an individual receives from their work does not satisfy their needs, it will almost certainly be a stressor. A less straightforward type of stressor is emotional which, as it stems from an individual's thoughts and perceptions, it is greatly influenced by one's past experiences and value judgements. As such, emotional stress differs from person to person because similar events are likely to be reflected in one's personality in a multitude of different ways (Ekmekçi 2008, p.12).

Although external factors may have a triggering effect on stress, the source of much stress can be observed to originate within a person themself (Ulukuş 2003, p.212). For this reason, the most important factor in individual stress source is personality, with additional sources of individual stress including situational uncertainties (Ekmekçi 2008), hereditary diseases, and situation-specific stressors like genetics, cultural structure, expectations, beliefs, and nutritional regulation (Özdemir 2008).

2.1.2.2 Organizational causes

Defined as communities established by at least two individuals to achieve a certain purpose, organizations influence their individual members through concepts such as

structures, exclusivity, economic and geographical situations, and modes of operation (Öztürk 2003). As employees usually spend most of their time in the workplace, they can face 'organizational stress' arising from the organizational environment while fulfilling certain roles and duties.

In today's fast-paced environment of continuous innovation in every field, organizations are presently locked in a development-centered framework of rapid and constant change. This uninterrupted change brings great opportunities accompanied by inevitable hazards, making stress inevitable in the organizations that seek to overcome these threats and gain opportunities. For this reason, organizational stress has been a topic of wide discussion in literature.

For instance, the author of "Managing Stress", Jere E. Yates (1979), has classified organizational stresses under five headings:

a. Intrinsic to job
    i. Boredom
    ii. Physical working conditions
    iii. Time pressures and deadlines
    iv. Exorbitant wok demands
    v. Exorbitant wok demands
    vi. Information overload
    vii. Job design and technical problems
b. Role in organization
    i. Role conflict
    ii. Role ambiguity
    iii. Responsibility for people
    iv. Territorial boundaries
c. Career development
    i. Under promotion
    ii. Over promotion
    iii. Lack of job security
    iv. Thwarted ambitions
    v. Success
d. Relationships at work

i. Poor relationships with peers, subordinates and boss
ii. Threats from below

e. Organizational structure and climate
i. Lack of participation
ii. Bureaucratic pettiness
iii. Pressures toward conformity
iv. Lack of responsiveness

Work-related organizational stressors can appear in various forms in enterprises, with the most common being related to technology, environmental conditions, physical conditions, members' positions, experiences and tendencies within the organization, organizational conflicts, organizational structure, policies, and processes (Akmel 1992, p.107). Organizational factors lead to worker to be overloaded work and time constraints, role conflict and uncertainty of roles, physical conditions, economic factors, responsibility, decision making and participation in decisions, work security, management style, career hurdles, and technological developments (Ekmekçi 2008, p.8). As can be understood from the many causes of organizational stress, there is a distinctly individual component at play which, as a result, directly affects the efficiency of the workers who comprise the very structure of any organization. In addition, the dimension of influence from organizational stress sources naturally varies according to personality.

2.1.2.3 Environmental causes

In addition to individual and organizational causes, the third category of stressors is environmental causes, as individuals are in constant contact with, and therefore affected by, their surroundings. As external factors which affect an individual, the causes of environmental stress can be as simple as the social environment in one's workplace. However, these stressful effects disturb the homeostatic balance of a person's body and cause them to worry (Ekmekçi 2008, p.8).

The uncertainty factor mentioned as an individual cause of stress can also be caused by uncertainties in a person's surroundings. For example, national or global economic and/or political uncertainties are likely to be environmental factors (Naidoo, Botha and Bisschoff 2013, p.179); although changes in the political landscape or the economy are out of the

control of employees, any downsizing which occurs will affect them in a certain way (Bloisi et al 2007, p.320).

Technological developments can also create anxiety in workers as new technology brings with it the need for adaptation and the threat of a reduced need for human labor (Nekzada and Tekeste 2013, p.19), leaving people may concerned about the permanence of existing jobs. In addition, the environmental and transportation problems of modern cities and the increase of the generation gap greatly affect workers (Eren 1998, p.230), with the threat of local and global terrorism having become a source of stress for the population as a whole in the 21st century (Robbins and Judge 2007, p.668).

2.2 THE DEFINITION OF PERFORMANCE

Performance, as "a degree of achievement expressed in words of one syllable", is a concept comprised of many different factors (Selvi 2013) and, for this reason, is not easy to define in the field of social sciences. This difficulty is due to the fact that the word performance is defined inconsistently, with many definitions which vary according to the purpose of the performance. Therefore, the term can be heard in many aspects of daily life as well as in academic literature and in the workplace, as the quality of one's work is expressed in terms of performance.

Performance is a qualitatively or quantitatively defined phenomena that results in a number of purposeful and planned activities in the general sense (Williams 1998, p.55). Although this definition also applies to job performance, there are more specific ways of describing it. For instance, according to Çolak (2010), job performance is the level of achievement of the work and behavior of an employee within the framework of their specified circumstances. According to Barutçugil (2004, p.11), performance is defined as the evaluation of all efforts made to achieve business objectives.

Job performance, in the most general sense, is one of the basic terms related to the realization of organizational goals (Simpson 2010, p.9) and, for this reason, the term should be considered as organizational in nature. In defense of this classification, Campbell (1990) stated that work performance "constitutes one of the most important issues of organizational psychology" (Camgöz and Alperten 2006, p.192).

To establish sustainable success in business, it is necessary to improve both individual and team performance in order to boost organizational performance because an enterprise

can also be as steadfast as its employees (Çöl 2008, p.39). As such, work performance should first be improved because, when the performance of employees increases, the performance of both the team and the business will increase as a result. Inversely, organizations are also negatively affected by the weak work performance of employees (Çalık 2003, pp.7-8). For these reasons, job performance has great prominence in businesses in both the individual and organizational sense.

2.2.1 Individual and Organizational Performance

Performance is a circumstantial term, and, for this reason, there are variances in different levels depending on the purpose of its usage. Job performance, which is related to the aim of this research, is under two headings in the management sciences: "individual" and "organizational". Organizational performance and individual performance relate to production and span throughout human history. However, it is difficult to find systematic studies in the literature dating before the scientific management period. Furthermore, the variable conditions of today's working life make it necessary to reshape and redefine the dimensions and content of the performance concept (Erkut 2001, p.11).

When analyzing job performance on a macroscopic basis, the entire corporate structure from employees to brand identity must be addressed, thus representing organizational performance. Due to the semantic scope of organizational performance, many meanings can be found in the academic literature, leading to no universally accepted definition. While organizational performance was seen as a criterion for meeting organizational goals in the 1950s, it began to be expressed in the 1960s and 70s as an attempt to use a company's limited resources (Georgopoulos and Tannenbaum 1957, p.535). In the following years, it became clear that organizational performance was a more comprehensive concept, leading to a more detailed and prominent place in the literature where it was understood that the performance of an organization was high when achieving its objectives (effectiveness) and using minimal resources (efficiency) (Gavrea, Ilıeş and Stegerean 2011, p.287).

Lebans and Euske (2006) define organizational performance as a set of financial and non-financial indicators which offer information on the degree of achievement of objectives and results. Similarly, Daft (2001) describes the term as the ability of an organization to accomplish its aims through the use of resources in a properly structured manner and,

according to Richardo (2001), it is the ability to achieve organizational goals and objectives. The term organizational performance is broad, covering all the work processes that are intended to promote organizational effectiveness and efficiency, emphasizing corporate identity. From this point of view, it can be said that organizational performance is an institutional process that has been developed in order to shape the strategic plans of an enterprise or institution, share its organizational resources among employees in the most effective manner in accordance with these plans, and ensure that all organization members later reach the designated targets in a synchronized manner (Selvi Durukan 2013, p.131).

Performance in an individual sense describes the degree of success of each employee in their work. When the topic is approached in this way, it refers to the performance of employees in the organization in the micro sense, from unskilled laborers to managers and owners. Although it linguistically expresses a personal concept, individual performance is critical for any organization and is one of the primary tools for achieving organizational goals.

Individual performance is a core concept within work and organizational psychology which, during the past 10-15 years, researchers have made progress in clarifying and extending the performance concept (Campbell 1990). A simple definition of individual performance is how well an employee strives for their work (Schuler 1995), while also referring to the attitudes and results of the employee's ability and motivation to achieve expected goals (Uysal 2015).

Any result obtained from an employee working on a task assigned to them within a particular time frame indicates individual performance. If these results are positive, it is understood that a particular employee fulfills their duties and responsibilities successfully, thus exhibiting a high-performance rate. If the results are inadequate, it is assumed that the employee is not successful and has a low performance rate (Özgen, Öztürk and Yalçın 2001).

Individual performance is, in other words, the competencies used by an individual to reach organizational goals, including not only work-related duties but also duties and behaviors that are not directly aimed at their work. Furthermore, competence is the degree to which one realizes business objectives (Büte 2011, p.178), explaining the effect of individual performance on organizational performance. Clearly, an employee with low

individual performance cannot be expected to have a high, positive effect on organizational performance.

As many studies in the literature show, there are two dimensions which aggregately complement individual performance: “task performance” and “contextual performance” (Borman and Motowidlo 1997).

2.2.2 Types of Job Performance

Job performance is considered in two dimensions as task performance and contextual performance (Borman and Motowidlo 1997) and, while task performance refers to the success of employees according to their job descriptions, contextual performance describes what employees exhibit outside their obligations and contribute to organizational integrity (Ünlü and Yürür 2011). In the following research dealing with work performance, both task performance and contextual performance will be examined.

2.2.2.1 Task performance

Task performance is the main dimension of individual work performance and has therefore been analyzed ever since work performance began to be explored in the literature. Several scholars have defined task performance as the effectiveness with which individuals perform their job activities (Motowidlo and Schmit 1999) and, due to the fact that this type of performance is only relevant in the context of work and the achievement of organizational goals, these activities intersect with and have a direct effect upon the success of an organization.

Task performance is defined as the actions exhibited by employees to provide technological support or to provide resources, materials and services to the technical core of the organization (Borman and Motowidlo 1997). Task performance includes fulfilling the conditions which are part of the contract between the employer and the employee, while activities other than the effort made to achieve these targets are not included in the category of task performance.

2.2.2.2 Contextual performance

For a number of years, it has been argued by many researchers that job performance involves more than simply task performance (Organ 1988; Borman and Motowidlo 1993).

In contrast to task performance, which is only relevant to the technical aspects of work, contextual performance encompasses a broader framework which includes additional behaviors that are not formally defined, such as teamwork, diligence and adaptation with the organization.

Contextual performance is defined as individual behaviors supporting the organizational, social, and psychological environment in which the technical center operates (Borman and Motowidlo 1993). These behaviors include voluntary activities such as administration which is not part of one's official profession, helping others and cooperating, coping with organizational rules, being enthusiastic, making efforts to fulfill organizational duties, and assisting and protecting organizational goals (Borman and Motowidlo 1993). Broadly consisting of all behaviors which support the organizational, social, and psychological environment, contextual performance differs from task performance in that it is multi-dimensional, involving activities not officially part of one's job definition.

Borman and Motowidlo (1993) divide contextual performance into five categories: (1) volunteering for activities beyond a person's formal job requirements; (2) persistence of enthusiasm and application when needed to complete important task requirements; (3) assistance to others; (4) following rules and prescribed procedures even when it is inconvenient; and (5) openly defending organizational objectives (Borman and Motowidlo, 1993).

As reported by the Organ (1997, p.88), the definition of contextual performance is consistent with organizational citizenship behavior (OCB), which has been accepted in the literature as a way of helping other colleagues and volunteering to cooperate with them, even though a person is not on duty (Ünlü and Yürür 2011). Organizational citizenship behaviors are frequently encountered as a main topic of study in the literature, with contextual performance as just one example of OCB. Organ (1997) defined OCB as discretionary behaviors which are not a part of one's individual job but are intended to help an organization's members and improve organizational functionality. In this sense, discretionary refers to behaviors which are not enforceable nor part of a formal role in terms of an individual's contract with the organization (Sonnentag, Volmer and Spyschala 2008).

Organ (1988) extended OCB by introducing a five-dimensional model: altruism (i.e. helping others); conscientiousness (i.e. compliance to the organization); civic virtue (e.g. keeping up with matters that affect the organization); courtesy (e.g. consulting with others before taking action); and sportsmanship (e.g. not complaining about trivial matters). (Sonnentag et al 2008). Organ then described OCB in three articles identifying it with contextual performance: helping, courtesy, and conscientiousness (Sonnentag et al 2008). These customized dimensions adapt the contextual performance content and show their identity with OCB.

The greatest difference between task and contextual performance is that task performance consists of activities directed at specific tasks and needs while contextual performance refers to activities that are common to everyone in the organization (Simpson 2010, p.9). In addition, there are three basic differences between task and contextual performance (Borman and Motowidlo 1997; Motowidlo and Schmit 1999):

i. While task performance is specific to work, contextual performance is comparable to all activities in job,
ii. While task performance is predominantly related to talent, contextual performance is primarily related to motivation and personality,
iii. While task performance is part of the behavior in the employee role and formal job definition, contextual performance refers to extra role behavior and voluntary efforts and is often not rewarded by formal reward systems.

2.3 THE DEFINITION OF BURNOUT

Burnout is a syndrome which causes physical, emotional, and mental fatigue in people and is often experienced by individuals in service occupations or in other related fields (Karapınar 2012, p.4). Furthermore, as people spend an increasing amount of their time thinking about business and business-related activities (Sökmen 2005, p.3), this situation inevitably leads to the employee being exposed to adverse factors which are physical and psychological negative. Poor management, economic difficulties, negative workplace conditions, conflicts of expediency, personal problems, structural and system-related disorders, and the like can cause an employee to become inefficient in their working life, be absent from work, and face various diseases (Albrect 1988, p.50). In this context, burnout is one of the most important problems related to stress, negatively affecting the

physiological, psychological, and social health of employees and potentially leading to leave their work entirely. Naturally, burnout is accepted as a situation to be avoided as it will lead to heavy and serious individual and organizational consequences (Avşaroğlu and others 2005, p.116).

A loss of emotional energy in any individual will lead them to become insensitive to the people working with and for them. After all, as one's sense of personal accomplishment decreases, burnout is inevitable (Sürgevil 2006) for this reason, burnout is a serious threat to working life on both the individual and organizational level. According to Zhou and Wen (2007), burnout experienced at work is a group of negative individually-centered symptoms commonly referred to as "job burnout" or "staff burnout", which occurs in many occupations with varying symptoms. In today's business world, the advancement of technology has brought about a noticeable increase in production and yield quality which, in turn, fosters a more competitive environment where the prevalence of burnout has likewise increased.

Having initially emerged as a social problem, the lack of initial scientific structure means that the concept of burnout has been shaped pragmatically apart from academic concerns. Although burnout had not been a serious issue in scientific research until 1970-1980, it became the subject of much research in the literature in the following years. Freudenberger (1974), who defines burnout syndrome as a "professional hazard," was the first person to tackle this subject in academic literature in 1974. According to Freudenberger (1974, p.159), burnout is "the extinction of motivation or incentive, especially where one's devotion to a cause or relationship fails to produce the desired results" and, should be viewed as "cynicism, negativism, inflexibility, rigidity of thinking, unhappiness, boredom, psychosomatic symptoms, and a condition in which helping professionals wear out in their pursuit of impossible goals" (Maslach and Jackson 1981, p.25).

After Freudenberger (1974), the theorist Maslach (1994) is most often cited for her work on the subject and especially for the scale she developed regarding burnout. Having been classified by Maslach and Jackson (1981) as an extreme form of chronic and unresolved stress caused when individuals are required to be intensely involved with other people for extended periods of time, this intense involvement can ultimately manifest as emotional exhaustion and frustration, eventually leading one to lose feelings of concern and regard

toward those around them (students, clients, co-workers, leaders, etc.). Regarded as one of the most popular names in the study of burnout, Maslach (1981) analyzed the topic in three parts, compiled a highly reliable inventory to assist future research, and authored the Maslach Burnout Inventory survey, which is still used in much of today's research.

Due to the fact that burnout has been studied for more than 40 years in a variety of occupations, the literature presents a well-developed conceptual framework. Pines and Aranson (1988) describe burnout as a condition of physical, emotional, and mental exhaustion caused by prolonged exposure to emotional demands (Schaufeli and Van Dierendonck 1993, p.633). Having serious functional ramifications including substantial costs for organizations and individual, burnout is important in explaining a range of behaviors and attitudes in stressful jobs (Lee and Ashforth 1993). Moreover, it has been emphasized that the level of one's exhaustion and eventual risk of burnout directly depends on the intensity and significance of stress involved in interpersonal relationships in one's profession. (Cordes and Dougherty 1993). On the other hand, multiple scientists have suggested that burnout is related to additional factors of social and managerial relevance (Golembiewski, Boudreau, Munzenrider and Luo 1996). The main element that distinguishes stressful sources of burnout from others is the result of an individual's interactive relations in the working environment (Maslach 2003, p.189; Ashforth and Lee 1997, p.705) and, for this reason, any solution will still be relevant to the work environment. While individual and organizational practices have made possible to cope with burnout, the resulting organizational impact is a serious matter which must be paid attention to by all modern companies.

Naturally, burnout manifests as a wide range of symptoms which, although greatly varied from person to person, help explain one's exhaustion in general terms.

2.3.1 The Symptoms of Burnout

Individuals overwhelmed by a heavy workload or extreme exhaustion often face burnout, frequently experiencing the feeling of a "never-ending life", described by Freudenberger (1974) as a symptom of burnout (Baltaş and Baltaş 1997).

Burnout is not a sudden occurrence but is a condition which occurs gradually and after a long period of time (Peker 2002, p.306), becoming quite complex due to the diversity of symptoms which, in and of themselves, represent an integral detail of the insidious

burnout process. In the literature, the symptoms of burnout are classified under three headings: physical, psychological, and behavioral (Çam 1992, p.10).

2.3.1.1 Physical symptoms

All of the following may not be observed at the same time but can be experienced simultaneously by some individuals. Some of the physical symptoms of burnout are (Yıldırım 2009, p.8):

i. The feeling of insomnia, lack of energy, tiredness and exhaustion,
ii. Unexplained headaches and general body aches, weight loss,
iii. Gastrointestinal system disorders (vomiting, stomach pain),
iv. Dermatologic disorders,
v. Respiratory distress, rapid pulse rate,
vi. Cardiac diseases,
vii. Difficult waking up in the morning,
viii. Insomnia which causes nightmares,
ix. Chronic strain,
x. Predisposed to sickness,
xi. Chronic or perpetual colds,
xii. Muscle cramps,
xiii. Backaches

2.3.1.2 Psychological symptoms

When an individual loses control of their work and feels discomfort, they may be pushed into a state of burnout, causing negative ramifications (Aksoy 2009, p.47). Some of the psychological symptoms of burnout are (Yıldırım 2009, p.8):

i. Being open to psychological injury,
ii. Feeling unsupported and insecure,
iii. Headiness, uneasiness,
iv. Hopelessness,
v. Job dissatisfaction,
vi. Irritability,
vii. Suspicion and concern,
viii. Emotional disorders and depressive feelings,

ix. The desire not to go to work,
x. Often thinking about quitting,
xi. Touchiness,
xii. Negative attitudes towards life,
xiii. Decrease in positive emotions such as courtesy, respect, and friendship,
xiv. Anger directed at the business environment, friends, and managers,
xv. The feeling of not being accepted and supported by managers,
xvi. A shift toward a more negative self-image,
xvii. The belief that everyone is trying to create problems and make life difficult,
xviii. Having negative feelings toward those offering assistance.

2.3.1.3 Behavioral symptoms

Behavioral symptoms of burnout can be more easily observed than other types as an individual's feelings are often reflected in their behavior; if individual feels that something is not going their way, or they have nothing to lose, they are often not afraid to express their thoughts. Some of these behaviors are (Yıldırım 2009, p.8):

i. Difficulty in adjusting to the job,
ii. Rude behavior,
iii. Avoiding assigned tasks and skirting responsibilities,
iv. Quitting or neglecting work,
v. Increase in drug, tobacco, and alcohol use, or other addictive behaviors,
vi. Difficulty concentrating,
vii. A sharp decrease in physical activity,
viii. Increased strain and controversy at home,
ix. Procrastination,
x. Providing monotonous, disdainful, or mocking service.

In actual fact, such a separation of the symptoms of burnout is inaccurate and purely for narrative simplicity, as even symptoms categorized separately cannot be considered independent of each other. When considered alone, the symptoms of burnout could be interpreted as any number of other problems but, when evaluated in parallel to work being done and in an organizational context, they provide an invaluable first step in the

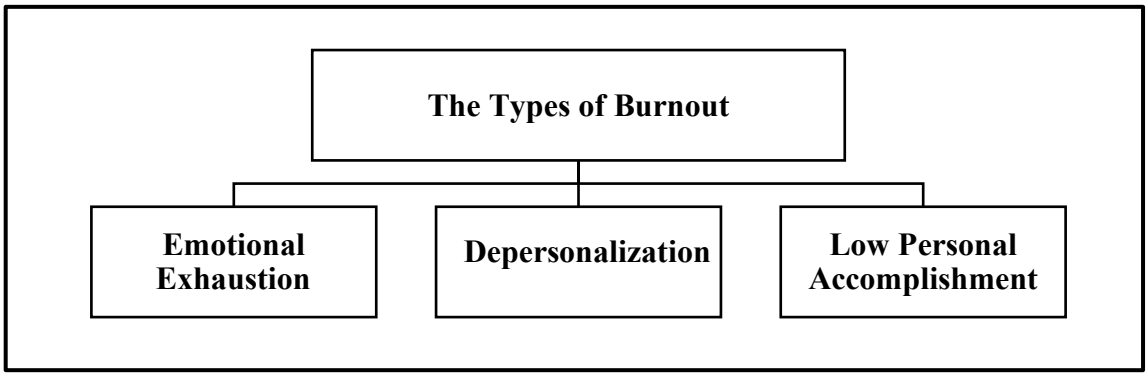
prevention, diagnosis, and treatment of burnout (Sağlam Arı and Çına Bal 2008).

2.3.2 The Types of Burnout

The concept of burnout consists of three sub-dimensions which are generally accepted in the literature: emotional exhaustion, depersonalization, and low personal accomplishment. While Freudenberger (1974) describes only the emotional dimension, Maslach and Jackson (1981) revealed the three dimensions of burnout (Sağlam Arı and Çına Bal 2008).

It is important to note that burnout differs from temporary fatigue, which although it can occur at different stages of working life, goes away after a certain rest period (Çimen 2000, p.6). The three dimensions of burnout are more complex and can occur in different variations according to the context in which they are experienced. For example, an individual may be placed in a situation involving very demanding contact with business colleagues which can lead to temporary emotional exhaustion and ultimately beneficial opportunities for success. On the other hand, some work conditions can be challenging and downright painful without any clear purpose or potential benefit, leading to emotional exhaustion and a feeling of low personal accomplishment. (Maslach 2003, p.190). The three types of burnout are outlined below (Sağlam Arı and Çına Bal 2008):

Figure 2.3: Types of burnout



2.3.3.1 Emotional exhaustion

Expressed as the most critical and determinative dimension of burnout in the literature, emotional exhaustion is classified as the inner dimension and is inevitably more common in individuals perpetually engaged in professional face-to-face relationships (Maslach 1981) and those who have failed to cope with stress (Tuğrul and Çelik 2000:37).

In this aspect of occupational exhaustion, individuals are faced with fatigue, lack of energy, and feelings of being emotionally worn out. An individual experiencing emotional exhaustion often encounters feelings of being less responsive and responsible to the people they serve than they once were in the past. This is frequently combined with constant reminders of one's obligation to return to work the next day, fostering feelings of tension and frustration, which is a major concern. (Leiter and Maslach 1988, p.297)

2.3.3.2 Depersonalization

Closely related to an individual's behavior toward others, depersonalization occurs in the form of negative and rigid behaviors (Maslach, Schaufeli and Leiter 2001) which suggest that an individual has fallen away from humanism and has become engaged in cynical, condescending, rigid, insensitive, and indifferent attitudes (Leiter and Maslach 1988, p.297).

Depersonalization refers to the interpersonal dimension of burnout, further explained by Daley (1979, p.375) who lists some personality characteristics of individuals experiencing burnout. Firstly, depersonalized individuals draw a rigid border between the people they serve and their private lives as they strictly avoid talking about work in their home environment and abstain from any unnecessary dialogue while at work in order to put a physical distance between themselves and those they serve. In addition, Daley (1979, p.375) states that employees who feel burnout often resort to acting as if they are just "going by the book" in an attempt to solve their problems, which is a classic behavioral trait of depersonalization (Sağlam Arı and Çına Bal 2008).

2.3.3.3 Low Personal Accomplishment

Simply put, an individual with a sense of low personal accomplishment "tends to evaluate himself negatively" (Maslach 2003, p.190) and develops disavowing and unfair attitudes about themselves, often feeling inadequate, incompetent, and unmotivated.

At this level, an individual experience a markedly negative self-assessment, fails to see any progress in their work or even feels a decline, and believes that any effort spent is in vain as they perceive no difference around them. (Leiter and Maslach 1988, pp.297-298). Other traits of low personal accomplishment include low morale, interpersonal disagreement, low productivity, inability to cope with problems, and a decrease in self-

esteem. (Baysal 1995, p.33).

The three types of burnout experienced by individuals are not frequently independent of each other and each dimension occurs in different variations according to circumstance, with the relationship between them explained by the models of burnout.

2.3.3 Burnout Models

Explained in the literature as a process, there are two widely accepted models of burnout: the Maslach model (2003) and the Golembiewski model (1996) (Lewin and Sager 2007, p.2).

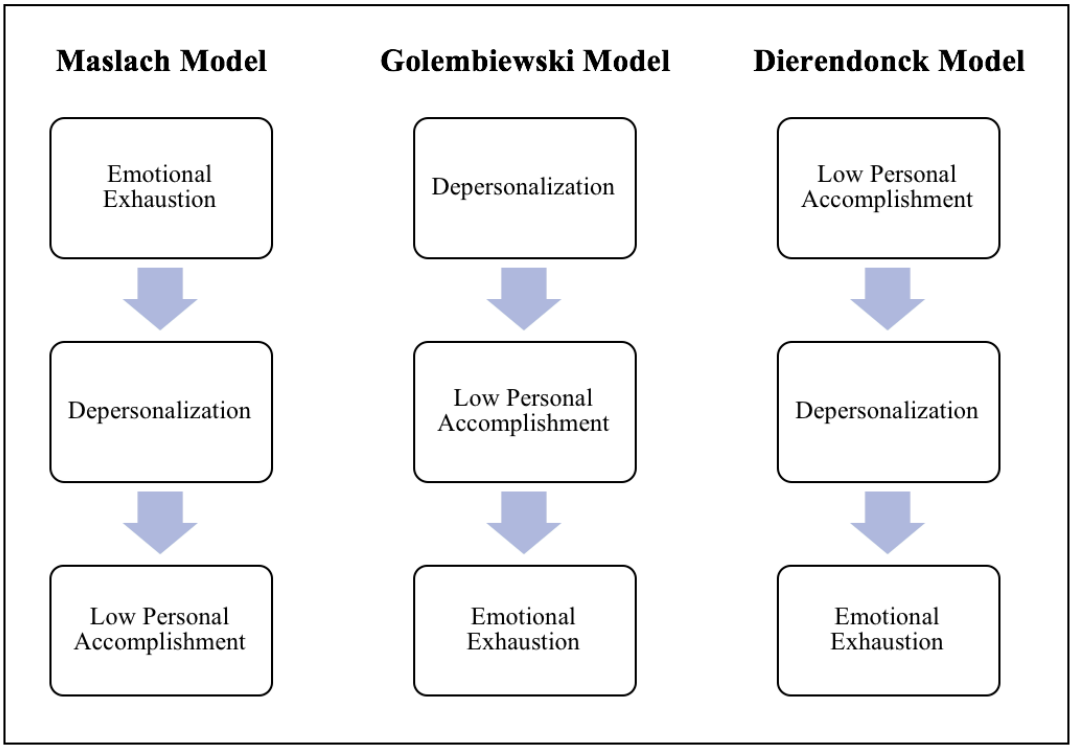
According to the Maslach model (2003), burnout begins with emotional exhaustion as a response to ongoing stress sources in one's work and, as a strategy of coping with this emotional exhaustion, the individual starts to become desensitized in relation to others, psychologically keeping them away. When depersonalization begins, the affected individual notices the inconsistency between their situation and their employer's potential expectations, resulting in feelings of failure and inadequacy. As outlined by the Maslach Model (2003), emotional exhaustion is considered to be the cause of depersonalization, which then causes low personal accomplishment (Sağlam Arı and Çına Bal 2008, p.141).

In the Golembiewski Model (1996), the process begins with depersonalization, which is reflected in the work performance of an individual and leads to a sense of low personal accomplishment by negatively influencing success evaluations. These factors in turn lead to an individual's emotional exhaustion. In short, the Golembiewski Model (1996) considers depersonalization to cause low personal accomplishment, which causes of emotional exhaustion (Lewin and Sager 2007, p.2).

In a third model of burnout, Van Dierendonck et al. (2001, p.49) state that the main source of the problem lies in one's sense of personal accomplishment and competence in the workplace, and that low personal accomplishment is in fact the first dimension of burnout. According to this model, employees experiencing declining personal accomplishment to withdraw from their jobs, causing depersonalization which then leads to emotional exhaustion.

The difference between these models is summarized in Figure 2.4:

Figure 2.4: Burnout models



3. THE RELATION OF STRESS TO PERFORMANCE AND BURNOUT

3.1 CONSERVATION OF RESOURCES THEORY

Regarded as fundamental in the examination of the relationship between stress, burnout, and performance, the Conservation of Resources Theory is firmly supported by researchers in the field of organizational behavior. Initially described by Stevan Hobfoll (1989), the "Conservation Resources Theory" (COR) was developed in the 1990's on the subject of stress and has since taken an important place in the literature.

Hobfoll argues that people have both an innate and later-learned motivation to create, develop, maintain, and protect the quality and quantity of their own resources (Hobfoll 2001) which can be anything important to an individual that contributes positively to their well-being. In his overview of COR theory and its applications, Hobfoll (2001) noted that there are 74 different types of resources, both business-related and non-business-related resources. According to this theory, valuable resources for individuals are grouped into four categories: personal characteristics, financial resources, conditions, and energy.

Personal characteristics are resources linked to an individual's relationship with stress, where beneficial traits and skills make it easier for them to adapt to surrounding conditions, leading to greater stress resistance. *Financial resources* are valuable as they indirectly provide advantages to an individual; a house, for example, provides shelter and a sense of security. Marriage and seniority, on the other hand, can be given as examples of *conditions* critical in increasing one's resistance to stress while energy describes resources such as time and information, which are essential vehicles for the acquisition and development of other resources (Hobfoll 1989; Hobfoll and Lilly 1993; Hobfoll 2001).

The value placed on certain resources varies between individuals depending on their personal experience and current situation. For instance, time spent with family can be a valuable resource for one individual while, inversely, it can be viewed by another individual as a threat to other, more important resources. Likewise, hobbies and other personal activities (sports, listening to music, attending courses, etc.) may be regarded either as an unnecessary loss of priceless time, or as an advantageous addition to one's life.

Regardless of which resources are most important to any one person, all individuals strive to acquire, retain, and protect the resources they value and, according to theory, if one of the following three conditions occurs, the individual will experience psychological stress (Hobfoll 1989; Hobfoll and Lilly 1993; Hobfoll 2001):

i. being faced with the danger of losing one's current resources,
ii. an actual loss of resources,
iii. failure to obtain adequate resources despite spending other resources.

The theory proposes that, in the face of such stressful situations, individuals react by trying to minimize resource loss because, according to Hobfoll (1989), these losses are a great threat to survival due to their priority over resource acquisition during adverse (stressful) conditions. Furthermore, individuals tend to focus less on loss of earnings than loss of resources because such losses reduce one's ability to survive and develop in their own world. However, resource acquisition does still remain important in order to improve one's circumstances and general psycho-social well-being.

Grandey and Cropanzano (1999) attest that the model provides a strong conceptual framework for explaining stress outcomes for both in-role and inter-role conflicts. Since Hobfoll (2011) recognizes that people's values are universal, he suggests that organizations will have no other choice than to operate in accordance with people's values and goals and, for this reason, COR theory is universally important for organizations.

3.2 THE RELATION BETWEEN STRESS AND PERFORMANCE

In current life, the relationship between stress and performance is generally seen as a negative structure, but this was not always true. In order to understand this relationship, models linking stress and performance must firstly be discussed along with the hypotheses of researchers who have examined this topic.

3.2.1 Models Examining the Relationship Between Stress and Performance

It is widely accepted that individuals today are the target of significant amounts of stress for a variety of reasons, experiencing both negative and positive effects. This phenomenon is especially prevalent in developed countries, where increasing effort and financial resources are being spent in an attempt to combat stress, to eliminate sources of stress, and to create more efficient working environments (Tokay 2000, p.66).

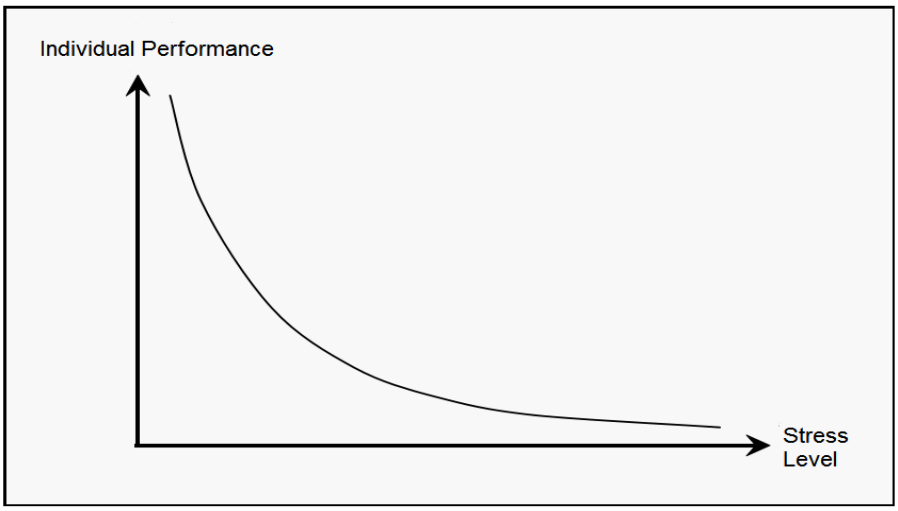
When examining the results of stress, the topic of performance is most often studied due to the poor performance of employees being seen as the most significant negative influence on a company's competitive power (Atkinson and others 1995, p.191). As stress is inevitably one of the main factors affecting not only individual but also organizational performance, much effort is paid by organizations seeking to reduce its negative influence while also maximizing the well-documented positive effects of some stress. Due to the varied nature of any one individual's work environment, colleagues, job requirements, personal and organizational goals and expectations, and personal differences, one will naturally be affected differently by stress, leading to a myriad of changes reflected in their performance variable. Nevertheless, there is a consensus among researchers that stress is related to anxiety and performance (Seipp 1991). According to Sullivan and Bhagat (1992), there are four hypotheses on the relationship between stress and performance: the negative linear model, the positive linear model, the inverted-U model, and that there is no relation at all between stress and performance.

3.2.1.1 Negative model

The negative model proposes that stress at any level has negative effects on an individual's time, energy, and attention, thus taking away from the task at hand (Jamal 1985). Any discomfort, psychological and mental problems caused by stress directly affect the performance of an individual and reflect in their work relations and business success (Eren Gümüştekin and Öztemiz 2005, p.282). The stress type which has this negative effect is distress, which has an inverse relationship to performance; performance decreases as stress increases.

This inverse relationship is shown in the graphic below (Figure 3.1):

Figure 3.1: Negative relationship model



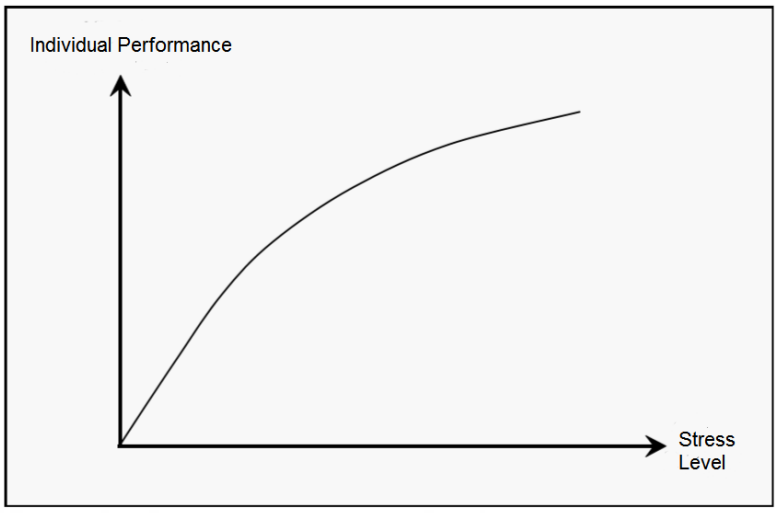
As concluded by Jex (1998), high stress reduces job performance, leading to the hypothesis that job stress will have direct negative effect on job performance. The extra energy that an individual expends to combat stress causes mental burden and generates tension and a negative emotional state, effects which lead to a negative impact on performance (Kulaksız 2016). Faced with such stress, rather than spending energy and resources on job performance, individuals inevitably focus on the stressful situation and, for this reason, as the psychological burden created by stress increases, the out-of-work expenditure also increases.

However, this model fails to take into account all possible consequences of the experience of stress, as potentially positive effects such as preparation for the future and due caution are excluded. (Ulukuş 2001, p.87)

3.2.1.2 Positive model

As the name implies, the positive model stands in direct opposition to the negative model, hypothesizing that the effects of stress have a positive impact on performance. As can be seen in the graphic below, this relationship model is directly causative where, as stress increases, performance also increases (Figure 3.2).

Figure 3.2: Positive relationship model



The positive relationship model between work performance and work stress is based on the notion that the difficulties, worries, and competitive environment in the workplace are an opportunity for an individual to develop constructive action to improve their performance (Kulaksız 2016, p.112). Moreover, a low stress level can cause under-stimulation of an individual, resulting in reduced motility and possible performance degradation (Muse and others 2003, p.350). It is therefore reported that stress can even be critical for good business performance; that the resulting competitive environment fosters one's self-development and thus improves performance.

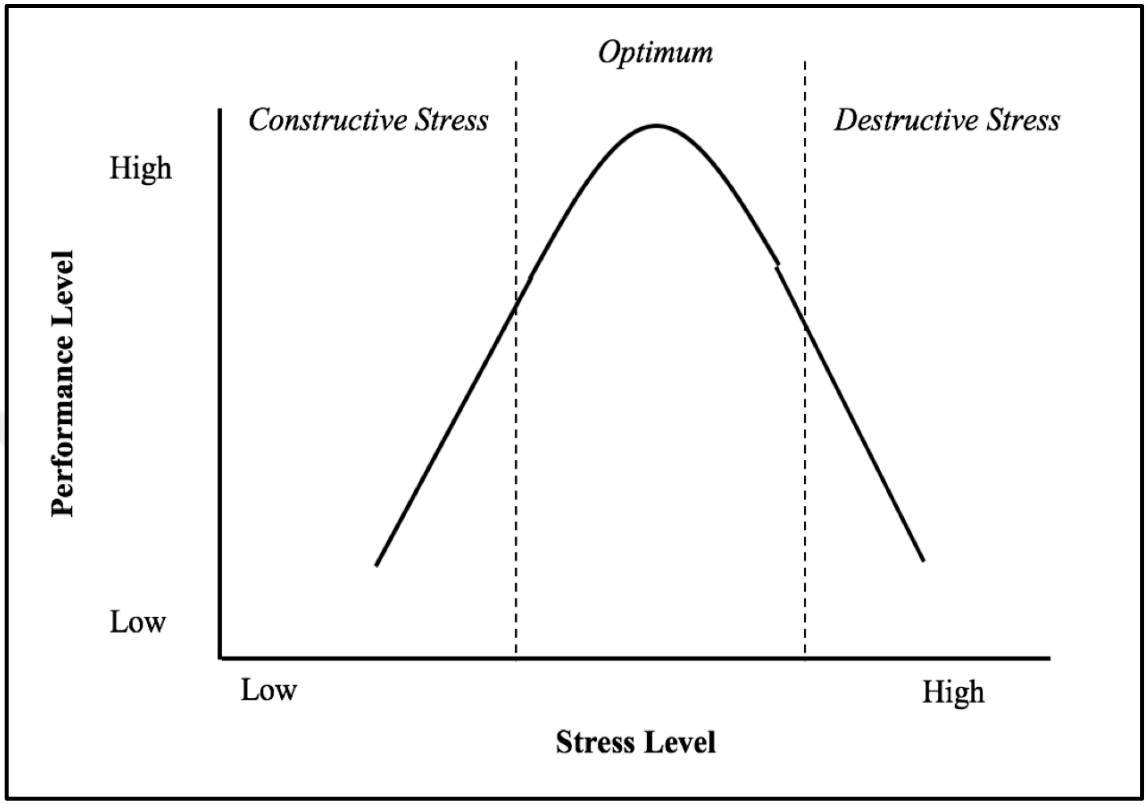
This hypothesis has some conceptual shortcomings, however, namely that it fails to explain how some normally successful people cannot perform well under stress and in a competitive environment, also neglecting to address the failure of those under extreme stress, such as soldiers fleeing war or students returning blank examination papers (Tokay 2000, p.68).

3.2.1.3 The Inverted-U curve model

This model, in which the relationship between stress and performance is likened to an inverted curve, consists of a combination of the positive relationship model (stress is beneficial) and the negative relationship model (stress is detrimental), suggesting that there is an optimal level of exposure to stress at which performance peaks (Westman and Eden 1996). As shown in Figure A, the inverse U-shaped relationship model is similar to the positive relationship model from the beginning to a certain stress level, at which it acts like a negative relationship model (Kulaksız 2016, p.101). In other words, increasing

stress to an optimum point improves performance, while the ability to work efficiently beyond this critical level is negatively impacted (Lewis 1995, p.34).

Figure 3.3: Inverted U model



Source: John R. Schermerhorn Jr., James G. Hunt, and Richard N. Osborn. Managing Organizational Behavior, Third Edition, New York: John Wiley & Sons, Inc., 1988, s.533

As with the positive model, the Inverted-U suggests that some stress is necessary and therefore functional to motivate optimum work performance (McGrath 1976; Selye 1975). Graphically, the performance of the employee increases as the stress level in the X axis reaches the optimum level, which generates the maximum performance of an employee. According to the model, a decrease in performance on the Y-axis is seen after the optimum stress level has been surpassed, at which point the Inverted-U model mimics the inverse relationship between stress and performance described by the negative relationship model.

Stress and its effect on performance, therefore, can be categorized as either constructive stress, which is useful and ultimately beneficial, and destructive stress, which is harmful and nonfunctional. Acting as a performance enhancer, the motivating effect of

constructive stress leads individuals to be more invested in their work and experience increased enthusiasm, while destructive stress prevents one from fulfilling one's tasks (Eren Gümüştekin and Öztemiz 2005, pp.281-284).

As can be understood from the above graphic, there are three levels of stress: low, moderate, and high. Low levels of stress cause individuals to be less alert which leads to inadequate performance, while coping with high stress levels negatively impact an individual's ability to successfully perform. Moderate stress levels, on the other hand, trigger individuals just enough that they are motivated to increase their performance and productivity without suffering any adverse effects. More complex than both the negative and positive relationship models, the intuitive nature of the Inverted-U Curve model means that it has been difficult to disprove, leading to it being the most widely-accepted model of the relationship between stress and performance in the literature today (Tokay 2001, p.67).

3.2.1.4 No relationship model

In short, this model hinges on the hypothesis that there exists a psychological agreement between an employee and their organization in which the individual believes that, because they are compensated according to a certain level of performance, they must maintain this desired standard regardless of external factors such as stress (Yılmaz 2006, p.122). It is theorized that, as people will behave sensibly and, if necessary, willingly ignore stress in favour of showing an expected level of work output, no relationship can be established between stress and performance.

In summary, there are different interpretations from researchers regarding the relationship between stress and performance, as outlined in the four models discussed above.

3.2.2 The Relationship Between Stress and Performance

Performance is thought of as an important parameter for an enterprise's strategy to realize its long-term vision, making poor performance of employees a critical factor which can compromise competitiveness (Atkinson and others 1995, p.191). For this reason, addressing factors affecting the performance of employees within an organization is of paramount importance.

When examining the relationship between stress and performance today, there exists very little support for the positive and no relationship models, with researchers generally favoring either the negative or inverted-u models. According to supporters of the negative relationship model, an increase in stress will inevitably cause a decrease in one's performance and vice versa, as exemplified below:

Jamal (1984, p.19) and Abramis (1994, p.1430) believe that any increase in the level of stress reduced performance without regard to the difficulty or ease of the task being performed (Leung et al 2008), while Jamal (1984) observed an inverse linear relationship between stress and performance in his research on 440 nurses in 1984. Furthermore, Jamal (1985) then went on to confirm his inverse linear relationship in a 1985 survey of a manufacturing plant. He found results that would support Inverted-U, but it did not result in a positive relationship.

In his research, Gokgoz (2013), proved that a unit change in the stress caused by individual, business, and general environmental factors led to a decrease in multiple job performance factors. He listed the factors which caused poor performance as follows: the ambition to rise above perceived competitors and the problems arising due to this competition, incompatibility and conflict with the colleagues, intensity of work, lack of adequate tools and supplies, uncertainty of working hours, not being able to get support from top management during a decision phase, not participating in decisions, not being able to criticize managerial practices, injustice in performance evaluation, and confidential discrimination and favoritism. Gokgoz (2013) therefore proposes that the negative aspects of the subscales of stress factors should be corrected or improved in order to increase job success.

According to Suandi, Ismail, and Othman (2014), there exists an overwhelmingly negative relationship between job stress and performance. It was reported that high stress levels caused low performance quality due to the observation that the performance of male workers was 2.6 percent higher than that of women and the performance of people aged 41+ was 11 percent higher than those under 40 years of age. These results were thought to be achieved due to a more favorable working environment for men than women, and because older employees having greater experience were more secure in their roles, leading to less stress and higher performance (Suandi, Ismail and Othman 2014).

The psychological states of employees are directly reflected in the work or service they are doing which can, in turn, create a stressful environment within the organization itself. Any discomfort, psychological, or mental issues which cause individual stress directly to affect not only an employee's performance but also shape their working relationships and overall job success (Eren Gümüştekin and Öztemiz 2005, p.282). Stress, tension, anxiety, and fatigue experienced by employees make it difficult for them to fulfil their job requirements and reduce their performance (Greenhaus and Beutell 1985, p.219)

Far from only affecting individual success, an employee's performance also affects the organization in which they work, meaning that the impact of stress on performance must be analyzed both individually and organizationally in order to develop a more comprehensive understanding of its effects. (Radbeh 2014, p.47). To this end, the previously mentioned Conservation of Resources Theory (COR)—that a person who feels their resources are diminishing or being lost entirely will experience stress—is a widely accepted approach to analyzing stress formation in humans. By focusing on the resources of individuals and groups, COR theory explains the impact of evaluation on emotions and performance (Buchwald 2010), advocating that, after step three (failure to obtain adequate resources despite spending other resources), an individual will experience a high level of stress. Furthermore, even personal circumstances which are perceived to threaten one's resources and prosperity will result in stress in one's daily life, negatively affecting work performance. (Hobfoll and Shirom 2000) According to the COR, a constant threat to valuable resources results in burnout (Hobfoll 1989), and that these valuable resources may also be related to job performance (Hobfoll 1989).

Apart from the above-mentioned studies and COR theory, multiple different approaches have described the effects of stress on performance. When the literature is examined it can be seen that, even though there exists a lack of independence and originality in research on the subject, different results are still observed; some research indicates that stress has a completely negative effect on performance, while some researchers advocate the Inverted-U model mentioned above.

To think that any level of stress is negative for employees is not accurate because, according to researchers who advocate the Inverted-U model, a certain amount of stress is required for high performance. In this approach there exists an optimum level of stress which causes high performance, meaning it is necessary to view this adjusted stress as an

element which increases efficiency and effectiveness. (Özdevecioğlu et al 2003, p.131). More precisely, it is the ability to adjust and control stress to achieve this optimum level which will lead to increased performance. According to the Inverted-U model, a lack of stress will lead to underperformance, with the optimum point varying according to one's ability to tolerate stress. (Eren Gümüştekin and Öztemiz 2005, p.283)

As the first to work on the link between stress and performance, Yerkes and Dodson (1908) developed the Yerkes-Dodson inverted U-shaped performance law (YDL) in 1908 which states that there is an appropriate (optimum) amount of stress for performance (Yerkes and Dodson 1908). When a person is not experiencing stress, performance is poor, but performance will increase as the stimulation from stress increases, with performance decreasing once certain threshold is exceeded. Represented graphically as an inverted-u curve, the resilience of the Yerkes-Dodson law is quite impressive, having been reshaped and applied to countless other areas (Calabrese 2008).

In a slightly different approach, Zajonc (1965, p.272) alleged that stress increased performance on simple tasks, but certain levels of stress reduced employee's performance on difficult tasks. While Lazarus (1985, p.1420) expresses the threshold of stress as an endurance force, it has been suggested by Selye (1976) that stress may not always be harmful, but harmful effects may occur when it rises above a certain level. Selye (1976) also emphasizes that stress is a necessary part of life and does not always have negative consequences for the organism, with moderate stress increasing individual performance. (Salami, Ojokuku and Ilesanmi 2010, p.250).

Having investigated the relationship between stress and performance in military research, Yılmaz (2006) e presented three hypotheses on the subject: (1) stress affects performance, (2) a certain level of stress has a positive effect on performance, and (3) excessive stress affects performance negatively. Research conducted has been shown to favour the first hypothesis, along with investigation into the Inverted-U model upon which the second is based, further strengthening its validity. The third hypothesis has also been tested and accepted with the suggestion that "performance will decrease as the stress level increases".

As evident from the above-referenced studies, the Yerkes-Dodson Law, and the Conservation of Resources Theory, it is obvious that stress affects performance. This

research aims to examine the relationship between stress and its effect on performance in IT staff. For this purpose, the following hypotheses will be examined:

H_{1a}: Perceived stress at an excessive level negatively affects performance.

H_{1b}: Perceived stress at an optimum level positively affects performance.

H_{1c}: Perceived stress at all levels negatively affects performance.

H_{1a} and H_{1b} hypotheses have been established in accordance with Inverted-U model supported by the Yerkes-Dodson Law and relevant studies. The H_{1c} hypothesis was established according to the COR model and the negative relationship model supported by related research.

3.3 THE EFFECTS OF STRESS ON BURNOUT

When the results of job stress are examined in the literature, it has been seen that an excessive increase in the stress which creates physical, mental, and emotional pressure leads to burnout, an extreme form of stress (Eren 2004, p.288).

Stress and burnout are actually different from each other, although they are often used interchangeably. While stress is often temporary and can be experienced at any stage of daily life, burnout is nothing less than a prolonged sense of complete physical and mental weariness brought about by one's inability to cope with an increased level of stress. Kemaloğlu (2009, p.15) describes burnout as a progressive and chronic state of stress but it should be noted that, while the effects of stress can be either positive or negative, burnout causes only detrimental consequences for an individual (Eğin 2015, p.110).

Employees in every sector can experience stress due to organizational or personal reasons for either a long or short duration. One of the main factors distinguishing burnout from stress, however, is that it ultimately results in the failure to meet expectations and targets. According to Koksal (2009, p.7), burnout is not a discovery of work-related stress but a result of unstable work-stress, which acts as a valuable description of the relationship between stress and burnout, two different but interrelated terms. Short-term and temporary stress generally does not affect individual well-being, nor does it lead to negative consequences, only affecting one's health, for example, after a substantial period of time has passed. It is this kind of adverse situation which can cause burnout as, according to Landrum, Knight and Flynn, stress is a positive predictor of burnout (Landrum, Knight and Flynn 2012, p.228).

The effects of stress on the individual are instantaneous and do not cause too great a breakdown when it occurs due to immediate effects. In the same way, the stress can easily be removed by removing the stressing elements in the individual. However, even if the factors that cause the individual to catch up with burnout syndrome disappear, the syndrome will not end until the individual is physically and mentally rested completely. (Eğin 2015, p.110)

When considered together as variables, it has been found that there exists a significant positive relationship between the prevalence of stress sources and the sensation of burnout. (Jamal 2005). Aydoğan's (2008) research on 378 teachers, for example, found that work stress is positively and significantly related to both the emotional exhaustion and desensitization dimensions of burnout, proving that job stress is a significant predictor of both. Furthermore, Aydoğan (2008) showed that an increase in job stress levels lead to an increase in the level of employees' emotional exhaustion and depersonalization. Although the research failed to find a positive and meaningful relationship between work stress and the low personal accomplishment dimension of burnout, it should be emphasized that experiencing emotional exhaustion and depersonalization—which are directly affected by stress—will inevitably result in a feeling of low personal accomplishment.

Describing the relationship between stress and burnout, Erkan (2009 8) states: "Although everyone experiences conflict due to work stress, burnout emerges in those who have lofty goals, high expectations, and increased motivation in their working life. While stress is observed in a variety of different business situations, burnout is predominantly seen in those working collaboratively or in close contact with other people. Stress does not necessarily lead to exhaustion. People who believe what they do is important will not experience burnout even when feeling variable levels of stress." As highlighted in this statement, stress is a positive factor for burnout but it depends on the specific individual whether stress turns into exhaustion; it is incorrect to say that everyone will experience burnout as a result of the same stressful situation, but stress should be considered to have a positive and significant effect on burnout. In the same vein, Sandıkçı (2010) supported this position by reaching the conclusion that stress affects emotional exhaustion, depersonalization, and a decline in personal accomplishment (Sandıkçı 2010).

Gustafsson and Skoog (2012) investigated the effects of perceived stress and burnout in athletes, noting in their research that burnout is influenced by stress. (Gould, Udry, Tuffey, and Loehr 1996). In fact, it was reported that chronic stress is the main cause of burnout in professional athletes (Gustafsson et al. 2011; Maslach et al. 2001). Furthermore, Gustafsson and Skoog (2012) found that stress positively affected burnout in the 217 athletes studied, coming to the conclusion that this stress induced burnout resulted in not only psychological but also physical fatigue.

According to the previously-mentioned COR theory, people are trying to obtain and maintain valuable resources and that, as emphasized by Hobfoll (2001), individuals will experience burnout as a consequence of the third condition of the theory: failure to obtain adequate resources despite spending other resources. According to this, if an individual spends considerable time and energy away from their family but can still not obtain additional resources or continues to lose existing resources, they will experience burnout (Yürür 2011, p.111). Neveu (2007) found a positive relationship between the depletion of resources and all subdimensions of depletion in his research, which dealt with the Theory of Preservation of Resources, further noting that this relationship is stronger with the emotional exhaustion sub-dimension than the sub-dimensions of depersonalization and personal low personal accomplishment.

According to extensive research on the subject and COR theory, there is a positive relationship between stress and burnout, with the following hypothesis having been determined for research purposes:

H_2: Perceived stress positively affects burnout.

4. RESEARCH

4.1 PURPOSE OF THE RESEARCH

The purpose of this research is to investigate the effects of stress on individual performance and burnout.

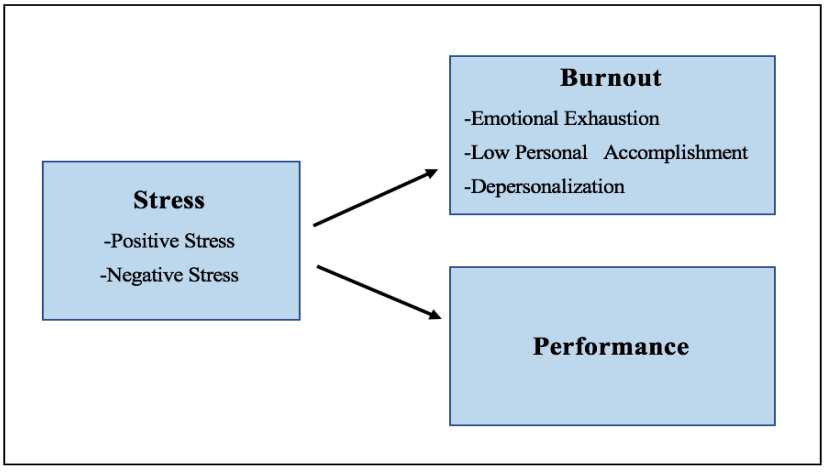
As exposure to stress in one's daily life is commonplace, it is natural to assume that this inevitable condition affects individual performance and burnout in some way, be it positively or negatively. For this reason, it is important to recognize the significance of stress and investigate its relationship to both performance and burnout.

The information technologies sector was selected as the area of study due to a lack of comparable research into this rapidly-developing sector where employee stress is common. In fact, no study published in Turkey was found to have analyzed the effect of stress on both performance and burnout, making this research a necessary and important contribution to the field.

4.2 RESEARCH MODEL AND HYPOTHESIS

In developing the model of this study, an extensive examination of related literature was conducted to determine an independent variable of stress and two dependent variables: performance and burnout. In addition, demographic characteristics known to impact stress, such as gender, education, and duration of employment, are included in the model.

Figure 4.1: Model of the research



Hypotheses:

H_{1a}: Perceived stress at an excessive level negatively affects performance.

H_{1b}: Perceived stress at an optimum level positively affects performance.

H_{1c}: Perceived stress at all levels negatively affects performance.

H_2: Perceived stress positively affects burnout.

4.3 METHODOLOGY

A survey method was applied in the research, where the survey was sent by e-mail to workers in the sample group. Prior to any data evaluation, all submissions were screened for completion and answer relevancy, with only those deemed to be valid and appropriate included in the final analysis.

Survey analysis was conducted using SPSS 23 where a 95 percent confidence level was obtained.

Tests used in this research were the Pearson correlation, regression, t-test, and Anova. The Pearson correlation test technique is used to determine the direction and strength of a linear relationship between two independent quantitative variables. The regression test is used to evaluate whether a quantitative dependent variable is affected by one or more independent variables. The t-test is used to compare two independent groups in terms of a quantitative variable. The one-way Anova test is used to compare independent k groups ($k > 2$) in terms of a quantitative variable.

The relation of scale scores in the study was analyzed using the Pearson correlation test, the influence of independent variables on dependent variables was evaluated through use of the regression test, and scale scores by demographic variables were analyzed with both the t- and Anova tests.

4.4 PARTICIPANTS

The total number of survey forms filled out by participants was 176, with no invalid surveys among the submitted surveys.

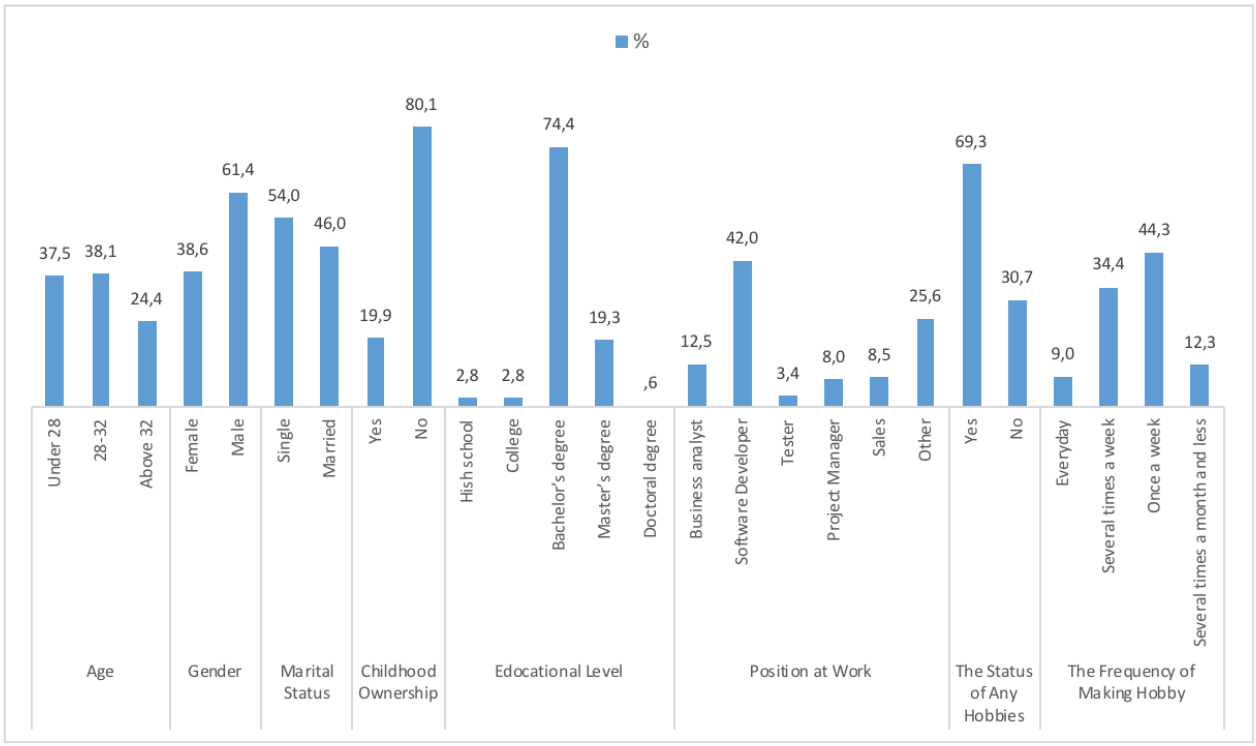
Analysis was conducted on all 176 responses. All surveys required for the survey were answered by employees at various companies within the information technologies sector.

Table 4.1: Participants' demographic characteristics

n=176		Frequency	Percentage (%)
Age	Under 28 years	66	37,5
	28-32 years	67	38,1
	Over 32 years	43	24,4
Gender	Female	68	38,6
	Male	108	61,4
Marital status	Single	95	54,0
	Married	81	46,0
Children	Yes	35	19,9
	No	141	80,1
Education level	High school	5	2,8
	College	5	2,8
	Bachelor's degree	131	74,4
	Master's degree	34	19,3
	Doctoral degree	1	,6
Job title	Business analyst	22	12,5
	Software Developer	74	42,0
	Tester	6	3,4
	Project Manager	14	8,0
	Sales	15	8,5
	Other	45	25,6
Monthly income	3000 TL <	14	8,0
	3000-5000 TL	58	33,0
	5000-7000 TL	49	27,8
	7000-9000 TL	24	13,6
	9000 TL >	31	17,6
Total work experience	1-2 years	17	9,7
	3-5 years	80	45,5
	6-10 years	47	26,7
	More than 10 years	32	18,2
Total work experience at current workplace	1 year or less	49	27,8
	2-3 years	52	29,5
	4-6 years	47	26,7
	7 years or more	28	15,9
Managerial responsibility	Yes	35	19,9

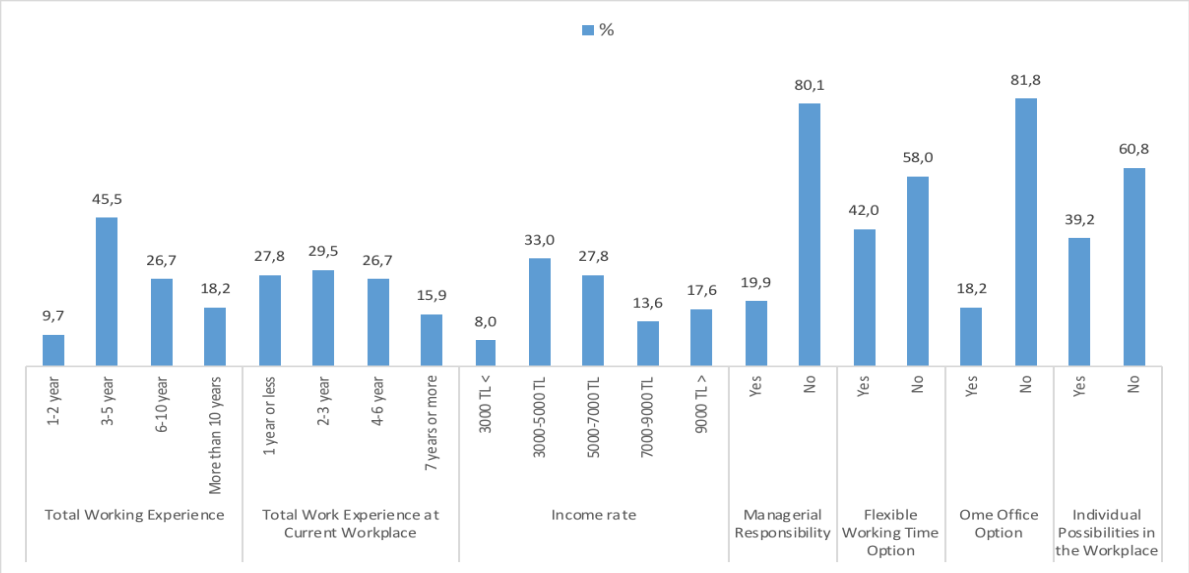
	No	141	80,1
Number of employees supervised	1-2	9	25,7
	3-5	10	28,6
	6-10	9	25,7
	More than 10	7	20,0
House is close to the workplace	Yes	86	48,9
	No	90	51,1
Flexible working time option	Yes	74	42,0
	No	102	58,0
Home office option	Yes	32	18,2
	No	144	81,8
Individual possibilities in the workplace	Yes	69	39,2
	No	107	60,8
Transportation opportunity	Shuttle	76	43,2
	Personal vehicle	43	24,4
	Public transportation	49	27,8
	By walking	8	4,5
Participation in hobbies	Yes	122	69,3
	No	54	30,7
Hobby participation frequency	Every day	11	9,0
	Several times a week	42	34,4
	Once a week	54	44,3
	Several times a month and less	15	12,3

Table 4.2: Participants' personal information table



As can be seen in the above table, 38.1 percent of respondents are 28-32 years old, 61.4 percent are male, 54.0 percent are single, and 19.9 percent have at least one child. Employees with an undergraduate degree comprise 74.4 percent of those surveyed while 42.0 percent are software developers. Also, 44.3 percent of participants are engaged in personal hobbies once a week.

Table 4.3: Participants' business life information



The total work experience of 45.5 percent of the employees is 3-5 years, while 29.5 percent have been working in their current workplace for 2-3 years, with 33.3 percent having a monthly income of 3000-5000 Turkish Lira. Furthermore, 80.1 percent of the participants do not have any managerial responsibility, 58.0 percent of employees do not have flexible working hours, and 81.8 percent do not have the option of working from home, and there are 3-5 employees under 28.6 percent of the executives. 60.8 percent of those surveyed do not have access to individual facilities (such as a sports hall or recreation room), and 51.1 percent do not live close to their workplace, while 43.2 percent of employees benefit from a company-provided shuttle services as a means of transportation.

4.5 MEASUREMENT INSTRUMENTS

The survey consists of four main sections: demographic questions, a perceived stress scale, a performance scale, and a burnout scale.

4.5.1 Perceived Stress Inventory

The perceived stress scale developed by Cohen, Kamarc, and Mermelstein (1983) was used in this study because it is the most widely preferred in this area of research. In order for the scale to be understood by all participants, a Turkish version adapted from the original by Eskin et al. was used. (Eskin, Harlak, Demirkıran and Dereboy 2013)

The form consists of 14 items, with answers reported on the e 6-point Likert scale ranging from “never” to “always”. Sample items are, ‘How often have you been upset because of something that happened unexpectedly?’, and ‘How often have you been able to control irritations in your life?’.

4.5.2 Performance Inventory

The performance scale prepared by Ender (2017) was used to measure participants' performance level in the survey.

The form consists of 3 items, with answers reported using the 5-point Likert scale ranging from “far below expected” to “far above expected”. Sample items are, ‘Your last performance appraisal point/percentile.’, and ‘Your last performance appraisal result in comparison to your co- workers.’.

4.5.3 Maslach Burnout Inventory

The highly-acclaimed Maslach burnout scale was used to measure participants' burnout levels in the survey. This scale, originally prepared by Maslach and Jackson (1981), was adapted to Turkish by Ergin (1992).

The form consists of 22 items, with questions 10 - 17 consisting of positive expressions, while the other questions contain negative expressions. Prepared according to the 6-point Likert scale, possible responses ranged from “never” to “always”. Sample items are, ‘I feel burned out from my work.’, and ‘I feel recipients blame me for some of their problems.’.

4.6 PROCEDURE

The surveys used in this study were distributed to and submitted by participants via e-mail. In addition to a note regarding confidentiality in the content of the survey, special attention was paid to guarantee the confidentiality of all information during the distribution and submission phases. The questionnaires were distributed and collected within one month, with an average response rate of 58 percent.

5. RESEARCH FINDINGS

In this section, the results of the study including the relationships between and effect(s) of the research variables will be reported.

5.1 FACTOR ANALYSIS

Factor analysis was applied to the stress, performance, and burnout scales in the research and sub-dimensions were accepted as factor. The results are given below.

5.1.1 Factor Analysis of Perceived Stress Inventory and Reliability Analysis

Explanatory factor analysis was applied in the first stage with the purpose of determining dimensions related to the perceived stress scale. In the explanatory factor analyses, the perceived stress scale consisting of 14 items gave the best results with the 2-factor structure KMO (, 809). The results of the Barlett sphericity test, which is on the same table, indicates that the analysis can continue. Reliability analysis of the perceived stress scale was found to be suitable for scale factor analysis since it is 0.839.

Table 5.1: KMO value table of perceived stress scale

KMO		0,809
Bartlett Test	X2	947,436
	sd	91
	p	0,000

The KMO value and the Bartlett test was statistically significant (p <0,05). Accordingly, the scale is logical for factor analysis. After this step, the Scree Plot was examined to determine the number of factors, where it was found that the scale had two factors. Varimax rotation was then implemented to specify the structure of the factors and distribute the questions to the factors.

Table 5.2: Perceived stress scale factor analysis

Items	Positive Stress	Negative Stress	Explained Variance Ratio	Cronbach's Alfa
How often have you felt that you were effectively coping with important changes that were occurring in your life?	0,803			
How often have you been able to control irritations in your life?	0,773			
How often have you felt that you were on top of things?	0,767			
How often have you felt confident about your ability to handle your personal problems?	0,724		**29,142**	**0,860**
How often have you dealt successfully with irritating life hassles?	0,703			
How often have you been able to control the way you spend your time?	0,643			
How often have you felt that things were going your way?	0,639			
How often have you felt difficulties were piling up so high that you could not overcome them?		0,729		
How often have you felt nervous and "stressed"?		0,689		
How often have you been angered because of things that happened that were outside of your control?		0,675		
How often have you felt that you were unable to control important things in your life?		0,652	**21,627**	**0,765**
How often have you found that you could not cope with all the things that you had to do?		0,578		
How often have you been upset because of something that happened unexpectedly?		0,571		

How often have you found yourself thinking about things that you have to accomplish?	0,522

The first and second factors consist of 7 items. The first factor is “positive stress" and the second factor is "negative stress".

5.1.2 Factor Analysis of Maslach Burnout Inventory and Reliability Analysis

Explanatory factor analysis was applied at the first stage in order to determine dimensions related to the burnout scale. In the explanatory factor analysis, the burnout scale consisting of 22 items gave the best results with the one-factor structure KMO (,862). This value indicates the suitability of the data for analysis. The results of the Barlett sphericity test, which is on the same table, show that the analysis can continue.

Table 5.3: KMO value table of burnout scale

KMO		0,862
Bartlett Test	X2	2247,412
	sd	231
	p	0,000

The KMO value and the Bartlett test were statistically significant (p <0,05). Accordingly, the scale is logical for factor analysis. After this step, the Scree Plot was examined to determine the number of factors and it was found that the scale had 3 factors. Varimax rotation was then implemented to specify the structure of the factors and distribute the questions to the factors. As a result of this procedure, item 8 was deducted from the scale with the reason that the factor load is smaller than 0,30. Reliability analysis of the burnout scale was found to be suitable for scale factor analysis since it is 0.914.

Table 5.4: Burnout scale factor analysis

Items	**Exhaustion**	**Sense of Personal Accomplishment**	**Depersonalization**	**Explained Variance Ratio**	**Cronbach's Alfa**
I feel burned out from my work	0,876				
I feel fatigued when I get up in the morning and have to face	0,828			**25,574**	**0,854**

another day on the job.				
I feel used up at the end of the work day.	0,803			
I feel frustrated by my job.	0,785			
I feel emotionally drained from my work.	0,780			
Working with people all day is really a strain for me.	0,687			
I feel like I'm at the end of my rope.	0,667			
I feel I'm working too hard on my job.	0,626			
I can easily create a relaxed atmosphere with my recipients.		0,820		
I feel I'm positively influencing other people's lives through my work		0,761		
I feel exhilarated after working closely with my recipients.		0,740		
I have accomplished many worthwhile things in the job.		0,694	**18,982**	**0,917**
I feel very energetic		0,682		
I deal very effectively with the problems of my recipients.		0,651		
I can easily understand how my recipients feel about things		0,577		

In my work, I deal with emotional problems very calmly.	0,572				
I don't really care what happens to some recipients.		0,801			
I've become more callous toward people since I took this job.		0,795			
I feel I treat some recipients as if they were impersonal 'objects'.		0,794	**15,866**	**0,846**	
I worry that this job is hardening me emotionally.		0,757			
I feel recipients blame me for some of their problems.		0,600			

The first factor is "emotional exhaustion", the second factor is "sense of personal accomplishment", and the third factor is "depersonalization". While the emotional burnout and depersonalization dimensions consist of negative expressions, the personal accomplishment dimension consists of positive expressions.

5.2 CORRELATION ANALYSIS

Table 5.5: Descriptive statistics of stress, performance, and burnout scores of employees

n=176	Min	Max	Average	Std. deviation	%	Skewness	Kurtosis
Positive Stress	14	41	29,98	5,11	73,1	-0,56	0,19
Negative Stress	13	41	24,72	5,24	60,3	0,10	-0,25
Performance	6	15	10,48	1,97	69,9	0,23	-0,12
Emotional Exhaustion	8	47	24,80	8,56	52,8	0,08	-0,54
Sense of Personal Accomplishment	14	48	31,70	6,24	66,0	-0,36	0,06
Depersonalization	5	30	11,30	4,91	37,7	0,79	0,53

Descriptive statistics of the stress, performance, and burnout scores of participants can be seen in the table above (Table 5.5).

The average scores of participants were as follows: Positive stress was 29.98, negative stress was 24.72, performance was 10.48, emotional exhaustion was 24.80, sense of personal accomplishment was 31.70, and depersonalization was 11.30.

Skewness and kurtosis values were calculated to examine the normal distribution of stress, performance, and burnout scores. The skewness and kurtosis values obtained from the scales are between +3 and -3, which is sufficient for normal distribution (Groeneveld and Meeden, 1984). According to this, it is accepted that the scale scores have a normal distribution.

The Pearson Correlation analysis was used for the correlation analysis because the scale scores were within normal distribution.

Table 5.6: Correlation analysis table

		Positive Stress	Negative Stress	Performance	Emotional Burnout	Sense of Personal Accomplishment	Depersonalization
Positive Stress	r	1	-,370**	,218**	-,364**	,356**	-,181*
	p		,000	,004	,000	,000	,016
Negative Stress	r		1	-,007	,537**	-,170*	,254**
	p			,925	,000	,024	,001
Performance	r			1	-,139	,283**	-,125
	p				,067	,000	,097
Emotional Exhaustion	r				1	-,195**	,509**
	p					,009	,000
Sense of Personal Accomplishment	r					1	-,101
	p						,184
Depersonalization	r						1
	p						

****p<0,01, *p<0,05**

Relevance test results of participants' scale scores can be found in the above table. According to Pearson correlation test results for the relation of scale scores:

The positive stress score has a negative directional and moderately significant relationship with the negative stress and emotional exhaustion scores. The positive stress score has a

positive significant relationship with the sense of personal accomplishment and performance scores. It has a negative significant relationship with depersonalization.

The negative stress score has a positive significant relationship with emotional exhaustion and depersonalization. It has a negative significant relationship with a sense of personal accomplishment.

The performance score has a positive significant relationship with a sense of personal accomplishment.

The emotional exhaustion score has a negative significant relationship with a sense of personal accomplishment. It has positive significant relationship with depersonalization.

5.3 THE EFFECTS OF STRESS ON PERFORMANCE

Regression analysis was performed to observe the effect of stress' sub-dimensions (positive stress, negative stress) on performance.

Table 5.7: Stress and performance relationship

Dependent	Independent	B	T	p	F	p	R^2
Performance	Positive Stress	**0,096**	3,143	**0,002***	4,943	**0,008**	0,054
	Negative Stress	0,032	1,075	0,284			

***p<0,05**

As can be seen from Table 5.7, the model of the effect of stress dimensions on performance is statistically significant ($p < 0.05$).

As a result of the regression analysis, it was observed that there is a significant relationship between positive stress and performance (p= 0,002), where positive stress (B = 0.096) affects performance positively. Positive stress describes 5 percent of the change in performance. It should be understood from this result that employees experiencing positive stress will exhibit greater performance. This result supports the H_{1b} hypothesis.

As a result of the regression analysis, no significant relationship was found to exist between negative stress and performance (p= 0,284). As a result of these findings, neither the H_{1a} nor the H_{1c} hypotheses are supported by this research.

5.4 THE EFFECTS OF STRESS ON BURNOUT

Regression analysis was performed to observe the effects of stress sub-dimensions (positive stress, negative stress) on burnout sub-dimensions (emotional exhaustion, sense of personal accomplishment, depersonalization).

Table 5.8: Stress and burnout relationship

Dependent	Independent	B	t	p	F	p	R^2
Emotional Exhaustion	Positive Stress	**-0,319**	-2,825	**0,005***	40,745	**0,000**	0,320
	Negative Stress	**0,763**	6,917	**0,000***			
Sense of Personal Accomplishment	Positive Stress	**0,415**	4,451	**0,000***	12,772	**0,000**	0,129
	Negative Stress	-0,052	-0,575	0,566			
Depersonalization	Positive Stress	-0,097	-1,277	0,203	6,854	**0,001**	0,073
	Negative Stress	**0,204**	2,755	**0,007***			

***p<0,05**

As can be seen from Table 5.8, the model of emotional exhaustion affected by stress dimensions is statistically significant ($p < 0.05$).

Positive stress (B = -0.319) affects emotional exhaustion negatively while negative stress (B = 0.763) affects it positively. Positive and negative stress describes 32 percent of the change in emotional exhaustion. If an individual experience positive stress, emotional exhaustion is lower. If negative stress is present, emotional exhaustion is higher.

The model of sense of personal accomplishment affected by stress dimensions is statistically significant ($p < 0.05$). Positive stress (B = 0,415) affects sense of personal accomplishment positively while negative stress has no effect. Positive stress describes 13 percent of the change in sense of personal accomplishment. If an individual experiences positive stress, their sense of personal accomplishment is higher. There was no relationship between negative stress and personal sense of accomplishment.

The model of depersonalization affected by stress dimensions is statistically significant ($p < 0.05$). Negative stress (B = 0,204) affects depersonalization positively while positive stress has no effect. Negative stress describes 7 percent of the change in depersonalization. If an individual experiences negative stress, their level of depersonalization is higher. There was no relationship between positive stress and depersonalization.

As can be seen from these results, the H_2 hypothesis is not supported by this research.

5.5 COMPARISON ANALYSIS ACCORDING TO STRESS LEVELS

The distribution of participants' stress levels can be found in table 5.9 below.

Table 5.9: Distribution of stress levels of employees

		n	**%**
Positive stress level	Low	22	12,5
	Moderate	75	42,6
	High	79	44,9
Negative stress level	Low	83	47,2
	Moderate	77	43,8
	High	16	9,1

While 44.9 percent of employees had a high level of positive stress, 47.2 percent had a low negative stress level.

Table 5.10: Comparison of positive stress levels of employees according to performance, and burnout scores

Positive stress level		**n**	**Average**	**Std. Deviation**	**F**	**p**
Performance	Low	22	10,14	1,96	4,919	**0,008***
	Moderate	75	10,05	1,69		
	High	79	10,99	2,12		
Emotional Exhaustion	Low	22	29,55	8,40	10,180	**0,000***
	Moderate	75	26,44	8,37		
	High	79	21,92	7,86		
Sense of Personal Accomplishment	Low	22	28,68	5,17	10,150	**0,000***
	Moderate	75	30,31	6,21		
	High	79	33,86	5,85		

	Low	22	12,09	5,11		
Depersonalization	Moderate	75	12,04	5,04	2,566	**0,080**
	High	79	10,38	4,64		

***p<0,05**

Table 5.10, contains a comparative test for stress, performance, and burnout scores for employees with different positive stress levels. According to the ANOVA test results for positive stress level groups:

There is a statistically significant difference in terms of performance points among the positive stress level groups. People with high positive stress (10,99) have the highest performance level.

There is a statistically significant difference in terms of emotional exhaustion points among the positive stress level groups. People with low positive stress (29,55) have the highest level of emotional exhaustion.

There is a statistically significant difference between the positive stress level groups in terms of the sense of personal accomplishment score. Individuals with high positive stress (33,86) have the highest level of sense of personal accomplishment.

No statistically significant difference was found between the positive stress level groups in terms of the depersonalization score.

Table 5.11: Comparison of negative stress levels of employees according to performance, and burnout scores

Negative Stress Level		**n**	**Average**	**Std. Deviation**	**F**	**p**
Performance	Low	83	10,60	2,25	2,217	**0,112**
	Moderate	77	10,19	1,54		
	High	16	11,25	2,11		
Emotional Exhaustion	Low	83	21,48	7,28	19,023	**0,000***
	Moderate	77	26,62	8,04		
	High	16	33,25	9,14		
Sense of Personal Accomplishment	Low	83	32,20	6,43	0,677	**0,509**
	Moderate	77	31,42	5,84		
	High	16	30,44	7,17		
Depersonalization	Low	83	10,18	4,33	4,448	**0,013***
	Moderate	77	12,16	4,89		

	High	16	13,00	6,66		

Table 5.11 contains a comparative test for stress, performance, and burnout scores for employees with different negative stress levels. According to the ANOVA test results for positive stress level groups:

There is a statistically significant difference between negative stress levels in terms of emotional exhaustion score. People with high negative stress (33,25) have the highest emotional exhaustion level.

There is a statistically significant difference between negative stress levels in terms of depersonalization score. People with high negative stress (13,00) have the highest depersonalization level.

No statistically significant difference was found between the negative stress level groups in terms of sense of personal accomplishment or performance scores.

5.6 FINDINGS OF DEMOGRAPHIC VARIABLES

Analyzes of demographic data in the survey are reported in the following tables:

Table 5.12: Comparing age of participants according to stress, performance, and burnout scores

Age		**n**	**Average**	**Std. Deviation**	**F**	**p**
Positive Stress	Under 28 years	66	29,94	4,86	0,276	**0,759**
	28-32 years	67	30,30	5,41		
	Above 32 years	43	29,56	5,11		
Negative Stress	Under 28 years	66	24,94	4,95	0,164	**0,849**
	28-32 years	67	24,43	5,84		
	Above 32 years	43	24,81	4,74		
Performance	Under 28 years	66	10,45	1,87	1,045	**0,354**
	28-32 years	67	10,72	1,94		

	Above 32 years	43	10,16	2,16		
Emotional Exhaustion	Under 28 years	66	25,39	8,04	0,390	**0,678**
	28-32 years	67	24,79	8,97		
	Above 32 years	43	23,91	8,82		
Sense of Personal Accomplishment	Under 28 years	66	30,77	6,05	2,190	**0,115**
	28-32 years	67	31,58	6,52		
	Above 32 years	43	33,30	5,89		
Depersonalization	Under 28 years	66	11,23	5,35	0,127	**0,881**
	28-32 years	67	11,16	4,48		
	Above 32 years	43	11,63	4,96		

Table 5.12 consists of a comparative test for stress, performance, and burnout scores for participants of different ages. According to ANOVA test results for different age groups: There was no statistically significant difference between the age groups in terms of stress, performance, and burnout scores.

Table 5.13: Comparing gender of participants according to stress, performance, and burnout scores

	Gender	**n**	**Average**	**Std. Deviation**	**t**	**p**
Positive Stress	Female	68	28,99	5,12	-2,073	**0,040***
	Male	108	30,61	5,03		
Negative Stress	Female	68	25,28	5,08	1,134	**0,258**
	Male	108	24,36	5,32		
Performance	Female	68	10,32	1,67	-0,851	**0,396**
	Male	108	10,58	2,14		
Emotional Exhaustion	Female	68	26,69	8,36	2,354	**0,020***
	Male	108	23,61	8,51		
Sense of Personal Accomplishment	Female	68	31,15	6,36	-0,931	**0,353**
	Male	108	32,05	6,16		

Depersonalization	Female	68	11,19	5,01	-0,235	**0,815**
	Male	108	11,37	4,88		

Table 5.13 consists of a comparative test for stress, performance, and burnout scores for participants of different genders.

There is a statistically significant difference in positive stress score between males and females according to t test results for both gender groups. Male participants experience positive stress more than females (30,61).

There is a statistically significant difference in the emotional exhaustion score between males and females, with male participants experiencing emotional exhaustion more than females (26,69).

There is no statistically significant difference in terms of performance scores between males and females.

Table 5.14: Comparing marital status of participants according to stress, performance, and burnout scores

Marital Status		**n**	**Average**	**Std. Deviation**	**t**	**p**
Positive Stress	Single	95	29,76	5,16	-0,631	**0,529**
	Married	81	30,25	5,08		
Negative Stress	Single	95	25,21	5,59	1,360	**0,175**
	Married	81	24,14	4,75		
Performance	Single	95	10,57	1,98	0,622	**0,535**
	Married	81	10,38	1,97		
Emotional Exhaustion	Single	95	26,11	8,21	2,213	**0,028***
	Married	81	23,27	8,76		
Sense of Personal Accomplishment	Single	95	30,77	6,13	-2,166	**0,032***
	Married	81	32,79	6,22		
Depersonalization	Single	95	11,26	4,20	-0,111	**0,912**
	Married	81	11,35	5,66		

Table 5.14 consists of a comparative test for stress, performance, and burnout scores for participants of differing marital status. According to the results of the t test:

There is a statistically significant difference between single and married individuals in terms of the emotional exhaustion score. The emotional exhaustion level of singles is higher than that of married couples (26,11).

There is a statistically significant difference in the sense of personal accomplishment score between singles and married couples. The sense of personal accomplishment level of married couples is higher than that of singles (32,79).

There was no statistically significant difference in stress and performance scores between single and married individuals.

Table 5.15: Comparing education level of participants according to stress, performance, and burnout scores

Education Level		**n**	**Average**	**Std. Deviation**	**F**	**p**
Positive Stress	High school, College	10	30,80	6,86	2,054	**0,131**
	Bachelor's degree	131	29,53	5,15		
	Master's degree, Doctoral degree	35	31,43	4,22		
Negative Stress	High school, College	10	25,70	3,68	0,995	**0,372**
	Bachelor's degree	131	24,92	5,37		
	Master's degree, Doctoral degree	35	23,66	5,05		
Performance	High school, College	10	10,30	2,26	0,482	**0,618**
	Bachelor's degree	131	10,42	1,83		
	Master's degree, Doctoral degree	35	10,77	2,40		
Emotional Exhaustion	High school, College	10	21,70	9,71	1,644	**0,196**
	Bachelor's degree	131	25,46	8,46		
	Master's degree, Doctoral degree	35	23,23	8,45		
Sense of Personal Accomplishment	High school, College	10	34,10	8,17	3,937	**0,021***
	Bachelor's degree	131	30,94	5,81		
	Master's degree, Doctoral degree	35	33,86	6,67		
Depersonalization	High school, College	10	11,80	4,13	0,190	**0,827**
	Bachelor's degree	131	11,17	4,85		
	Master's degree, Doctoral degree	35	11,66	5,44		

Table 5.15 is composed of s a comparative test for stress, performance, and burnout scores for participants with differing educational levels. According to ANOVA test results for different age groups:

There is a statistically significant difference between education level in terms of the personal accomplishment score. Those who have graduated from high school or college (association's degree) have the highest level of personal accomplishment (34,10).

No statistically significant difference was found between the education level groups in terms of stress or performance.

Table 5.16: Comparing position of participants at work according to stress, performance, and burnout scores

Position at work		n	Average	Std. Deviation	F	p
Positive Stress	Business Analyst	22	30,77	3,56	1,298	**0,273**
	Software Developer	74	29,55	5,00		
	Project Manager	14	32,64	5,83		
	Sales	15	29,47	5,15		
	Other	51	29,69	5,54		
Negative Stress	Business Analyst	22	25,50	5,30	1,304	**0,270**
	Software Developer	74	24,23	5,24		
	Project Manager	14	24,71	5,30		
	Sales	15	27,33	5,56		
	Other	51	24,31	5,03		
Performance	Business Analyst	22	10,45	1,63	1,220	**0,304**
	Software Developer	74	10,15	2,03		
	Project Manager	14	11,00	2,04		
	Sales	15	11,07	1,98		
	Other	51	10,67	1,98		

Emotional Exhaustion	Business Analyst	22	26,68	5,58	0,944	**0,440**
	Software Developer	74	25,26	8,38		
	Project Manager	14	23,07	8,42		
	Sales	15	26,33	11,24		
	Other	51	23,35	9,04		
Sense of Personal Accomplishment	Business Analyst	22	32,86	4,52	0,814	**0,518**
	Software Developer	74	30,89	6,60		
	Project Manager	14	31,71	6,39		
	Sales	15	30,93	6,72		
	Other	51	32,59	6,18		
Depersonalization	Business Analyst	22	11,68	3,51	0,061	**0,993**
	Software Developer	74	11,34	5,35		
	Project Manager	14	11,00	6,31		
	Sales	15	11,00	4,28		
	Other	51	11,25	4,69		

Table 5.16 is composed of a comparative test for stress, performance, and burnout scores for participants in different positions at work. According to ANOVA test results for these groups:

There was no statistically significant difference regarding an individual's position at work in terms of stress, performance, or burnout scores.

Table 5.17: Comparing monthly income of participants according to stress, performance, and burnout scores

Monthly Income		**n**	**Average**	**Std. Deviation**	**F**	**p**
Positive Stress	3000 TL <	14	28,64	6,16	1,357	**0,251**
	3000-5000 TL	58	29,09	4,97		

	5000-7000 TL	49	30,55	5,22		
	7000-9000 TL	24	30,08	4,33		
	9000 TL >	31	31,29	5,15		
Negative Stress	3000 TL <	14	25,43	5,77	0,627	**0,644**
	3000-5000 TL	58	25,22	5,07		
	5000-7000 TL	49	24,73	5,80		
	7000-9000 TL	24	24,63	5,42		
	9000 TL >	31	23,48	4,23		
Performance	3000 TL <	14	10,07	2,20	0,463	**0,763**
	3000-5000 TL	58	10,45	1,91		
	5000-7000 TL	49	10,51	1,96		
	7000-9000 TL	24	10,29	1,63		
	9000 TL >	31	10,84	2,28		
Emotional Exhaustion	3000 TL <	14	27,71	9,88	2,971	**0,021***
	3000-5000 TL	58	25,28	8,52		
	5000-7000 TL	49	25,71	8,35		
	7000-9000 TL	24	25,92	7,64		
	9000 TL >	31	20,29	7,96		
Sense of Personal Accomplishment	3000 TL <	14	31,50	7,36	0,392	**0,814**
	3000-5000 TL	58	31,53	5,93		
	5000-7000 TL	49	31,80	5,75		
	7000-9000 TL	24	30,67	6,18		
	9000 TL >	31	32,74	7,24		
Depersonalization	3000 TL <	14	11,43	3,55	1,957	**0,103**
	3000-5000 TL	58	11,40	4,52		
	5000-7000 TL	49	11,59	5,75		
	7000-9000 TL	24	12,92	4,95		
	9000 TL >	31	9,35	4,33		

Table 5.17 is composed of a comparative test for stress, performance, and burnout scores for participants based on rate of monthly income. According to ANOVA test results for these groups:

There is a statistically significant difference in the level of emotional exhaustion among the income rate groups. The level of emotional exhaustion is highest for those who earn less than 3000 TL (27,71) and lowest for those who earn more than 9,000 TL (20,29).

There was no statistically significant difference between the income rate groups in terms of stress, performance, depersonalization, sense of personal accomplishment scores.

Table 5.18: Comparing total work experience of participants according to stress, performance, and burnout scores

Total Work Experience		**n**	**Average**	**Std. Deviation**	**F**	**p**
Positive Stress	1-2 years	17	28,29	5,50	0,733	**0,534**
	3-5 years	80	30,24	4,57		
	6-10 years	47	30,26	5,99		
	More than 10 years	32	29,84	4,88		
Negative Stress	1-2 years	17	24,47	5,36	0,172	**0,915**
	3-5 years	80	24,91	5,29		
	6-10 years	47	24,30	5,77		
	More than 10 years	32	24,97	4,32		
Performance	1-2 years	17	9,65	1,73	1,503	**0,216**
	3-5 years	80	10,64	1,88		
	6-10 years	47	10,68	2,14		
	More than 10 years	32	10,25	2,02		
Emotional Exhaustion	1-2 years	17	24,88	8,46	0,813	**0,488**
	3-5 years	80	25,64	8,08		
	6-10 years	47	24,68	9,54		
	More than 10 years	32	22,84	8,32		
Sense of Personal Accomplishment	1-2 years	17	28,24	6,02	3,014	**0,032***
	3-5 years	80	31,58	6,23		
	6-10 years	47	31,77	5,94		
	More than 10 years	32	33,75	6,22		
Depersonalization	1-2 years	17	12,00	4,66	0,188	**0,905**
	3-5 years	80	11,18	5,20		
	6-10 years	47	11,47	4,48		

	More than 10 years	32	11,00	5,11		

Table 5.18 is composed of a comparative test for stress, performance, and burnout scores for participants based on total work experience. According to ANOVA test results for these groups:

There is a statistically significant difference in the sense of personal accomplishment among individuals based on their total work experience. Employees with a total of more than 10 years' experience had the highest level of sense of personal accomplishment (33,75), with the lowest observed in employees (28,24) with 1-2 years' total experience.

No statistically significant difference was found between stress or performance scores based on total work experience.

Table 5.19: Comparing participants' total work experience at current workplace according to stress, performance, and burnout scores

Total work experience at current workplace		**n**	**Average**	**Std. Deviation**	**F**	**p**
Positive Stress	1 year or less	49	30,71	4,45	2,039	**0,110**
	2-3 years	52	29,79	4,82		
	4-6 years	47	30,62	5,44		
	7 years or more	28	28,00	5,84		
Negative Stress	1 year or less	49	24,53	5,79	0,466	**0,707**
	2-3 years	52	24,73	4,69		
	4-6 years	47	25,36	5,92		
	7 years or more	28	23,93	3,92		
Performance	1 year or less	49	10,47	2,12	0,458	**0,712**
	2-3 years	52	10,56	1,84		
	4-6 years	47	10,64	2,04		
	7 years or more	28	10,11	1,87		
Emotional Exhaustion	1 year or less	49	23,43	7,18	2,172	**0,093**
	2-3 years	52	25,50	9,01		
	4-6 years	47	26,85	8,58		
	7 years or more	28	22,46	9,34		
Sense of Personal Accomplishment	1 year or less	49	29,73	6,28	3,980	**0,009***
	2-3 years	52	31,10	5,81		
	4-6 years	47	33,77	6,40		

	7 years or more	28	32,79	5,65		
Depersonalization	1 year or less	49	10,35	4,16	1,567	**0,199**
	2-3 years	52	11,79	4,72		
	4-6 years	47	12,21	5,59		
	7 years or more	28	10,54	5,12		

Table 5.19 consists of a comparative test for stress, performance, and burnout scores for participants based on total work experience at their current workplace. According to ANOVA test results for these groups:

There is a statistically significant difference in the total working experience at current workplace groups in terms of sense of personal accomplishment. Employees who have been at their current workplace for 4-6 years have the highest sense of personal accomplishment level (33,77), with the lowest for employees of 1 year or less (29,73).

There is no statistically significant difference in participants' total work experience at their current workplace in terms of stress or performance scores.

Table 5.20: Comparing managerial responsibility of participants according to stress, performance, and burnout scores

	Managerial Responsibility	**n**	**Average**	**Std. Deviation**	**t**	**p**
Positive Stress	Yes	35	30,49	5,83	0,649	**0,517**
	No	141	29,86	4,93		
Negative Stress	Yes	35	25,00	5,08	0,358	**0,721**
	No	141	24,65	5,29		
Performance	Yes	35	11,00	2,06	1,744	**0,083**
	No	141	10,35	1,94		
Emotional Exhaustion	Yes	35	26,09	9,72	0,992	**0,323**
	No	141	24,48	8,26		
Sense of Personal Accomplishment	Yes	35	33,34	6,20	1,753	**0,081**
	No	141	31,29	6,20		
Depersonalization	Yes	35	12,97	5,69	2,273	**0,024***
	No	141	10,89	4,63		

Table 5.20 is composed of a comparative test for stress, performance, and burnout scores for participants based on their managerial responsibility. According to t test results for these groups:

There is a statistically significant difference in managerial responsibility groups in terms of depersonalization, with participants with managerial responsibility having the highest level of depersonalization (12,97).

There was no statistically significant difference between stress or performance scores between those with managerial responsibility and those without.

Table 5.21: Comparing flexible working time option of participants according to stress, performance, and burnout scores

Flexible Working Time Option		n	Average	Std. Deviation	t	p
Positive Stress	Yes	74	30,80	5,24	1,811	**0,072**
	No	102	29,39	4,96		
Negative Stress	Yes	74	24,59	4,94	-0,261	**0,794**
	No	102	24,80	5,46		
Performance	Yes	74	10,61	2,10	0,716	**0,475**
	No	102	10,39	1,88		
Emotional Exhaustion	Yes	74	23,16	8,71	-2,187	**0,030***
	No	102	25,99	8,29		
Sense of Personal Accomplishment	Yes	74	31,59	6,43	-0,188	**0,851**
	No	102	31,77	6,13		
Depersonalization	Yes	74	10,39	4,44	-2,112	**0,036***
	No	102	11,96	5,15		

Table 5.21 is composed of a comparative test for stress, performance, and burnout scores for participants based on whether they have the option of flexible working time. According to t test results for these groups:

There is a statistically significant difference in the emotional exhaustion score between employees who have a flexible working time options and those who do not. Those who do not have a flexible working time option experience the highest level of emotional exhaustion (25,99).

There is a statistically significant difference in the depersonalization scores between individuals with a flexible working time options and those without. Those without this option experience the highest level of depersonalization (11,96).

There is no statistically significant difference between stress or performance scores based on flexible working time options.

Table 5.22: Comparing home office option of participants according to stress, performance, and burnout scores

Home Office Option		n	Average	Std. Deviation	t	p
Positive Stress	Yes	32	32,13	5,12	2,665	**0,008***
	No	144	29,51	5,01		
Negative Stress	Yes	32	22,81	3,93	-2,301	**0,023***
	No	144	25,14	5,40		
Performance	Yes	32	10,91	1,99	1,346	**0,180**
	No	144	10,39	1,96		
Emotional Exhaustion	Yes	32	20,69	8,36	-3,077	**0,002***
	No	144	25,72	8,36		
Sense of Personal Accomplishment	Yes	32	32,41	7,07	0,708	**0,480**
	No	144	31,54	6,05		
Depersonalization	Yes	32	9,63	4,32	-2,155	**0,032***
	No	144	11,67	4,97		

Table 5.22 is composed of a comparative test for stress, performance, and burnout scores for participants based on whether they have a home office option. According to t test results for these groups:

There is a statistically significant difference in the positive stress score between those who have home office work options and those who do not. Those with home office work options have a higher level of positive stress (32,13).

There is a statistically significant difference in negative stress scores between those with a home office work options and those without. Individuals without a home office work option have a higher negative stress level (25,14).

There is a statistically significant difference in emotional exhaustion scores between those who have home office work options and those who do not. Those without a home office work option experience a higher level of emotional exhaustion (25,72).

There is a statistically significant difference in the depersonalization scores of those who have home office work options and those who do not. Those without a home office work option have a higher depersonalization level (11,67).

There is no statistically significant difference in the performance scores of those with or without a home office option.

6. CONCLUSION

In this study, an investigation into the effects of stress on performance and burnout was conducted by applying the survey method to employees in the information technologies sector. Data provided by participants was analyzed using the SPSS 23.0 program, with all findings used to interpret hypotheses.

The variables in the study are stress, performance, and burnout. Factor analysis has been used to control the factor weights of these variables and to divide them into sub-variables. As a result of the data obtained from these findings, it was discovered that stress is composed of two sub-dimensions (positive stress and negative stress), burnout contains three (emotional exhaustion, sense of personal accomplishment, and depersonalization), and performance consists of only one.

Reliability analysis of the scales used in the research gave a sufficient level of results. The perceived stress scale alpha value was 0.839, the performance scale alpha value was 0.854, and the burnout scale alpha value was 0.914.

According to analyzes conducted and conclusions obtained from these findings, the results of hypotheses determined in the study are as follows:

H_{1a}: Perceived stress at an excessive level negatively affects performance.

A correlation analysis was conducted to check the relationship between the variables. As a result of factor analysis of the stress scale, “negative stress” refers to stress above the optimum stress level. As a result of the correlation analysis, there was found to be no significant relationship between negative stress and performance; stress exceeding the optimum level did not affect performance. According to this result, the H_{1a} hypothesis was not confirmed.

H_{1b}: Perceived stress at an optimum level positively affects performance.

A correlation analysis was conducted to check the relationship between the variables. As a result of factor analysis of the stress scale, “positive stress” refers to stress at the optimum stress level. As a result of the correlation analysis, there was discovered to be a significant relationship between positive stress and performance. Regression analysis was applied to determine the level of this relationship, where a 5 percent change in performance can be attributed to positive

stress. According to this result, the hypothesis H_{1b} was confirmed by this research.

H_{1c}: Perceived stress at all levels negatively affects performance.

As can be understood from hypotheses H_{1a} and H_{1b}, an optimum stress level positively affects performance while no statistically significant effect of negative stress on performance was discovered. Perceived stress at all levels, therefore, does not negatively affect performance. According to this result, the H_{1c} hypothesis was not confirmed by this research.

H_2: Perceived stress positively affects burnout.

A correlation analysis was conducted to check the relationship between the variables. As a result of this analysis, there was found to be a significant relationship between positive stress and the burnout factors of emotional exhaustion and personal accomplishment, but there was no significant relationship with depersonalization. The same analysis revealed a negative relationship between negative stress and both emotional exhaustion and depersonalization, but no significant relationship was found between negative stress and sense of personal accomplishment. According to this result, the H_2 hypothesis was not confirmed by this research.

Additional results from the findings, obtained when demographic variables are added to the analyzes made, are given below:

i. Positive stress has a positive effect on performance, where positive stress will increase the performance of an individual. Based on the research, it was concluded that people with higher positive stress levels had higher performance.

ii. It was found that positive stress had a negative effect on emotional exhaustion, while negative stress had positive effect. That is, when one's stress is at optimum levels emotional exhaustion is reduced, but when negative stress exceeds the optimum stress level, one will experience increased emotional exhaustion. As a result of the research, it was concluded that individuals with high levels of positive stress had low levels of emotional exhaustion. It was also found that people with low levels of negative stress had low levels of emotional exhaustion.

iii. There is a positive effect of positive stress on an individual's sense of personal accomplishment. As one's positive stress increases, so too does their sense of personal accomplishment. It was concluded that the individuals with high levels of positive stress in the study had a high personal sense of accomplishment.

iv. Negative stress has a positive effect on depersonalization. As an individual's negative stress increases, their depersonalization also increases. In addition, it was concluded that those with high negative stress in the survey experienced greater depersonalization.

v. The demographic variable of gender was found to be significantly correlated with positive stress, where male participants experience positive stress more than females.

vi. Male participants experience greater levels of emotional exhaustion than females.

vii. The emotional exhaustion level of single individuals is higher than that of married ones.

viii. The sense of personal accomplishment level of married individuals is higher than that of singles.

ix. Those who have graduated from high school or association's degree have the highest level of personal accomplishment.

x. The level of emotional exhaustion is highest for those who earn less than 3000 TL monthly and lowest for those earning more than 9000 TL.

xi. Employees with a total of more than 10 years' experience have the highest level of sense of personal accomplishment, with the lowest level for employees with 1-2 years of experience.

xii. Employees who have been at their current workplace for 4-6 years have the highest sense of personal accomplishment level, with the lowest level experienced by employees of 1 year or less.

xiii. Participants with managerial responsibility have a higher level of depersonalization than those who do not.

xiv. Individuals without a flexible working time option have a higher emotional exhaustion level than those without.

xv. Those who do not have a flexible working time option have a higher depersonalization level than those who do.

xvi. Those with home office work options experience greater positive stress.

xvii. Those without a home office work option have a higher negative stress level.

xviii. Those without a home office work option have a higher level of emotional exhaustion.

xix. Those without a home office work option experience higher depersonalization levels.

7. DISCUSSION

The results of the findings will be discussed below, where it will also be determined whether the conceptual framework specified in the literature section has been confirmed by this research. The evaluation will be made taking into consideration variables that are formed as a result of the factor analysis.

After the factor analysis of stress, which is an independent variable, a structure with two factors is expected. A similar factor structure is seen to be formed in studies done with a perceived stress scale in the literature (Basım 2016; Eskin and others 2013). Positive stress from a two-factor structure is also known as constructive stress, which refers to both an optimum stress level and stress which has positive effects on an individual. Negative stress, known as destructive stress, is that which adversely affects an individual above the optimum stress level.

As in the study in which Buyukbay (2017) performed the factor analysis of performance, a dependent variable of the research, the single factor scale was considered as the performance level of the individual.

When the factor analysis of burnout, another dependent variable of the study, was examined, a three-factor structure was expected. In the literature, it is seen that there is a similar factor structure in the studies conducted using the Maslach burnout scale (Baklacı 2013; Avcı 2017). These factors are named according to the types of burnout identified in the literature: emotional exhaustion, sense of personal accomplishment, and depersonalization.

In the study, a total of 4 hypotheses were categorized in two separate groups related to the research and a survey technique was used to determine whether these hypotheses were valid or not. The effects of the independent variable (stress) on dependent variables (performance and burnout) were investigated with the results of the above-mentioned factor analyzes.

One of the objectives of the research is to examine the effect of stress on performance, with the first group of hypotheses were formed for this purpose. There are three hypotheses in this group: H_{1a}, H_{1b}, and H_{1c}, which are intended to understand how stress affects performance. When the hypotheses were examined, it was seen that only the

hypothesis "*H_{1b}: Perceived stress at an optimum level positively affects performance*" was supported by the study. Negative stress, expressed as a high stress level, has no effect on performance and, as a result, the two other hypotheses cannot be supported. Based on these conclusions, this research supports the inverted-U model only up to the optimum stress level, in that positive stress (only that stress up to and including the optimum level) positively affects performance.

Tokay (2000, p.89) who wanted to investigate the relationship of organizational stress and performance achieved a similar result: that the performance of employees who are stressed at the optimum level are positively affected. Yilmaz's (2006) research on the effect of stress on performance reached the same conclusion illustrated by the inverted U model. According to this model, it is argued that an optimum level of stress positively affects individual performance whereas negative (above the optimum level) stress affects performance negatively. In Örücü and his colleagues' studies, there was found to be no significant relationship between employees' perceived stress levels and their performance (Örücü Kılıç and Ergül 2011, p.17).

Yilmaz (2012) found a significant relationship between stress and performance in his research. To examine this relationship, he created two hypotheses similar to this study's hypotheses. The first hypothesis, that "*A certain level of stress has a positive effect on performance*", was confirmed by his research, a result which coincides with the findings of this study, that stress up to the optimum level has a positive effect on performance. However, Yilmaz's (2012) study also supported the hypothesis that "*Excessive stress negatively affects performance*", contrary to the H_{1c} hypothesis formed in this study which cannot be supported due to the lack of a meaningful relationship between negative stress and performance.

When the research and similar studies in the literature are examined, it can be concluded that the general perception of stress and performance that stress always affects performance negatively is not correct. The positive impact of positive stress may be due to the need for a trigger to improve one's performance; individuals who experience no stress at work may lack the motivation to improve or even maintain their performance. In fact, it was also observed that the performance level of participants with positive stress was higher than that of their colleagues.

The research also examined the relationship between some demographic characteristics and factors of variables, finding that the positive stress levels of male workers are higher than their female counterparts and that employees with home office option have a higher positive stress level than those without.

From a managerial point of view, any organization seeking high performance from its employees should implement strategies to increase their positive stress levels. According to the results of this research, the inclusion of a home office option can increase the positive stress levels of employees. A manager who tries to bring the stress level of their employees closer to zero will actually have a negative impact because individuals need an optimum level of positive stress to trigger high performance.

Another aim of the research is to examine the effect of stress on burnout and, for this purpose, a second group hypothesis was formed to understand the relationship between stress and burnout. There is only one hypothesis in this group: H_2 "*Perceived stress positively affects burnout*", which is not supported in its entirety by the research. However, when investigating this hypothesis, various results were discovered relating to factors surrounding stress and burnout.

In the study, three factors of burnout were found: emotional exhaustion, sense of personal accomplishment, and depersonalization. The two different factors of stress had markedly different effects on the three factors of burnout. For instance, positive stress negatively affects emotional exhaustion but positively affects sense of personal accomplishment, while negative stress has positive effects on emotional exhaustion and depersonalization. In the study of stress levels, participants with a high positive stress had the lowest emotional exhaustion and highest sense of personal accomplishment. In addition, it was concluded that those with a higher level of negative stress experienced the highest levels of emotional exhaustion and depersonalization.

Sandıkçı (2010) studied the effect of stress on burnout dimensions in his work. Sandıkçı (2010), who deals with stress in one dimension, reached the conclusion that stress has a positive effect on emotional exhaustion and depersonalization and a negative effect on sense of personal accomplishment, similar to the results of this study.

Baklacı (2013) achieved similar results in her study on job stress, finding that an increase in job stress increased individual levels of burnout. In terms of burnout factors, she discovered stress to have a positive effect on both emotional exhaustion and personal

failure (referred to in this research as sense of personal accomplishment), while no relationship between stress and depersonalization was discovered. These results are similar to the conclusions of this research.

The study also examined the relationship between various demographic characteristics and burnout factors. For example, women have higher levels of emotional exhaustion than men, and the sense of personal accomplishment of married people is higher than that of singles. Participants with a higher level of education are less likely to experience a high sense of personal accomplishment than those with less education, and individuals with a monthly income of less than 3000 TL have greater emotional exhaustion. Employees who have more than 10 years of total work experience have a higher sense of personal accomplishment but those with managerial responsibility are more depersonalized than those without. Finally, participants with flexible working hours and home office options have less emotional exhaustion and depersonalization than those without.

A business wanting to reduce the burnout levels of its employees should pay attention to their stress levels, as positive stress up to and including the optimum level reduces emotional exhaustion whereas negative stress exceeding that level increases emotional exhaustion. Sense of personal accomplishment, on the other hand, is positively affected by positive stress while a decrease in negative stress results in a reduction in depersonalization. As a result, an employer should keep the stress levels of their employee at or slightly below the optimum, as excessive stress will cause the employee to experience factors or burnout. For instance, employers can reduce their employees' burnout levels by providing opportunities like flexible working hours and home office options, while also being mindful of their monthly salaries.

In domestic literature, while there are many studies investigating the effects of stress on either performance or on burnout, there are none in which the relationship between perceived stress and both performance and burnout are examined together. In addition, there has been no investigation into the IT sector in regard to this topic. For these reasons, it is therefore expected that this study will contribute to the literature in a meaningful way.

From a managerial point of view, business and human resource management methods tend to regard stress as a miserable concept, frequently desiring to eliminate it entirely from the work environment. While it can be accepted that high levels of stress can lead to adverse results, research shows that positive stress has positive effects on performance

and burnout. For this reason, it is suggested that establishing a positive stress environment within an organization rather than attempting to create a stress-free environment for each employee will increase performance and decrease burnout. Furthermore, managers must apply the key principles of COR theory to ensure that employees do not experience a loss of resources which would lead to an increase in destructive stress. Simply put, the main aim of those seeking to maximize employee performance should be to keep individual stress at optimum levels. As it is now a well-known fact that the performance and burnout of employees is of critical importance to the achievement of company goals, employers and managers must prioritize stress management for its effect on organizational success.

8. SUGGESTIONS

While this field of research is global in scope, this specific study sampled only a single sector (information technologies) and it is for this reason that further studies can and should be implemented across different sectors with varying employee profiles. Stress is undoubtedly an important factor in individual performance and burnout. In today's constantly changing and evolving work environment, employees face arguably more stress that ever before, making it of paramount importance to be mindful of its effect on performance and burnout. In this study, stress is divided into positive and negative stress factors, while burnout is divided into emotional exhaustion, sense of personal accomplishment, and depersonalization. As a result of the analyzes made, positive stress was found to affect both performance and sense of personal accomplishment positively, but negatively affect emotional exhaustion. Negative stress, on the other hand, was revealed to have a positive effect on emotional exhaustion and depersonalization. Taking these results into account, it is recommended that employees and employers alike adopt a more detailed approach to the management of stress by focusing on its impact on performance and burnout.

9. LIMITATIONS

As in all academic research, there are some limitations in this study which may prevent the generalization of its results. Most notably, individuals participating in this study were required to be working in the information technologies sector. As such, participants were selected from relevant professional positions such as software specialist, business analyst, project manager, manager of software specialists, and system specialist. Participants who work for companies in the information technologies sector but were not working in IT-specific positions (e.g. human resource specialist) did not fill out the survey, thus limiting the scope of this study.

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APPENDICES

APPENDIX 1: Survey Scale – English

Dear Participant,

This survey was prepared under consultancy of Prof. Ela Ünler to be part of a master thesis research in Business Administration carried at Bahçeşehir University. The aim of this study is to determine the effects of stress on performance and burnout at information technologies workers.

The data obtained from the survey should be kept carefully and evaluated by the investigator only for scientific purposes and the results will be subject to statistical analysis collectively. It is very important that you answer all the questions completely in terms of the reliability of the work.

Thank you for your precious time and support in scientific research.

Begüm Demirci

1. DEMOGRAPHIC INFORMATION

D1	Gender	Female	Male			
D2	Age					
D3	Marital Status	Single	Married			
D4	Do you have children?	Yes	No			
D5	The last educational institution you graduated from	1- High School	2 Junior College	3- Undergraduate	4 – Master's Degree	5 - Postgraduate
D6	Job Position	Business Analyst	Software Developer	Tester	Project Manager	Sales / Other
D7	Income Rate	<3000	3000-5000	5000-7000	7000-9000	9000<
D8	How many years have you been in working life?					
D9	How long have you been working in this workplace?					
D10	Do you have managerial responsibility?	Yes	No			
D11	What is the number of employees you are responsible for?					
D12	Is your workplace close to your house?	Yes	No			
D13	Do you have these options at your workplace?	Flexible Working Hour	Home Office			
D14	Do you have individual facilities at your workplace? (Such as a gym, recreation room)	Yes	No			
D15	What are your transportation possibilities?	Workplace's transport	Personal Car	Public transport	On foot	
D16	Do you have any hobbies?	Yes	No			
D17	If so, how often do you do it?					

2. PERCEIVED STRESS SCALE

Perceived Stress Scale **When you think of your last 3 months of life, indicate how often you experience the following statements.**		**Never (1)**	**Rarely (2)**	**Occasionally (3)**	**Sometimes (4)**	**Frequently (5)**	**Always (6)**
S1	How often have you been upset because of something that happened unexpectedly?	(1)	(2)	(3)	(4)	(5)	(6)
S2	How often have you felt that you were unable to control important things in your life?	(1)	(2)	(3)	(4)	(5)	(6)
S3	How often have you felt nervous and "stressed"?	(1)	(2)	(3)	(4)	(5)	(6)
S4	How often have you dealt successfully with irritating life hassles?	(1)	(2)	(3)	(4)	(5)	(6)
S5	How often have you felt that you were effectively coping with important changes that were occurring in your life?	(1)	(2)	(3)	(4)	(5)	(6)
S6	How often have you felt confident about your ability to handle your personal problems?	(1)	(2)	(3)	(4)	(5)	(6)
S7	How often have you felt that things were going your way?	(1)	(2)	(3)	(4)	(5)	(6)
S8	How often have you found that you could not cope with all the things that you had to do?	(1)	(2)	(3)	(4)	(5)	(6)
S9	How often have you been able to control irritations in your life?	(1)	(2)	(3)	(4)	(5)	(6)
S10	How often have you felt that you were on top of things?	(1)	(2)	(3)	(4)	(5)	(6)
S11	How often have you been angered because of things that happened that were outside of your control?	(1)	(2)	(3)	(4)	(5)	(6)
S12	How often have you found yourself thinking about things that you have to accomplish?	(1)	(2)	(3)	(4)	(5)	(6)
S13	How often have you been able to control the way you spend your time?	(1)	(2)	(3)	(4)	(5)	(6)
S14	How often have you felt difficulties were piling up so high that you could not overcome them?	(1)	(2)	(3)	(4)	(5)	(6)

3. EMPLOYEE PERFORMANCE INVENTORY

Please select the most suiting option below, that affirms your current performance appraisal result.

1-Far below the expected, 2-Below the expected, 3-As expected, 4-Above the expected, 5-Far above the expected

Employee Performance Items		**1**	**2**	**3**	**4**	**5**
P1	Your last performance appraisal point/percentile.	(1)	(2)	(3)	(4)	(5)
P2	Your last performance appraisal result in comparison to last three years.	(1)	(2)	(3)	(4)	(5)
P3	Your last performance appraisal result in comparison to your co-workers.	(1)	(2)	(3)	(4)	(5)

4. MASLACH BURNOUT INVENTORY

Burnout Inventory		Never (1)	Rarely (2)	Occasionally (3)	Sometimes (4)	Frequently (5)	Always (6)
T1	I feel emotionally drained from my work.	(1)	(2)	(3)	(4)	(5)	(6)
T2	I feel used up at the end of the work day.	(1)	(2)	(3)	(4)	(5)	(6)
T3	I feel fatigued when I get up in the morning and have to face another day on the job.	(1)	(2)	(3)	(4)	(5)	(6)
T4	Working with people all day is really a strain for me.	(1)	(2)	(3)	(4)	(5)	(6)
T5	I feel burned out from my work	(1)	(2)	(3)	(4)	(5)	(6)
T6	I feel frustrated by my job.	(1)	(2)	(3)	(4)	(5)	(6)
T7	I feel I'm working too hard on my job.	(1)	(2)	(3)	(4)	(5)	(6)
T8	Working with people directly puts too much stress on me.	(1)	(2)	(3)	(4)	(5)	(6)
T9	I feel like I'm at the end of my rope.	(1)	(2)	(3)	(4)	(5)	(6)
T10	I can easily understand how my recipients feel about things	(1)	(2)	(3)	(4)	(5)	(6)
T11	I deal very effectively with the problems of my recipients.	(1)	(2)	(3)	(4)	(5)	(6)
T12	I feel I'm positively influencing other people's lives through my work	(1)	(2)	(3)	(4)	(5)	(6)
T13	I feel very energetic	(1)	(2)	(3)	(4)	(5)	(6)
T14	I can easily create a relaxed atmosphere with my recipients.	(1)	(2)	(3)	(4)	(5)	(6)
T15	I feel exhilarated after working closely with my recipients.	(1)	(2)	(3)	(4)	(5)	(6)
T16	I have accomplished many worthwhile things in the job.	(1)	(2)	(3)	(4)	(5)	(6)
T17	In my work, I deal with emotional problems very calmly.	(1)	(2)	(3)	(4)	(5)	(6)
T18	I feel I treat some recipients as if they were impersonal 'objects'.	(1)	(2)	(3)	(4)	(5)	(6)
T19	I've become more callous toward people since I took this job.	(1)	(2)	(3)	(4)	(5)	(6)
T20	I worry that this job is hardening me emotionally.	(1)	(2)	(3)	(4)	(5)	(6)
T21	I don't really care what happens to some recipients.	(1)	(2)	(3)	(4)	(5)	(6)
T22	I feel recipients blame me for some of their problems.	(1)	(2)	(3)	(4)	(5)	(6)

APPENDIX 2: Survey Scale – Turkish

Değerli Katılımcı,

Elinizdeki anket, Bahçeşehir Üniversitesi Sosyal Bilimler Enstitüsü İşletme Bölümü programı kapsamında, Prof. Dr. Ela Ünler danışmanlığında yürütülmekte olan 'Stresin Performans ve Tükenmişlik Üzerine Etkisi – Bilişim Sektöründe Bir Araştırma'' isimli tez çalışmam kapsamında kullanılmak üzere hazırlanmıştır.

Anketten elde edilen veriler özenle muhafaza edilecek, sadece araştırmacı tarafından bilimsel amaçla değerlendirilecek ve sonuçlar toplu olarak istatistiksel analizlere tabi tutulacaktır. Çalışmanın güvenirliği açısından tüm sorulara eksiksiz olarak cevap vermeniz çok önemlidir.

Ayıracağınız çok değerli vaktiniz ve göstereceğiniz ilginiz için çok teşekkür eder, esenlikler dilerim.

Begüm Demirci

1. BÖLÜM DEMOGRAFİK BİLGİLER

D1	Cinsiyetiniz	Kadın	Erkek			
D2	Yaşınız					
D3	Medeni Durumunuz	Bekar	Evli			
D4	Çocuğunuz var mı?	Evet	Hayır			
D5	En son mezun olduğunuz eğitim kurumu	1- Lise	2 Yüksek Okul	3- Lisans	4 – Yüksek Lisans	5 - Doktora
D6	İş Yerindeki Pozisyonunuz	İş Analisti	Yazılımcı	Testçi	Proje Yöneticisi	Satışçı	Diğer
D7	Gelir Düzeyi	<3000	3000-5000	5000-7000	7000-9000	9000<	
D8	Kaç yıldır çalışma hayatı içindesiniz?					
D9	Kaç yıldır bu iş yerinde çalışıyorsunuz?					
D10	Yöneticilik sorumluluğunuz var mı?	Evet	Hayır			
D11	Sorumlu olduğunuz çalışan sayısı nedir?					
D12	İş yeriniz evinize yakın mı?	Evet	Hayır			
D13	İş yerinizde yandaki opsiyonlar var mı?	Esnek Çalışma Saati	Home Office			
D14	İş yerinizde bireysel olanaklar var mı? (Spor salonu, dinlenme odası gibi)	Evet	Hayır			
D15	Ulaşım imkânınız nedir?	Servis	Araç	Toplu Taşıma	Yürüyerek	
D16	Herhangi bir hobiniz var mı?	Evet	Hayır			
D17	Varsa hangi sıklıkla yapıyorsunuz?					

2. BÖLÜM ALGILANAN STRES SEVİYESİ ÖLÇEĞİ

Stres Seviyesi Ölçeği **Son 3 aylık hayatınızı düşündüğünüzde aşağıdaki ifadeleri ne sıklıkta yaşadığınızı belirtiniz**		**Hiçbir Zaman (1)**	**Nadir (2)**	**Çok az (3)**	**Bazen (4)**	**Çoğu Zaman (5)**	**Her Zaman (6)**
S1	Beklenmedik şekilde başıma gelen bir olaydan dolayı üzüldüm	(1)	(2)	(3)	(4)	(5)	(6)
S2	Yaşamımdaki önemli şeyleri kontrol edemediğimi hissettim	(1)	(2)	(3)	(4)	(5)	(6)
S3	Kendimi gergin ve stresli hissettim	(1)	(2)	(3)	(4)	(5)	(6)
S4	Yaşamımdaki can sıkıcı durumlarla başarılı bir biçimde baş ettim	(1)	(2)	(3)	(4)	(5)	(6)
S5	Yaşamımda meydana gelen önemli değişikliklerle etkili bir biçimde başa çıktım	(1)	(2)	(3)	(4)	(5)	(6)
S6	Kişisel sorunlarımla baş etme yeteneğimden emindim	(1)	(2)	(3)	(4)	(5)	(6)
S7	İşlerin istediğim gibi gittiğini hissettim	(1)	(2)	(3)	(4)	(5)	(6)
S8	Yapmak zorunda olduğum her şeyin üstesinden gelemeyeceğimi düşündüm	(1)	(2)	(3)	(4)	(5)	(6)
S9	Yaşamımdaki rahatsız edici olayları kontrol edebildim	(1)	(2)	(3)	(4)	(5)	(6)
S10	Yaşamımdaki olaylara hâkim olduğumu hissettim	(1)	(2)	(3)	(4)	(5)	(6)
S11	Kontrolüm dışında gerçekleşen şeylerden dolayı öfkelendim	(1)	(2)	(3)	(4)	(5)	(6)
S12	Üstesinden gelmek zorunda olduğum şeyler üzerinde düşündüm	(1)	(2)	(3)	(4)	(5)	(6)
S13	Zamanımı nasıl geçirdiğimi kontrol edebildim	(1)	(2)	(3)	(4)	(5)	(6)
S14	Güçlüklerin, üstesinden gelemeyeceğim kadar çoğaldığımı hissettim	(1)	(2)	(3)	(4)	(5)	(6)

3. BÖLÜM ÇALIŞAN PERFORMANS ÖLÇEĞİ

Çalıştığınız kurumda uygulanmakta olan performans değerleme/yönetim sistemine ilişkin sonucunuzu (puanınızı veya derecenizi) düşünerek, aşağıdaki soruları size en uygun seçeneği işaretleyerek yanıtlayınız.

1-Beklenenin çok altında, 2-Beklenenin altında, 3-Beklenen düzeyde, 4-Beklenenin üzerinde, 5-Beklenenin çok üzerinde

Çalışan Performans Ölçeği		**1**	**2**	**3**	**4**	**5**
P1	Son yıla ait performans değerleme puanınız	(1)	(2)	(3)	(4)	(5)
P2	Son 3 yıla karşılaştırdığınızda son yıla ait puanınız	(1)	(2)	(3)	(4)	(5)
P3	Diğer çalışma arkadaşlarınızla karşılaştırdığınızda, son yıla ait puanınız	(1)	(2)	(3)	(4)	(5)

4. BÖLÜM MASLACH TÜKENMİŞLİK ÖLÇEĞİ

Maslach Tükenmişlik Ölçeği		Hiçbir Zaman (1)	Nadir (2)	Çok Az (3)	Bazen (4)	Çoğu Zaman (5)	Her Zaman (6)
T1	İşimden duygusal olarak uzaklaştığımı hissediyorum.	(1)	(2)	(3)	(4)	(5)	(6)
T2	İş gününün sonunda kendimi bitkin hissediyorum.	(1)	(2)	(3)	(4)	(5)	(6)
T3	Sabahleyin yeni bir iş günü ile karşılaşacağımdan kendimi yorgun hissediyorum	(1)	(2)	(3)	(4)	(5)	(6)
T4	Bütün gün insanlarla birlikte çalışmaktan gerginlik duyuyorum	(1)	(2)	(3)	(4)	(5)	(6)
T5	İşimin beni tükettiğini hissediyorum	(1)	(2)	(3)	(4)	(5)	(6)
T6	İşimin beni hayal kırıklığına uğrattığını düşünüyorum	(1)	(2)	(3)	(4)	(5)	(6)
T7	İşimde çok fazla çalıştığımı düşünüyorum	(1)	(2)	(3)	(4)	(5)	(6)
T8	İnsanlarla doğrudan ilişki kurmayı gerektiren bir işimin olması bende stres yaratıyor	(1)	(2)	(3)	(4)	(5)	(6)
T9	İşimde yolun sonuna geldiğimi ve tükendiğimi hissediyorum.	(1)	(2)	(3)	(4)	(5)	(6)
T10	İşim gereği karşılaştığım insanların neler hissettiklerini kolayca anlayabilirim	(1)	(2)	(3)	(4)	(5)	(6)
T11	Çalışma arkadaşlarımın sorunları ile etkin şekilde ilgilenirim	(1)	(2)	(3)	(4)	(5)	(6)
T12	Yaptığım işle diğer insanlara olumlu yönde katkıda bulunduğumu hissediyorum	(1)	(2)	(3)	(4)	(5)	(6)
T13	Kendimi çok enerjik hissediyorum	(1)	(2)	(3)	(4)	(5)	(6)
T14	İşim gereği karşılaştığım insanlarla rahat bir hava yaratırım	(1)	(2)	(3)	(4)	(5)	(6)
T15	İşim gereği karşılaştığım insanlarla çalıştıktan sonra kendimi çok dinç hissediyorum.	(1)	(2)	(3)	(4)	(5)	(6)
T16	İşimde pek çok kayda değer başarı elde ettim.	(1)	(2)	(3)	(4)	(5)	(6)
T17	İşimden kaynaklanan duygusal problemlerin soğukkanlılıkla üstesinden gelirim.	(1)	(2)	(3)	(4)	(5)	(6)
T18	İşim gereği karşılaştığım insanlara sanki birer nesneymişler gibi davrandığımı hissediyorum	(1)	(2)	(3)	(4)	(5)	(6)
T19	Bu işe başladığımdan beri insanlara karşı daha hissiz olduğumu düşünüyorum	(1)	(2)	(3)	(4)	(5)	(6)
T20	Bu işin beni duygusal olarak katılaştırmasından endişe ediyorum.	(1)	(2)	(3)	(4)	(5)	(6)
T21	İşim gereği karşılaştığım insanların başlarına ne geldiği umurumda olmuyor	(1)	(2)	(3)	(4)	(5)	(6)
T22	İşim gereği karşılaştığım insanların problemlerini sanki ben yaratmışım gibi davrandıklarını hissediyorum.	(1)	(2)	(3)	(4)	(5)	(6)

APPENDIX 2: RESUME

Name Surname:	Begüm Demirci
Permanent Address:	Küçükçekmece / İstanbul, Turkey
Birthplace and Year:	Adalar, Turkey / 1990
Foreign Language:	English
Primary School:	Paşabahçe Primary School 2001, Ziya Ünsel First School 2004
High School:	Arnavutköy Korkmaz Yiğit Anatolian High School 2008
Bachelor's Degree:	Istanbul Technical University 2013
Name of Faculty:	Faculty of Science and Literature
Program Name:	Mathematical Engineering
Master's Degree:	Bahcesehir University 2018
Name of Institute:	Social Science Institute
Program Name:	Master of Business Administration
Business Life:	
	LC Waikiki 2018 - ... Mobile Developer
	Softtech 2013 – 2018 Mobile Developer
	Philip Morris SA 2012 – 2013 Software Developer
Contact:	begumkirkgoz@gmail.com