

THE RELATIONSHIP BETWEEN COGNITIVE APPRAISAL OF STRESS,
COPING STRATEGIES AND PSYCHOLOGICAL DISTRESS AMONG
CORRECTIONAL OFFICERS: PERSONAL AND ENVIRONMENTAL
FACTORS

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ABSTRACT

THE RELATIONSHIP BETWEEN COGNITIVE APPRAISAL OF STRESS, COPING STRATEGIES AND PSYCHOLOGICAL DISTRESS AMONG CORRECTIONAL OFFICERS: PERSONAL AND ENVIRONMENTAL FACTORS

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Coping is an important concept to explain stress-related factors because it is a process that is mediated by both primary, and secondary appraisal (Lazarus & Folkman, 1984). The present study aims to examine the extent to which correctional officers' cognitive appraisal associated with stress, and to develop, and test models including work stress, cognitive appraisal of stress, affect-related variables, coping strategies, psychological distress, and psychological adjustment. For this aim, a total of 268 correctional officers from seven different prisons in Turkey participated in the present study. The subjects were given Stress Appraisal Measure (SAM), Work Stress Scale for Correctional Officers (WSSCO), Positive, and Negative Affect

Schedule (PANAS), Beck Depression Inventory (BDI), Emotional Approach Coping Scale (EACS), State-Trait Anxiety Inventory-Trait Form (STAI-T), Satisfaction with Life Scale (SWLS), Job Satisfaction Scale (JSS), and The Ways of Coping Inventory (WCI) in addition to Demographic Information Form. A variety of hierarchical multiple regression analyses were conducted to reveal the significant associates of psychological distress and adjustment. According to the results of regression analyses, four models were developed, and tested by structural equation modeling. The results of the present study demonstrated that different cognitive appraisals, different affect-related variables, different coping strategies combined to influence psychological distress, and psychological adjustment measures in addition to the direct effects of work stress. Following discussion of the results in terms of theoretical, and methodological perspectives, the limitations of the present study, and the suggestions for future research were also handled.

Key Words: Work Stress, Cognitive Appraisal, Affect, Coping Strategies, Distress, Correctional Officers

ÖZ

CEZA İNFAZ KURUMU PERSONELİNDE STRESİN BİLİŞSEL DEĞERLENDİRMESİ, BAŞ ETME STRATEJİLERİ VE PSİKOLOJİK YAKINMALAR ARASINDAKİ İLİŞKİ: BİREYSEL VE ÇEVRESEL ETKENLER

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Baş etme, stresle ilgili etkenleri açıklamada stres ve birincil-ikincil bilişsel değerlendirmeler arasında aracı rolü nedeniyle önemli bir kavramdır (Lazarus & Folkman, 1984). Bu çalışma, ceza infaz kurumu personelinin strese yönelik bilişsel değerlendirmelerini araştırmayı ve stresin bilişsel değerlendirmesi, baş etme stratejileri, duygu durum, stresin neden olduğu psikolojik sorunlar ve uyum arasındaki ilişkiyi test edecek bir model geliştirmeyi amaçlamaktadır. Bu amaçla, Türkiye'nin farklı ceza infaz kurumlarında çalışan 268 ceza infaz kurumu personelinden veri toplanmıştır. Katılımcılara; demografik bilgi formunun yanı sıra Stres Değerlendirme Ölçeği, Cezaevi Çalışanları İçin İş Stresi Ölçeği, Olumlu ve Olumsuz Duygu Durum Ölçeği, Beck Depresyon Envanteri, Duygusal Yaklaşım Yoluyla Baş Etme Ölçeği, Durumluk Sürekli Kaygı Ölçeği-Sürekli Kaygı Formu,

Yaşam Doyumu Ölçeği, İş Doyumu Ölçeği ve Stresle Baş Etme Yolları Ölçeği uygulanmıştır. Psikolojik stres ve uyum arasındaki anlamlı ilişkileri ortaya koymak için çeşitli regresyon analizleri gerçekleştirilmiştir. Regresyon analizlerinin bulguları doğrultusunda dört farklı model geliştirilmiş ve bu modeller yapısal eşitlik modeli ile test edilmiştir. Çalışmanın bulguları işyeri stresinin psikolojik rahatsızlık ve psikolojik uyum ölçümleri üzerinde doğrudan etkisini (direct effect) ortaya koymuştur. Yanı sıra, farklı türde bilişsel değerlendirmelerin, duygu durumu değerlendiren farklı değişkenlerin ve farklı baş etme stratejilerinin psikolojik rahatsızlık ve psikolojik uyum ölçümleri üzerinde etki yarattığını ortaya koymuştur. Bulgular, teorik ve metodolojik açıdan tartışılmış, çalışmanın sınırlılıkları ele alınmış ve ileriye dönük çalışmalar için önerilerde bulunulmuştur.

Anahtar Kelimeler: İşyeri Stresi, Stresin Bilişsel Değerlendirmesi, Duygu Durum, Baş Etme Stratejileri, Psikolojik Sıkıntı, Cezaevi Çalışanları

*Baktım gökte bir kırmızı bir uçak
Bol çelik bol yıldız bol insan
Bir gece Sevgi Duvarını aştık
Düştüğüm yer öyle açık seçik ki
Başucumda bi sen varsın bi de evren
Saymıyorum ölüp ölüp dirilttiklerimi
Yalnızlığım benim çoğul türkülerim
Ne kadar yalansız yaşarsak o kadar iyi*

Can Yücel

This work can only be dedicated to the person who sacrificed my dream to become a reality by providing love, support, and encouragement, my beautiful wife, **EMRE**. Your unfailing love has made my dreams come true. You have been a lighthouse during my navigation in these turbulent seas.

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CHAPTER I

INTRODUCTION

Stress has deleterious impacts on human health, and affects the individual's well-being adversely. Therefore, stress has an effect on the mood, behaviors, and sense of well-being of the individual. Prolonged exposure to high levels of stress can lead to illnesses if it is not dealt with effectively. Several researchers explained its adverse impacts on the physical, and psychological health by demonstrating its relationship with cardiovascular diseases (Lloyd, Wing & Orchard, 1996), asthma (Smyth, Soefer, Hurewitz, Kliment, & Stone, 1999), chronic headache (De Benedittis & Lorenzetti, 1992), irritable bowel syndrome (Dancey, Taghavi & Fox, 1998), alcohol consumption (Cooper, Russell, Skinner, Frone & Mudar, 1992; Largo-Wight, Peterson, & Chen, 2005), anxiety (Lundberg, 1996), and depression (Miner, & Dowd, 1996; Ravindran, Griffiths, Merali, & Anisman, 1996; Stader & Hokanson, 1998). As a result, it proves to be a crucial duty for researchers, and practitioners to define stress, to explain stress-related factors, and to develop an intervention model regarding the effects of personal, and environmental factors on the individual's well-being.

In the literature, there are several approaches defining stress, and explaining

its nature. One of the most popular approaches in recent years is the “Cognitive Transactional Model” of Lazarus, and Folkman (1984). In this model, the cognitive components of stress are considered while explaining stress. In other words, stress is seen as a process that encompasses not only an appraisal of personal or environmental variables but also an interaction between the person, and his environment. This model defines psychological stress as "a particular relationship between the individual, and the environment that is appraised by the individual as taxing or exceeding his or her resources, and endangering his or her well-being" (Lazarus & Folkman, 1984, p. 19). According to this, the cognitive appraisal of stress should be taken into consideration in the evaluation of how an individual can cope with stress.

In the following text, the theoretical review of work stress, cognitive appraisals of stress, affect-related variables of stress, coping strategies to deal with stress, and their negative, and positive consequences (e.g., psychological distress, psychological adjustment) are going to be clarified. Besides, as a highly stressful situation, work stress in correctional setting is going to be considered. Following that, the interaction among the variables stated above is going to be assessed for the aim of developing an interactional model of stress.

1.1. Work Stress in Correctional Officers

The role of cognitive appraisal on stress has been examined using a variety of topics one of which is work stress. A number of researchers have investigated work stress, and its harmful impacts on physical, and mental health. Behavioral, and

emotional problems, such as depression (Patterson, 2003; Curbow, Spratt, Ungaretti, McDonnell, & Breckler, 2000; Tennant, 2001), anxiety (Lowman, 1993; Lundberg, 1996), psychosomatic problems (Long, Kahn, & Schutz, 1992), burnout (Anderson, 2000; Curbow et al., 2000; Garland, 2004; Piko, in press), and alcohol abuse (Muchinsky, 1997) have been reported to result from stressful work environments.

Work stress also has severe negative consequences on organizational processes. A significant negative association between work stress, and job satisfaction (Brough, 2005; Noelker, Ejaz, Menne, & Jones, 2006; Piko, in press), job performance (Hills & Norvell, 1991; Lu, Siu, & Cooper, 2005) or organizational commitment (Griffin, & Hepburn, 2005) has been found. Furthermore, work stress may lead to an increase in the organizational problems such as job turnover (Auerbach, Quick, & Pegg, 2003; Curbow et al., 2000; Lim & Teo, 1999; Lu, Siu, & Cooper, 2005), absenteeism (Hills & Norvell, 1991; Lim & Teo, 1999; Tennant, 2001), and job accidents (Frankenhaeuser, 1991).

To investigate the adverse effects of work stress on health, and organizational functions, researchers have preferred to study with samples working in highly stressful environments such as police officers, fire workers or ambulance personnel (Brough, 2005). Another highly stressful job studied in the stress literature is that of correctional officers.

It is known that correctional officers are the only resource in the prison for continuing the correctional facilities (Fisher-Giorlando, & Jiang, 2000; Lambert, Hogan, Barton, & Clarke, 2002), and the custody (Botha, & Pienaar, 2006). In parallel with different countries (Fisher-Giorlando, & Jiang, 2000), prison population grows rapidly depending on the possible increase in the ratio of crime due to the

widening economic gap between the upper, and the lower social classes, immigration, increase in divorce rates, changes in the structure of crime (e.g., increase in organized crime in place of individual crime) etc. Therefore, political, and governmental decisions have been adopted by the authorities in order to cope with increase in the ratio of crime.

In Turkey, Ministry of Justice changed the physical conditions, and the job descriptions of the correctional officers in the correctional settings, recently (Şenol, 2003). According to Rafferty, and Griffin (2006), frequent, and sudden changes result in anxiety for the employees due to unpredictability of change. Therefore, the impacts of these changes on the correctional officers should be further examined.

In the present study, employees that work in the correctional settings are selected as a sample particularly due to the fact that working in the correctional settings can be very stressful, and the correctional officers are among the groups being exposed prolonged high level of stress (Şenol-Durak, Durak, & Gençöz, 2006). Correctional officers' daily working conditions range from boring to dangerous (Cooperstein, 2001). Regardless of the setting, correctional officers' job is to maintain order within the institution, and enforce rules, and regulations. Additionally, they are responsible for not only the custody of prisoners but also the correction of the prisoners' misbehaviors, and their rehabilitation (Armstrong, & Griffin, 2004; Şenol-Durak et al., 2006; Farkas, 1999; Wright, 1993).

The correctional officers perceive their roles as "being impotent key keepers" (Kommer, 1993). When they try to create, and maintain a humanly environment within the walls (Hepburn & Knepper, 1993), many complications arise such as role conflict, and role ambiguity (Durak, Şenol-Durak, & Gençöz, 2003; Van Voorhis,

Cullen, Link & Wolfe, 1991), night shifts, work overload (Botha, & Pienaar, 2006; Şenol-Durak et al., 2006; Triplett, Mullings, & Scarborough, 1996), sick leave (Deitch, Koutsenok, & Ruiz, 2004), and the perceptions of danger (Armstrong, & Griffin, 2004; Auerbach et al., 2003; Deitch et al., 2004; Dowden, & Tellier, 2004; Durak et al., 2003; Farkas, 1999; Moon, & Maxwell 2004; Van Voorhis et al., 1991) which resultantly effect their performance, and mental health. When Schaufeli, and Peeters (2000) overviewed the earlier studies conducted with correctional officers, they found that role problems, work overload, required social contact with prisoners, colleagues, and supervisors, and poor social status to be the most frequently emphasized stress factors.

Additionally, the correctional officers can not cope with work stress successfully due to many reasons including lack of organizational support (Armstrong, & Griffin, 2004; Auerbach et al., 2003; Şenol-Durak et al., 2006; Garland, 2004; Lambert et al., 2002), burnout (Garland, 2004), and negative perceptions about the job in the society (Cooperstein, 2001; Şenol-Durak et al, 2006; Moon, & Maxwell 2004). Besides, contacting with inmate also has a negative influence on the correctional officers particularly during the stressful occasions (Garland, 2004). These factors affect their mental health adversely on top of the already mentioned regular stressors in their working settings.

1.2 Cognitive Appraisal of Stress

Richard Lazarus, and his colleagues propose “the Cognitive - Relational Theory of Stress” (Lazarus, 1966; Lazarus & Launier, 1978; Lazarus & Folkman,

1984) in which “cognitive appraisal” is a central concept in explaining stress. Within the framework of this theory, stress is described as “an evaluative process that determines why, and to what extent a particular transaction or series of transactions between the individual, and the environment is stressful” (Lazarus & Folkman, 1984, p. 19). That is, cognitive appraisal can be described as the individual’s evaluation of whether or not a situation is threatening to his or her well-being and the possible responses of the individual in order to manage the situation (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). How an individual copes with stress is initially determined by how that individual subjectively appraises the stressful event, and how he responds, and adapts to stress. In other words, cognitive appraisal has a mediator value in between the stressful events, and the reactions (Karademas, & Kalantzi-Azizi, 2004). According to this model, appraisal process determines the perception, management, and termination of stress (Largo-Wight et al., 2005). Additionally, highly significantly appraised events are more likely to result in stress reactions (King, 2005). In this model, stress inevitably includes cognitive processing since the responses related to the stressful situation involve inconsistent information in the individual, which are also accompanied with previously held assumptions about the self, the world, and the future (Cordova, Ruzek, Benoit, & Brunet, 2003).

Cognitive appraisal of stress theory is a popular approach in the studies regarding stress because it has been examined in numerous studies. For example, the effect of racial, and gender discrimination (King, 2005), heart disease (Stewart, Hirth, Klassen, Makrides, & Wolf, 1997), fertility (Berghuis, & Stanton, 2002), exam anxiety in university (Folkman, and Lazarus, 1985) have been investigated via the cognitive appraisal stress theory.

Cognitive appraisal of stress theory was examined in numerous samples who had been exposed to a variety of stressful situations, among which are students (Devonport, & Lane, 2006; King, 2005; Largo-Wight et al., 2005), adolescents (Rowley, Roesch, Jurica, Vaughn, 2005), athletes (Gan, & Anshel, 2006), women (stress due to prenatal depression) (Honey, Bennett, & Morgan, 2003), mothers (stress due to noncompliance with their children) (Dopke, & Milner, 2000), medical patients, and their families (Cordova et al., 2003), and employees (Rafferty, & Griffin, 2006).

The cognitive appraisal of stress is composed of two stages, namely the “primary appraisal”, and the “secondary appraisal” (Lazarus & Folkman, 1984). The former occurs during the initial perception of a stimulus, and the latter, the secondary appraisal, takes place following the primary appraisal of threat or stress.

Alternatively, Ferguson, Matthews, and Cox (1999) stated that these “two appraisal processes are not mutually exclusive, but rather interact to produce an overall percept” (p. 98).

1.2.1 Primary Appraisals

Primary appraisal includes the initial perception of a stimulus, and the individual decides whether the event is threatening or stressful for himself (Bookless, Clayer, & McFarlane, 2000; Folkman, Lazarus, Gruen, & DeLongis, 1986; Folkman, & Lazarus, 1986; Largo-Wight, et al., 2005). In the primary appraisal stage, the individual is thinking “Am I in trouble or being benefited, now or in the future, and in what way?” (Lazarus & Folkman, 1984, p.31). He evaluates whether the event can

have a potential impact on his well-being through evaluating the personal significance of own values, beliefs, situational intentions, and goal commitments (Devonport & Lane, 2006). In other words, during the primary appraisal stage he decides whether the situation will be positive, can be challenged, or involve harm, loss, and threat for his existence (Lazarus & Folkman, 1984). At the end of this evaluation, the individual may interpret the situation in three ways: (1) it is irrelevant, (2) it is positive and not threatening, (3) it is stressful (Devonport, & Lane, 2006; Karademas, & Kalantzi-Azizi, 2004).

This appraisal is influenced both by the situational aspects of the event, and psychosocial aspects of the individual. The situational aspects of the event include the quality of the stressful event, the degree of familiarity with it, the timing, and the context in which it occurs, and the ambiguity of its outcome. On the other hand, the psychosocial aspects of the individual contain the person's values, motivations, role expectations, personality characteristics, religious affiliation, and the perception of controllability on it.

The categorization of the primary appraisal has been made differently. While Lazarus and Folkman (1984) accepted three categories, namely harm/loss, threat, and challenge, Peacock and Wong (1990) ignored harm/loss dimension while developing the questionnaire of Stress Appraisal Measure (SAM), which is the most frequently used scale for the assessment of cognitive appraisals of event since. Instead of the harm/loss dimension, which was not an anticipatory factor -it is the evaluation of the past event not present or future event-, Peacock and Wong (1990) added the dimension of centrality which is described as the perception of the

importance of the event. Therefore, they proposed the perception of centrality to the scale besides the factors of challenge, and threat perception.

1.2.1.1 Challenge

Challenge is usually accepted as one of the factors of positive reappraisal (Devonport & Lane, 2006). It includes the evaluation of the possibility of potential gain in specific situations (Karademas & Kalantzi-Azizi, 2004; Peacock & Wong, 1990). In other words, individuals appraise even highly stressful events as possibilities to obtain gains. Karademas and Kalantzi-Azizi (2004) stated that this kind of appraisal is “anticipatory” (p.1034). This means individuals see the possibility of obtaining gain but they do not acquire it immediately following the event. An example to the items of challenge is “To what extent can I become a stronger person because of this problem?”(Peacock & Wong, 1990).

1.2.1.2 Centrality

The centrality is related to the patterns of goals, beliefs, and commitments all of which lead to greater distress (King, 2005). An example to the items of centrality in SAM is “Does this situation have important consequences for me?” (Peacock & Wong, 1990). It is known that highly significantly appraised events are more likely to result in stress reactions (King, 2005).

Centrality plays considerable role in appraising the events as significant or important for one-self. It includes considering long term consequences of the stress (Roesch & Rowley, 2005; Rowley et al., 2005). High levels of centrality are

generally related to health problems (King, 2005). Even though the event had taken place long ago, preoccupation of the event might have prolonged due to the role of centrality (King, 2005).

The relationship between discrimination related stress, and centrality was found as positive in a moderate degree (King, 2005). The mediator role of centrality in the relationship between the attributes of stress, and discrimination was demonstrated.

1.2.1.3 Threat

Appraisal of threat is generally associated with the evaluation of potential harm or loss in a specific situation (Karademas & Kalantzi-Azizi, 2004). An example to the items of threat in SAM is “Is this going to have a negative impact on me?” (Peacock & Wong, 1990).

Among the impacts of a specific event, individuals may consider potential harm, and loss (Meeks, Woodruff-Borden, & Depp, 2003; Rowley et al., 2005). Therefore, the appraisal of threat is accepted as one of “the anticipatory appraisals” (Karademas & Kalantzi-Azizi, 2004; p.1034) that are initiated during the change process. Individuals may evaluate this process as a possible threat to their self concept as well (Eilam & Shamir, 2005).

Threat is correlated with many behavioral, and emotional problems some of which are behavioral disengagement, denial, and, substance abuse (Rowley et al., 2005).

1.2.2 Secondary Appraisals

During the secondary appraisal stage, the individual evaluates his resources for coping, and determines how to cope with the stressor (Folkman & Lazarus, 1986; Largo-Wight et al., 2005). In other words, secondary appraisal is defined as the evaluation as to “which coping options are available, the likelihood that one can apply a particular strategy or set of strategies effectively” (Lazarus & Folkman, 1984, p.35). Thus, the individual decides whether his coping resources and options would be sufficient to overcome the harm and/or threat, and also to maximize gains (Folkman, Lazarus, Dunkel-Schetter et al., 1986).

The basic resources which help the individual to cope with stress effectively at this stage are psychological resources (e.g., problem-solving skills), social support (e.g., the presence of emotionally supportive people), physical resources (e.g., good health), and material resources (e.g., economical well-being) (Karademas & Kalantzi-Azizi, 2004) of the person. After completing cognitive appraisal of the stressful event, and having the resources at hand, the individual can try to figure out a coping strategy to deal with the situation.

There are three dimensions of secondary appraisal process: 1. Self-control, 2. Other-control, and 3. Uncontrollability.

1.2.2.1 Self-Control

The self-control dimension is defined as having the ability to overcome distress by oneself (Roesch & Rowley, 2005; Rowley et al., 2005). An example to the items of self-control is “Will I be able to overcome the problem?” (Peacock & Wong, 1990).

1.2.2.2 Other-Control

The dimension of other-control is defined as evaluating situations as having available recourses that help to overcome the distress (Roesch & Rowley, 2005; Rowley et al., 2005). An example to the items of other-control is “Is there anyone who can help me to manage this problem?” (Peacock & Wong, 1990). Honey and her colleagues (2003) found that while dealing with postnatal depression, women were less likely to appraise the events as controllable by others.

1.2.2.3 Uncontrollability

Besides the dimensions of self-control, and other-control, the sense of reduced control over the situation is possibly experienced by the individuals when they are exposed to stress (Eilam & Shamir, 2005). An example to the items of uncontrollability is “Is this a totally hopeless situation?” (Peacock & Wong, 1990). Uncontrollability is about evaluating the extent to which individuals attribute the outcomes of the events to internal or external resources or the predictability of the events (Gan & Anshel, 2006). In this way, their emotions are also directly affected by the sense of uncontrollability. For instance, during this process, individuals may feel that they lost their power, status, social relationships, and benefits (Eilam & Shamir, 2005), and they may feel totally helpless (Roesch & Rowley, 2005; Rowley et al., 2005).

1.2.3 The Relationship between Primary Appraisals and Secondary Appraisals

The interactions among the dimensions of primary and secondary appraisal

have been widely investigated in the literature. Studying the relationships among the dimensions of primary appraisal, Skinner and Brewer (2002) reported that the dimensions of challenge and threat appraisal change in the opposite directions. In other words, while the level of threat appraisal increases, the level of challenge appraisal decreases or vice versa.

Moreover, the relationships between the primary and secondary appraisals have also been studied. In order to examine role of general appraisal style, which is obtained through combining the scores of different types of appraisal, separate regression analyses were conducted by Hemenover and Dienstbier (1998). They found the perception of threat as a dimension of primary appraisal, and the perception of control by the self as a dimension of secondary appraisal as the main predictors of the general appraisal style.

Additionally, the roles of the factors that have impacts on the link between primary, and secondary appraisal have been examined through various variables. In this regard, factors such as gender, time, age, type of problems, skill level, and cultural factors have been examined as related to their effects on the relationship between primary, and secondary appraisal. The role of gender, and time was examined by Devonport and Lane (2006) in a sample composed of undergraduate students. As regards to the gender effect on the stress related to the dissertation period; male undergraduate students were found as perceiving the dissertation as more threatening, and less challenging as compared to the female students. The results of the study as regards to the effect of time, primary appraisal of stress was found as not considerably changing over time. Time effect was also examined by Stewart and his colleagues (1997) with a group of heart disease patients. They found

that individuals were to appraise the event as less central, and less threatening when coming to the hospital for the first time compared to their second visit.

Besides, age, and the type of problem had an influence on the types of cognitive appraisals in Aldwin, Sutton, Gina, and Spiro's research (1996). They found that individuals in the early mid life (64.9%), and late life (40.6%) significantly reported as challenged by the problem. Furthermore, appraisal type may be affected by the problem type. Work problems created both challenge (74%), and annoyance appraisal (82.5%). However, older men were less likely to feel challenged or annoyed, probably due to the loss of job. While problems with wife (or partner) generally elicited annoyance (92.8%), health problems elicited both threat (28.1%), and harm/loss appraisals (22.5%) due to the likelihood of health problem.

Examining the effects of skill level among the athletes, Gan and Anshel (2006) found that the skill level of the athletes had a significant influence on the threat, and centrality appraisal among female but not male participants. To put it in a more detailed fashion, for the female athletes, the higher the skill level, the higher the responses of these individuals through the appraisals of threat, and centrality.

Cultural factors may play a significant role in the cognitive appraisal of the individuals as well. Karademas and Kalantzi-Azizi (2004) examined the essence of threat, and challenge during appraisal process with a sample of Greek university students. Although they emphasized the role of both challenge, and threat, they only obtained significant results for the threat appraisal. They explained this difference as Greek students' tendency to evaluate exams as threat. Therefore, cultural factors may play considerable roles during the cognitive appraisal process.

1.3 Affect Related Variables Related to Stress

Particular cognitions and emotions are associated with each other (Frijda, Kuipers, & ter Schure, 1989; Roseman, Spindel, & Jose, 1990; Smith & Ellsworth, 1985; Smith & Lazarus, 1993). For example, while anger has been related with blaming other individuals, guilt has been associated with blaming oneself. Besides, fear-anxiety occurs when evaluating particular situations as dangerous. On the other hand, happiness occurs in case individuals obtain whatever they want. In order to sum up these associations, Smith, Haynes, Lazarus, and Pope (1993, p.918) suggested emotions, and their core relational themes in the Table-1.

Table-1: Appraisal Components and Core Relational Themes Associated with Six Emotions

Emotion	Core relational theme
Anger	Other-blame
Guilt	Self-blame
Fear-Anxiety	Danger-threat
Sadness	Irrevocable loss, helplessness about harm or loss
Hope-Challenge	Effortful optimism, potential for success
Happiness	Success

Affect related variables such as positive affect, negative affect, and emotional approach coping have been found to have effects on stress reactions. In the following text, each of them will be explained in detail.

1.3.1 Positive and Negative Affect

Watson and Tellegen (1985) propose a two-dimensional model of affect, namely, positive affect (PA), and negative affect (NA). According to this model, while NA is characterized by subjective distress, and unpleasantness, PA is characterized by being enthusiastic, active, alert (Watson, Clark, & Tellegen, 1988), happy (Fredrickson & Joiner, 2002), upbeat, appreciative, and grateful (Fredrickson & Losada, 2005). It is also stated that PA is related to intuition (Bolte, Goschkey, & Kuhl, 2003).

Although PA and NA are considered as acting together, they are conceptualized as distinct, and independent dimensions, and not merely the opposites of the same axis (Cheng & Furnham, 2003; Larsen & Diener, 1985; Watson, Clark, & Tellegen, 1988; Watson & Tellegen, 1985; Zevon & Tellegen, 1982). There is support for PA and NA as independent, and distinct aspects of emotional well-being although the independence of these factors has been debated. While some researchers found a significant negative correlation between PA, and NA after controlling for measurement error (Green, Goldman, & Salovey, 1993), others did not find any significant correlation between these dimensions (Cheng & Furnham, 2003). Similarly, it is found that both depression, and anxiety shared characteristics of NA, but, in contrast, depression was distinguished by symptoms of anhedonia, and low PA, whereas anxiety appeared unrelated to PA (Gençöz, 2002; Clark & Watson, 1991; Watson, Clark, & Carey, 1988).

1.3.1.1 Positive Affect

Folkman and Moskowitz (2000) criticized that the role of PA has not been

extensively studied in the stress process. They suggested that the relationship of PA with the stressful period should be clearly examined. They mentioned that NA, and PA can be observed at the same time even during the stressful periods, and that in fact, PA may bring the individuals to the point of a “psychological break”, and “support continued coping efforts” (p.649). Additionally, Watson and Tellegen (1985) stated that high PA is related to high energy, full concentration, and pleasure. Moreover, individuals with high PA have a tendency to be satisfied with their jobs (Bowling, Beehr, Wagner, & Libkuman, 2005).

1.3.1.2 Negative Affect

Watson and Tellegen (1985) called attention to situations where low NA is related to sadness, and loss of interest or pleasure, as opposed to PA. High NA represents a wide variety of aversive mood states such as nervousness, and tension, whereas low NA represents being calm, and relaxed.

As mentioned above, NA has been considered as reflecting individual differences in the negative emotions, and the self concept (Watson & Clark, 1984). It has been argued that NA may affect perceived levels of stress by having impacts on perceptions of the self or the environment. Accordingly, individuals who are found to be high in NA tend to report higher levels of dissatisfaction, and perceived stress, when compared with individuals who have lower levels of NA (Watson & Clark, 1984). Individuals with high NA have a particular tendency to be dissatisfied with their jobs (Bowling et al., 2005).

1.3.2 The Relationship of Cognitive Appraisals with Positive and Negative Affect

According to Chang, Sanna, and Yang, (2003), cognitive appraisal is more important than the affectivity in the determination of the psychological adjustment. On the other hand, relative importance of affectivity can not be totally ignored. The affectivity can be accepted as a bridge between the cognitive appraisal of stress, and its consequences. For instance, it is stated that PA is closely related to challenge appraisal, and it prevents individuals from clinical depression (Folkman & Moskowitz, 2000).

Similarly, Hemenover (2001) examined the mediator role of mood between the personality characteristics, and cognitive appraisals. He found that individuals with PA had a tendency to rely on the positive features of the situation which in turn leads to a more positive appraisal when they are exposed to hypothetical stressors. Negative mood on the other hand, had its direct effects only on secondary appraisals.

Dopke and Milner (2000) found that mothers experienced greater stress, threat, uncontrollability, and NA when they encounter noncompliance from their children. However, this study could not find the effects of self-control perception in the mothers, regardless of whether the children were compliant or not.

1.3.3 Emotional Approach Coping

Stanton, Kirk, Cameron, and Danoff-Burg (2000) affirm the emotional approach coping in solving life problems caused by stress, and psychological conflicts. Consistent with Lazarus and Folkman's (1984) conceptualization of coping

processes, the emotional approach coping is understood to represent effortful attempts to approach one's emotions in response to situations appraised as taxing or exceeding one's resources. The concept of the emotional approach coping has been derived from the earlier, and more widely known concept of emotion-focused coping, and has been developed in response to the criticism that emotion-focused coping generally confounds emotional outcome, and distress (Stanton, Danoff-Burg, Cameron, & Ellis, 1994). According to Stanton and her colleagues (1994), items of the coping inventories are “contaminated with emotional distress” (p.351).

Stanton, Kirk, and their colleagues (2000) emphasize that the emotional approach coping involves at least three distinct strategies as our current knowledge on the personality, and developmental psychology on functional emotion-directed personality processes show. The first strategy, namely, emotion identification is defined as the maintenance of self-awareness, and active acknowledgment of one's emotional states (Saarni, 1990, Salovey, Bedell, Detweiler, & Mayer, 1999; cited in Stanton, Kirk et al., 2000). The second strategy which is emotional processing is defined as the actively involvement in the attempt to explore meanings, and come to an understanding of one's emotions (Averill & Thomas-Knowles, 1991; cited in Stanton, Kirk et al., 2000). Finally, the third strategy known as the emotional expression is defined as the interpersonal, and intrapersonal (e.g., journal writing, artistic production) forms of letting feelings out (Averill & Thomas-Knowles, 1991; Salovey & Mayer, 1990; cited in Stanton, Kirk et al., 2000). These three distinct strategies are recently started to be grouped into two, with the names of emotional expression, and emotional processing (Smyth, 1998).

1.3.3.1 Emotional Expression

Environment promoting the self disclosure of emotions may decrease distress, and increase well-being (Cordova et al., 2003). Besides, it affects the way the individuals cope with stress (Stroebe, Schut, & Stroebe, 2005). Generally speaking, having someone who is willing to listen him is necessary for a person to self disclose (Stroebe et al., 2005). Some examples of the items of emotional expression are “I allow myself to express my emotions”, and “I get my feelings out in the open”.

Some individuals may not have anyone who listens to him, therefore, they may inhibit their emotions. In fact, inhibition of emotions may prolong distress, and lead psychological impairments (Cordova et al., 2003). Broderick, Junghaenel, and Schwartz (2005) established the link between emotional expression, and some psychological disorders such as anxiety, and depression. They found that written emotional expression alleviates depression but not the anxiety in the fibromyalgia patients. However, Iwamitsu, Shimoda, Abe, Tani, Okawa, & Buck, (2005) found that suppression of emotion increased anxiety as well as negative moods among the breast cancer survivors.

Emotional expression is defined as allowing oneself to express feelings, taking time to express feelings, and feeling free to express feelings intentionally (Stanton, Kirk et al., 2000). It basically provides benefits for the person with regard to the health-related outcomes, and also the psychological adjustment of the individuals for highly stressful situations such as grief (Stroebe et al., 2005). In other words, people who express their emotions through oral or written report exhibit fewer negative physical or psychological symptoms than the other individuals who

keep their emotions to themselves. In a longitudinal research, it has been demonstrated that coping through emotional expression is beneficial for breast cancer patients (Stanton, Danoff-Burg, Cameron, Bishop, Collins, Kirk, & Twillman, 2000). Similarly, Smyth (1998) conducted a meta-analysis to investigate the role of written emotional disclosure on health. This study found that written emotional disclosure significantly provides an improvement on the physical health.

Smyth, Stone, Hurewitz, and Kaell (1999) conducted a study in a sample of asthma or rheumatoid arthritis patients. For the purposes of the study the researchers categorized these patients into experimental, and control groups. The patients in the experimental group were instructed to write over the most stressful event of their lives during a three-session period, and the ones in the control group were asked to write about emotionally neutral topics during the same amount of time. Both asthma, and rheumatoid arthritis patients in the experimental group showed significant improvement as compared to patients in the control group. This improvement could be assessed in the physiological measures, such as, lung function (through spirometry at 4-month follow-up) for asthma patients, and by a rheumatologist for rheumatoid arthritis patients. Similarly, Stanton and colleagues (2002) demonstrated that if the breast cancer patients were assigned to write over the importance of expressing emotions, and finding benefit over four sessions, their medical visits for cancer-related morbidities diminished in the early stage of breast cancer.

When the cancer patients perceived their health status as becoming poorer (following three months), the amount of expression of their emotions decreased (Stanton, Danoff-Burg et al., 2000). However, when their quality of life was increased, emotional expression also increased (Stanton, Danoff-Burg et al. 2000)

The relationship between emotional expression, and health outcome depends on the finding that emotional expression may serve as a vehicle for clarifying, and pursuing goals (Stanton, Kirk et al., 2000; Stanton et al., 2002). Expressive writing provides benefits for three aspects that are important during the course of treatment, which are, making efficient schedule for medical appointments, taking other proactive actions to address medical concerns, and need for fewer medical appointments for cancer-related morbidities.

A study held by Stanton, Danoff-Burg et al. (2000) revealed that emotional expression was not always effective in all conditions or among all individuals. To clarify this point of view, Stanton, Kirk, and their colleagues (2000) examined the effect of gender, and types of coping on the emotional expression. Results revealed that women utilized emotional expression more than men. When looking at the types of coping, emotional expression was found to be correlated only with distress-contaminated coping, seeking social support, and problem-focused coping. Stanton, Danoff-Burg and colleagues (2000) explained this gender difference as those women tended to be using emotional expression for pursuing goals.

Alongside the above mentioned health outcomes, emotional expression serves as a facilitator in reaching suitable outcomes in the area of cognitive emotional processing (Cordova et al., 2003). Cordova and his colleagues (2003) stated that “cognitive emotional processing may entail self exposure to traumatic memories, and related fears” (p.359). Cognitive emotional processing is composed of contemplating, confronting, and integrating experiences into one’s life (Cordova et al., 2003). For this reason, this aspect of emotional approach coping, namely, the emotional processing should also be taken into account in the attempts of explaining

the relationship among stress, cognitive appraisal, affect, coping, and distress.

1.3.3.2 Emotional Processing

Emotional processing includes taking time to figure out real feelings, understanding the feelings, realizing the feeling as real, and valid, and acknowledging feelings intentionally (Stanton, Kirk et al, 2000), all of which are neutral statements (Segerstrom, Stanton, Alden, & Shortridge, 2003) such as “I delve into my feelings to get a thorough understanding of them”, and “I acknowledge my emotions”. This process helps individuals to pursue goals successfully, and facilitates their adjustment to life (Stanton, Kirk et al., 2000). This way of thinking was found as reducing the perception of negative content such as negative emotional statements in college students (Segerstrom et al., 2003).

Stanton, Kirk and their colleagues (2000) explored the relationship between gender, type of coping, and emotional processing. Results demonstrated that women were more likely to use emotional processing. When looking at the correlation between emotional processing, and types of coping, emotional processing was only correlated with seeking social support, and problem-focused coping.

The relationship between quality of life, profile of mood states, and emotional processing was also investigated with a sample of cancer patients (Stanton, Danoff-Burg et al. 2000). When cancer patients’ perception of the quality of life increased, emotional processing increased as well. Interestingly, when the distress increased in the profile of mood states, an increase in emotional processing was observed. The researchers concluded that distress might be related with the health status of these patients.

1.3.4 The Relationship between Cognitive Appraisals and Emotional Approach Coping

Stanton, Kirk and their colleagues , (2000) suggest that the role of emotion-focused coping on stress outcome is not clear because of three reasons. First, many items of emotion-focused coping measures are confounded with measures of distress, and psychopathology. Second, inclusion of these items on coping scales may increase the relations between emotion-oriented coping and maladjustment, and finally, specific emotion-focused strategies are adaptive in confronting stressful circumstances under particular conditions. Therefore, any attempt to distinguish different facets of coping through emotional approach is very evocative to understand the relationship among stress, cognitive appraisals, emotions, coping strategies, and stress outcomes.

Researchers who examine the relationship between stress, and its related factors suggest that handling interaction among stress, cognitive appraisals, and coping strategies is not enough to understand the nature of stress. In other words, appraisal processes involve cognitive processes. However, appraisal itself is not simply a cognitive issue. Other issues, emotions, should also be considered in the relationship among psychological stress, cognition, and psychological outcome because, as an essential part of our lives, they have impact on how we think, and behave. For this reason, appraisal theorists (Roseman, Spindel, & Jose 1990) assert that the evaluation or interpretation of an event is more important than the event itself in the determination of not only whether an emotion will be experienced or not, but also which kind of emotion will be experienced. However, the role of emotion can be evaluated through the stressful events. Typically, a situation does not generate

emotion by itself. Cognitive evaluation of the situation plays considerable role on the extent, and the kind of emotions to be experienced. Additionally, evaluation of the individual about the situation is emotion-generative. For example, anger commonly arises when someone else is responsible for the situation. Guilt, on the other hand, is observed when the person himself perceives responsibility for the event. Sadness emerges when one feels helpless. This cognitive evaluation of situation shapes, and organizes the emotional responses by facial expression, autonomic activity or action tendencies. Therefore, emotion occurs as a result of cognitive appraisal of the situation. Lazarus (1991), states that reappraisal plays a fundamental role in the theories about emotion. Moreover, reappraisal is also an essential part of stress reduction (Katz & Epstein, 1991; Meichenbaum, 1985). In this framework, alongside the cognitive appraisal, capacity to regulate emotion, and cognitive appraisal-emotion relationship affect social functioning of the individuals (Eisenberg, 2001), and maintains mental health (Gross & Munoz, 1995). For this reason, clarifying the nature of cognitive processing in emotion generation, and regulation, and the role of appraisal of emotion in psychological outcome seem to be crucial.

In addition to cognitive appraisal, and emotion relationship for the stressful events, the relationship between emotions, coping strategies, and stress seem to be highly important factors in examining the individuals' responses to stressful situations. Parallel to this, there are current debates on the role of emotion-focused coping strategies on physiological, and psychological outcomes of stress in literature.

1.4 Coping Strategies to Deal with Stress

According to Karademas and Kalantzi-Azizi, (2004) "coping, and cognitive

appraisal are interdependent. Each part exerts influence, and determines the other.” (p.1034). Coping is an important concept to explain stress-related factors because it is a process that is mediated by both primary, and secondary appraisal (Lazarus & Folkman, 1984). Therefore, coping is expected to be consistent with cognitive appraisal. It is known that positive appraisal is associated with initiating coping (Long et al., 1992). Making its definition is not an easy task because of the necessity to consider multiple transactions between the individual, and the environment (Schwarzer & Schwarzer, 1996, p. 107). That is why coping can not be defined as a homogeneous concept. Many strategies, tactics, responses, cognitions, and behaviors are involved in the definition of coping.

Lazarus and Folkman (1984) stated that coping is the effort to manage a situation but it should not be confounded with the outcome of the situation because coping contains any thinking, and attempts, regardless of the outcome. In other words, the outcome may be negative or positive, pleasant or unpleasant, wanted or unwanted, however this does not show that there are no coping strategies.

The distinction between coping and the secondary appraisal is important. While secondary appraisal includes the process of coping resources, definition of coping implies “constantly changing cognitive, and behavioral efforts to manage specific external/internal demands that are appraised as taxing or exceeding the resources of person” (Lazarus & Folkman, 1984, p. 141). From this perspective, initially, Lazarus and Folkman (1984) defined coping as thoughts, and behaviors used to manage the internal, and external demands of situations that are appraised as stressful. In other words, coping is the act of managing emotions, and behaviors in order to lessen the effects of excessive stress (Folkman & Lazarus, 1986; Largo-

Wight et al., 2005), and manage person, and environment transaction (Folkman, Lazarus, Gruen et al., 1986). After that, Lazarus (1991) reviewed the definition of coping from the perspective of cognitive frame. According to him, coping has been defined as "...cognitive, and behavioral efforts to manage specific external or internal demands (and conflicts between them) that are appraised as taxing or exceeding the resources of a person" (p. 112).

To fully understand coping, Schwarzer and Schwarzer (1996) emphasized three basic assumptions which should be kept in mind. First, in order to start the coping process making an effort does not need to bring about successful results. Second, the types of effort can be cognitive or behavioral in nature. And finally, coping occurs only after cognitive appraisals of the stressor take place. In terms of cognitive and behavioral efforts, the role of coping types in the way that individuals respond to daily hassles, and serious life events (Lazarus, 1993; Lazarus & Folkman, 1984; Parker & Endler, 1992) are considered by researchers. For instance, individuals suffering from post-acute coronary syndrome had higher scores on depression due to emotion-focused coping (Di Benedetto, Lindner, Hare, & Kent, 2007).

It is important to differentiate the type of coping style which is utilized in order to deal with stress. Lazarus and Folkman (1984) categorize two main types of coping; "problem-focused coping", and "emotion-focused coping". The former is an action-oriented and instrumental type, which seeks to alter relationship between self, and environment; while reducing the demands of the situation or expanding the resources to deal with, especially for the financial, and family problems. This type of coping is related to the reduction of conflict between the individual, and the

environment. Emotion-focused coping, on the other hand, is a cognitive strategy, which seeks to reduce emotional pain, and distress; controlling the emotional response to the stressful situation, especially used in illness, and death. It is used to regulate stressful emotions, and change the meaning of the stressful situation.

The type of coping strategies is related with psychological symptomatology. Generally, emotion-focused coping is associated with the indicators of maladjustment (Durak, 2002). It is related with pessimism (Scheier, Weintraub, & Carver, 1986), physical symptoms (Billings & Moos, 1984), negative affect, depression (Endler & Parker, 1990), and panic disorder (Hino, Takeuchi, & Yamanouchi, 2002). However, problem-focused coping is related to well-being. As an illustrating study, panic disorder patients who used problem-focused coping showed significant improvement in their well-being (Hino et al., 2002). Similarly, university students using problem-focused coping had higher health outcome (Karademas & Kalantzi-Azizi, 2004).

The distinction among types of coping is not always as clear as one might expect due to insufficient specificity. Therefore, it is not an easy task. In fact, a number of authors have relied on the distinction for theoretical purposes, but defining how behaviors or cognitions actually constitute each type has been highly variable. For example, the Ways of Coping Scale - Revised (Folkman, Lazarus, Dunkel-Schetter et al., 1986) which is the most frequently used scale in coping studies, assesses coping by means of eight factors such as confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem-solving, and positive reappraisal. On the other hand, some researchers suggest that problem-focused strategies are composed of

“confrontive coping”, “accepting responsibility”, and “planful problem-solving”, whereas emotion-focused coping strategies are composed of “distancing”, “seeking social support”, and “escape-avoidance”. Nevertheless, this categorization does not reflect the whole framework, since an item in any subscale may take part in more than one coping style. For example, in the seeking social support subscale, the item “talked to someone who could do something concrete about the problem” seems decidedly problem-focused, while “accepted sympathy, and understanding from someone” is clearly emotion-focused. For this reason, ways of removing these problems have been verified in various studies. At first, Carver, Scheier, and Weintraub (1989) make an effort to solve this problem, and clearly delineate the various forms of problem-focused, and emotion-focused coping by developing the COPE inventory. This inventory consists of five problem-focused subscales called “active coping”, “planning”, “suppression of competing activities”, “restraint coping”, and “seeking social support for instrumental reasons”. It also contains five emotion-focused subscales called “seeking social support for emotional reasons”, “positive reinterpretation, and growth”, “acceptance”, “turning to religion”, and “focus on, and venting of emotions”. In addition, subscales measuring “behavioral disengagement”, “mental disengagement”, and “alcohol-drug disengagement” are included. Secondly, Gençöz, Gençöz, and Bozo (2006) suggest higher order factor analysis to solve this problem. According to these researchers, Ways of Coping Inventory is composed of three higher order subscales namely, problem-focused coping, emotion-focused coping, and seeking social support. Thus, some independent items loaded in the subscale of seeking social support.

Another issue related with coping strategies is how the process of

relationship between coping strategies and psychological symptomatology is handled. Parker and Endler (1992) explain the importance of coping strategies by putting forward the relationship between coping, and psychological outcome. According to these researchers, coping strategies mediate between antecedent stressful events, and negative consequences such as, anxiety, depression, psychological distress, and somatic complaints. In other words, coping strategies more strongly explain the relationship between stressful events, and negative consequences.

Certain kinds of coping strategies, such as avoidance, are consistently associated with poor mental health outcomes. However, effectiveness of other kinds of coping, such as seeking social support or problem-focused coping are depending on characteristics of the appraised stressful encounter. They are sometimes associated with negative outcome or sometimes with positive outcome.

1.4.1 Problem-Focused Coping

Briefly, problem-focused coping is described as altering the events causing distress (Folkman & Lazarus, 1986; Devonport & Lane, 2006). It is the ability to gain control over the situation whenever it is evaluated as uncontrollable (Folkman & Moskowitz, 2000). It is established by means of the identification of situation specific goals with focus, and attention (Folkman & Moskowitz, 2000). Individuals using this type of coping have positive outcomes as focusing attention, and having a sense of mastery, and control (Folkman & Moskowitz, 2000) as well as general positive health outcomes (Karademas & Kalantzi-Azizi, 2004) such as decrement in the depression (Berghuis & Stanton, 2002).

1.4.2 Emotion-Focused Coping

Emotion-focused coping is used in order to regulate stressful emotions (Folkman & Lazarus, 1986; Devonport & Lane, 2006). Individuals have a tendency to use emotion focused coping more frequently during highly stressful situations as compared to less stressful situations (Gan & Anshel, 2006).

1.4.3 Seeking Social Support

Seeking social support is not always helpful for the individuals to decrease their stress due to the importance of the type, and timing of seeking support (Karademas & Kalantzi-Azizi, 2004). For instance, during the final exams for the Greek students it was better to use seeking social support for obtaining general health outcomes (Karademas & Kalantzi-Azizi, 2004). Besides, using seeking social support decreased the depression scores among women who were dealing with the fertility problem (Berghuis & Stanton, 2002).

The role of seeking social support in cognitive appraisal has also been examined. According to Taylor (1991), negative events including threat appraisals can be associated with social support seeking, but the individuals can prefer not to be with others. Therefore, the perception of threat and challenge may be associated with seeking social support in different contexts.

1.4.4 The Relationship between Cognitive Appraisals and Coping Strategies

After encountering with stress, the individuals initially appraise the event cognitively (Lazarus, 1991). In this framework, both the primary, and secondary

appraisal has an influence on the coping strategies (Link, Robbins, Mancuso, & Charlson, 2005). Following the cognitive appraisal, the individual selects coping strategies to deal with stressful event. Generally, it is anticipated that coping should be consistent with cognitive appraisal of stressful situations. In this framework, Ferguson and his colleagues (1999) stated that while negative appraisals (threat) should be thought in relation with avoidant, and emotion-focused coping, positive appraisals (challenge) should be thought in relation with problem-focused coping. In other words, different patterns of cognitive appraisal may activate different coping schemas, and may affect the choice of coping strategies which is influenced by the individual's perception of controllability of stressful situations (Folkman, 1984; Valentiner, Holahan, & Moos, 1994). For instance, women were found to be less likely to appraise event as controllable by others used avoidance coping strategy to lessen the effect of postnatal depression (Honey et al., 2003). Moreover, centrality, and uncontrollability had significant correlations with emotion-focused coping while dealing with exams (Peacock, Wong, & Reker, 1993). Besides, threat appraisals were associated with increased emotion-focused coping while challenge appraisal is associated with problem-focused coping (Peacock et al., 1993).

The relationship between secondary appraisals and coping strategies has been extensively studied. Generally, it has been showed that the appraisal of self-control is associated with problem-focused coping (Folkman & Lazarus, 1980; Peacock et al., 1993). Conversely, uncontrollability perception is associated with more likelihood for preferring the emotion-focused coping strategies (Folkman & Lazarus, 1980).

The principal rule in the activation of cognitive appraisal, and coping is that the individual should perceive the event as stressful. If an individual perceives an

event as not stressful (harmless and/or unthreatening), then coping is not needed (Gan & Anshel, 2006). However, a coping strategy is consciously initiated when the event is appraised as stressful (e.g., threatening, challenging, unpleasant, and harmful). Thus, cognitive appraisal precedes the evaluations regarding the perceived intensity, and perceived controllability of a stimulus or event.

As soon as cognitive appraisal process is initiated, the process of deciding which coping strategies are to be preferred starts. The coping strategies are chosen depending on the context of the coping appraisal process which is influenced by two reasons. The first is that a situation is evaluated as stressful, at least in part, whenever the individual perceives a lower ability to cope with it. The second is that stressors perceived as controllable elicit more proactive coping mechanisms (Aspinwall & Taylor, 1997), while those perceived as uncontrollable elicit more avoidance strategies (Compas, Malcarne & Fondacaro, 1988; Lazarus & Folkman, 1984; Roecker, Dubow & Donaldson, 1996). For example, problem-focused coping, that is, altering the individual-environment relationship causing distress, is more likely to be used if the situation is perceived as controllable whereas emotion-focused coping, that is, regulating stressful emotions, is used more when individuals perceive the situation as uncontrollable (Forsythe & Compas, 1987; Lazarus, 1991). Similarly, Rowley and colleagues (2005) mentioned that while threat appraisal is highly related with maladaptive coping strategies such as denial, and venting emotions, challenge appraisal is highly related with active coping, planning, positive reinterpretation, and use of humor.

Numerous characteristics of primary and secondary appraisals shape coping strategies. Some primary appraisal variables have been linked to differences in

coping. This can show a discrepancy relying on the level of perceived threat (Folkman, Lazarus, Dunkel-Schetter et al., 1986), perceived stakes (Folkman & Lazarus, 1985), appraised difficulty (Folkman & Lazarus, 1985), perceived desirability, and perceived amount of change in the situation (Stone & Neale, 1984). It can be said that the high scores in any primary appraisal subscale are associated with the high score in any specific coping subscale. For example, McCrae (1984) demonstrate that challenge subscale scores are correlated with active problem solving while threat subscale scores are associated with passive, and ineffective coping strategies such as faith, fatalism, and wishful thinking. In the same way, Folkman, Lazarus, Gruen et al. (1986) confirm that used coping strategies varied with different types of threats.

Similar to primary appraisal, the relationship between secondary appraisal, and coping have been demonstrated. Generally, perception of control has been associated with problem-focused coping during the major life events (Forsythe & Compas, 1987) such as final exams in university (Folkman and Lazarus, 1985). However, in case of daily hassles (Forsythe & Compas, 1987), perception of controllability has not been associated with problem-focused coping. Regarding the emotion-focused coping, it does not seem to be related with either major life events or daily hassles (Forsythe & Compas, 1987). Nevertheless, Stone and Neale (1984) reveal that perceived control is negatively correlated with emotion-focused coping for daily hassles.

Folkman and her colleagues (1986) conducted a study in order to observe the effect of coping style while controlling the effect of personal variables in the first step, primary appraisal in the second step, and secondary appraisal in the third step.

All variables explained 43% of the variance on the psychological symptoms. While personal variance (mastery, and interpersonal trust) explained 18% of variance, primary appraisal explained 17% of them. However, coping variables explained 9% of variance on the psychological symptoms.

Although researchers demonstrate the relationship between cognitive appraisals, and coping strategies, there is a serious problem emerging from an overlap between cognitive appraisals, and coping strategies. Appraising a situation, for instance as a threat, loss or challenge, may trigger coping. Nonetheless, a distinction between appraisal and coping is not an easy task, and it cannot be practically made. Lazarus (1991) tries to solve this problem by stating their diverse features of appraisal and coping. According to him, "coping refers to what a individual thinks or does to try to manage an emotional encounter; and appraisal is an evaluation of what might be thought or done in that encounter" (p. 113).

1.4.5 The Relationship between Affect and Coping Strategies

There is a debate between whether affect leads to coping or coping leads to affect immediately after the stressful events. Folkman and Lazarus (1988) highlight that coping directs emotions. However, they did not ignore the partial contribution of emotion immediately after the event. They accepted that appraisal process is followed by the emotion. Then, emotion creates cognition. At the end of this process, individuals reappraise emotions again via the cognition. Briefly, they assume that coping mediates the relationship between initial emotion, and reappraised emotion. In order to observe these complex relationships, after collecting data from the young

adults via interviews, they conducted separate regression analyses for each specific emotion pattern (reappraised emotion) as a dependent variable. They took personal variables in the first step, initial emotions at the beginning in the second step, and coping style at the last step. They found that feelings of disgust/angry were had a high positively correlation with both initial emotions, and different coping styles such as distancing, confrontive coping. On the other hand, planful problem-focused coping, and positive reappraisal were negatively associated with the feelings of disgust or anger. Besides, pleased or happy feelings were significantly associated with initial emotions. They were also positively associated with planful problem solving, and positive reappraisal, and negatively associated with confrontive coping. On the other hand, significant effect of coping could not be observed for the other types of affect such as worry and fear. In fact, the feelings of worry or fear were only associated with initial emotions seen immediately after the event. Therefore, coping may not totally explained with the occurrence of all kinds of emotions.

At this point, another perspective arises; that is the possibility that affect may lead emotions. Hemenover and Dienstbier, (1998) stated that “Coping may modify an ongoing emotion (e.g., anxiety may be attenuated following successful coping), however it is our perspective that the appraisal process, and resulting emotions guide coping” (p. 234). They conducted separate regression analyses for NA, and PA in order to observe predictive power of general appraisal. According to the findings, general appraisal style significantly predicted perceived stress, NA, and PA.

Hansdottir, Malcarne, Furst, Weisman, and Clements (2004) examined the role of PA, and NA in adjustment to a chronic rheumatic disease. Affect mediated the association between coping, and functional outcomes after controlling for disease

severity. They suggested that the adjustment to chronic illness for chronic rheumatic disease patients was influenced by both positive and negative affect. Similarly, Kahn, Hessling, and Russell, (2003) examined the relationship between social support, physical health, and NA. They found that individuals with higher scores on NA had lower social support, and poorer health outcomes.

1.5 Stress and Distress

Stress and its consequences have been examined by using various variables. These consequences may be examined under two categories, namely the negative and positive consequences. Stress and its negative consequences have been examined in different ways as well. Basically, both physical, and psychological health status have been investigated as related concepts with stress in the literature. In other words, stress is correlated with both physical and psychological disorders (Hemenover & Dienstbier, 1998). For instance, some negative consequences are considered like involvement in peer violence, and consumption of alcohol (Tschann, Flores, Pasch, & VanOss Marin, 2005) and general negative health status among the adolescent sample (Karademas & Kalantzi-Azizi, 2004).

Negative consequences of stress have been examined in the present study under two factors, namely depression and trait anxiety, which were referred to as psychological distress. Meeks, Woodruff-Borden, and Depp (2003) argue that depression, and anxiety measures assess “unitary distress” construct since they have high inter-correlations among different samples.

1.5.1 Stress and Depression

Stress may be seen as the initial reaction to stressful events for some individuals. Appraisal, coping style, and the affectivity play considerable role on depression. When looking at the appraisal, Folkman and Lazarus (1986) stated that depressive individuals possibly used threat or harm appraisal.

Coyne, Aldwin, and Lazarus, (1981) examined the role of appraisal, and the role of coping style among the depressive individuals. According to the results, individuals with depression had a tendency to appraise event as requiring more information but not appraising situations as requiring acceptance. Regarding coping, depressive individuals used seeking emotional and social support as a coping style. Similarly, it is established that coping resources predicted the depression scores of the individuals following the acute coronary syndrome (Di Benedetto et al., 2007). Especially, the individuals had higher scores on depression at the initial period of acute coronary syndrome due to lower coping resources.

Folkman and Lazarus (1986) found that individuals with elevated scores of depression used more self-control appraisal, confrontive coping, and escape/avoidance during the stressful time period. They had high scores on anger/disgust, and worry/fear but lower scores on confidence/secure. When comparing the scores of depressive, and non-depressive individuals according to primary, and secondary appraisal, depressive individuals had higher scores on the primary appraisal dimensions (self esteem stakes, own physical well-being, and goal at work deteriorate , financial problems, loss of respect for another, and concern for the one's own well-being arise), and secondary appraisal dimensions (had to hold back from acting) than their counterparts.

Affectivity plays a crucial role in depression as well. Depression and negative affect are closely related with each other (Meeks et al., 2003). Feelings of loneliness, sadness, and hopelessness are commonly seen among the depressive individuals (Detrick, Chibnall & Luebbert, 2004). Kahn and colleagues (2003) found that among elderly, higher scores of NA were significantly associated with higher depression scores. Besides, Chang and colleagues (2003) found that pessimism and depression relationship was mediated by the effect of negative affectivity.

Folkman, Chesney, Collette, Boccellari, and Cooke (1996) assessed factors affecting the depressive mood of the caregivers of HIV patients. The use of self distancing and self blame coping styles, did not diminish their depressive mood. On the other hand, if they found the positive meaning of care-giving their depressive mood relieved.

1.5.2 Stress and Trait Anxiety

Anxiety is twice as prevalent as mood disorders (Stanley & Beck, 2000). It leads to negative consequences such as decreased performance among police officers (Detrick et al., 2004). Trait anxiety, hypervigilance bias to threat related information (Calvo & Cano-Vindel, 1997) has two parts namely cognitive, and somatic anxiety. In most of the studies, only the cognitive anxiety yielded significant findings under stress (i.e., Andrade, Gorenstein, Vieira Filho, Tung, & Artes, 2001; Fox & Houston, 1983). According to Calvo and Cano-Vindel, (1997) trait anxiety mainly includes cognitive content.

Spielberger and Vagg (1984) stated that the individuals having high trait anxiety were more vulnerable to stress than the individuals having low trait anxiety.

Furthermore, they evaluated the events more dangerous, and threatening as compared to the individuals having low trait anxiety. Similarly, McNally (1989) explained trait anxiety by means of comparing it with anxiety sensitivity. According to him, trait anxiety was a general tendency to respond fearfully to stress.

According to types of appraisals, Raffety, Smith, and Ptacek (1997) mention that while challenge appraisals are related to a facilitating form of anxiety, threat appraisals are connected to debilitating anxiety. While challenge increases adaptation, threat leads avoidance, and low performance. Similarly, individuals appraised a referendum state (Quebeck separation from Canada) as threat, had significantly elevated scores on trait anxiety (Flett, Endler, & Fairlie, 1999). Threat triggers the perception of danger that leads proneness to have anxiety in certain life circumstances (Mogg, Mathews, Bird, & Macgregor-Morris, 1990).

Trait anxiety and NA are correlated with each other (Andrade et al., 2001; Meeks et al., 2003). Anxious individuals have higher scores on tension, nervousness, and worry (Detrick et al., 2004). Besides, individuals having different levels of trait anxiety used different coping mechanism. Individuals with higher trait anxiety had a tendency to use more avoidance coping but less problem-focused coping (Hemenover & Dienstbier, 1998).

1.6 Stress and Psychological Adjustment

The psychological adjustment following a stressful period has been verified directly, and generally indirectly. Among cancer patients, effects of primary and secondary appraisal through the coping strategies were examined as the outcome variables of the improvement in health related behavioral patterns (Link et al., 2005).

In another study, positive consequences of stress and psychological adjustment were examined through life satisfaction and job satisfaction, which are closely related to each other (Ünal, Karlıdağ, & Yoloğlu, 2001). Ünal and his colleagues (2001) study revealed that when life satisfaction increased, job satisfaction might increase as well.

Positive consequences of stress have been examined in this research with two variables; life satisfaction and job satisfaction, which referred to as psychological adjustment.

1.6.1 Stress and Life Satisfaction

Life satisfaction is the balance between desired personal goals, and general living conditions that influences the psychological, and physical well-being of the individuals (Koivumaa-Honkanen, Honkanen, Viinamaki, Heikkilä, Kaprio, & Koskenvuo 2001). Dissatisfaction with life and physical well-being are interrelated concepts. In this respect, Clarke and Black (2005) mention that physical disorders can impair the quality of life. Besides, affect, and life satisfaction are also closely related with each other. For instance, Duckworth, Steen, and Seligman (2005) stated that individuals with PA have significantly higher levels of life satisfaction. They emphasized that NA is not significantly related with life satisfaction. On the contrary, elderly individuals having higher scores of NA had significantly lower scores on life satisfaction (Kahn et al., 2003)

Life satisfaction of the correctional officers has yet to be examined thorough studies. Research has been conducted using samples of doctors, elderly and managerial women. Ünal and his colleagues (2001) examined the factors related with

the life satisfaction of the doctors. Female and married participants had higher scores on life satisfaction than male and unmarried participants. Besides, participants having extra job, and satisfied with the annual income had higher scores on life satisfaction than the other individuals. However, the researches did not detect a significant difference among the sample across age. When examining the effect of total years in job, the doctors working more than 11 years had higher scores than the others, and the doctors working less than 6 year had the lowest scores in the life satisfaction scale. According to them, having experiences in job makes the doctors stronger when they encounter stressful situations.

Kjeldstadli and colleagues (2006) examined the factors related with the life satisfaction of the medical students. They suggested that while using active or problem-focused coping, and seeking social support would increase satisfaction with life, passive or emotion-focused coping would have a negative impact on life satisfaction. Besides, life satisfaction of the medical students decreased, if they experienced career anxiety when they got graduated.

İmamoğlu and Kılıç (1999) compared the life satisfaction scores of their elderly sample according to factors like gender and type of institution they live in. They found that elderly living in high quality institutions had higher scores on life satisfaction, and more personal control than the others living in the low quality institutions. In terms of gender, female participants were more satisfied with their life as compared to male participants.

Long and his colleagues (1992) found that managerial women working in demanding, and non-supportive work environment, and having less self efficacy had greater dissatisfaction via direct and indirect effects of appraisal, and cognition.

When life conditions of the participants were supportive and not demanding, they were more likely to be satisfied with life with the help of appraisal and coping.

1.6.2 Stress and Job Satisfaction

Job satisfaction is accepted as one of the predictors of work related psychological well being (Brough, 2005) as well as one of the predictors of work outcome (Noelker et al., 2006) such as job turnover. It is related with the challenge appraisal (Andres & Grayson, 2003). Besides, it is generally decreased when the length of time in the job increased (Bowling et al., 2005). It is also associated with the frequency of change through uncertainty (Rafferty & Griffin, 2006).

Several workers have been examined in relation to factors that influence job satisfaction. For instance, nurses' social support networks were positively correlated with having job satisfaction, while personal, and work related stressors of nurses' were negatively correlated to job satisfaction (Noelker et al., 2006). Nurses' job satisfaction was negatively correlated with emotional exhaustion, psychosomatic symptoms, and role conflict, and positively correlated with personal accomplishment (Piko, in press). Moreover, daily hassles (organizational, and operational hassles) were correlated with low job satisfaction among the police officers (Brough, 2005).

Job satisfaction has a special implication for the correctional facilities. If they get satisfied with their job, their contribution in the correctional activities may increase. Examining the current literature regarding this group, it is observed that correctional officers had higher level of job satisfaction when working in less stressful work environment (Deitch et al., 2004). Wener (2006) describes this less stressful environment in a more detailed fashion. According to him, correctional

officers who work in prisons which also provide an opportunity for the officers to take direct supervision are more likely to be satisfied with their jobs and with the quality of the conditions of the prison. Parallel with this viewpoint, integration between the officers was found to be significantly correlated with the job satisfaction of the employees (Lambert et al., 2002). When the integration level between the officers increased, job satisfaction was observed to increase as well. Training and organizational support were other variables associated with the job satisfaction of correctional officers (Griffin, 2001).

1.7 A Proposed Model Examining the Relationship among Stress, Cognitive Appraisal of Stress, Affect, Coping Strategies, and Psychological Outcome

Despite the vast quantity of work done regarding stress, cognitive appraisal of stress, affect, coping strategies and psychological outcome in the literature, there are no studies which handle all of these variables in combination. Selecting few variables to explore the rationale behind the cognitive appraisal may be criticized as ‘spurious’, such as examining the effect of NA with only health outcomes (i.e. depression and life satisfaction) (Kahn et al., 2003, p.13).

The relationship between cognitive and emotional processes has been examined by means of stress, and its consequences. In terms of primary appraisal, generally, it is suggested that threat appraisal activates more emotion-focused coping strategies than challenge appraisal. Conversely, challenge appraisal initiates more problem-focused coping strategies than threat perception. For example, Mikulincer and Victor (1995) indicate that threat appraisal was positively correlated with emotion-focused coping while challenge appraisal was positively correlated with

problem-focused coping. Bjorck, Cuthberston, Thurman, and Yung (2001) prove the role of primary appraisal on coping strategies. They demonstrated that challenge appraisal predicted more problem solving, and positive reappraisal coping than harm/loss, and threat appraisals.

Likewise, Karademas and Kalantzi-Azizi (2004) examined the relationship between types of appraisal, coping, and their effects with a group of Greek students. The results of the study revealed that when the students appraise the final exams as a threat, they were more likely to report symptoms of disorder and less likely to use positive coping mechanism. However, when the students appraised the final exams as challenge; they had fewer symptoms via using the positive coping mechanism. Challenge appraisal increased the level of excitement in the faculty members. However, threat appraisal decreased the utilization of challenge appraisal eliciting emotions.

Skinner and Brewer, (2002) conducted a study in a sample composed of the university students and faculty members in order to observe relationship among appraisal, coping, emotions, and psychological well-being. They found that the appraisal of threat led to a decrease in coping expectancies and positive emotions whereas the appraisal of challenge increased coping expectancies and positive emotions.

Rowley and his colleagues (2005) examined the relationship among the variables of cognitive appraisals, affect, coping strategies, and psychological well-being. While threat appraisal was related with depression, challenge was negatively associated with depression. Besides, threat was negatively associated with hope, while challenge was positively associated. Regarding coping, challenge was

positively associated with active coping, positive reinterpretation, acceptance, humor, and planning. Conversely, threat appraisal was positively associated with self-deficient coping styles such as maladaptive coping such as denial, venting emotions, behavioral disengagement, and substance abuse.

In addition to the relationship between cognitive appraisal of stress and coping strategies, the relationship between cognitive appraisal and emotion should be taken into account when evaluating the stress-related variables. Many researchers claim that emotions are not caused by events themselves, but through the appraisal of events in relation to goals, and plans. In other words, the primary, and secondary appraisal processes generate emotions. In this frame, Lazarus (1999) stated that stress, and emotion can not be separated from each other. In fact, there are 15 emotions that are commonly elicited as a result of an individual's appraisal of stressful events. These emotions are: anger, envy, jealousy, anxiety, fright, guilt, shame, relief, hope, sadness, happiness, pride, love, gratitude, and compassion. These emotions, once elicited, serve to generate a coping response for the individual. In this manner, individuals attempt to regulate the individual-environment relationship, either through emotion- or problem- focused coping.

In general, negative emotions tend to be related with danger, insecurity, discomfort, stress, and reduced immune activity, while positive emotions have a tendency to be associated with safety, security, comfort, and relaxation (Smith, 2006). Specifically, harm/loss, and threat appraisals are highly correlated with negative emotions although challenge appraisal is highly correlated with positive emotions. For example, if the event is perceived as a "threat" (i.e., may cause harm, injury, or loss), other negative emotions (e.g., fear, worry, anger, and anxiety)

accompany with this appraisal. Alternatively, the event may be construed as a “challenge” (i.e., may enable growth, learning, or other benefits for the individual), and this perception will probably be accompanied by positive emotions such as enthusiasm, excitement, and hope.

Affectivity is another factor that plays a crucial role in measures of life satisfaction. Chang and colleagues (2003) found that the relationship between optimism, and life satisfaction was mediated by the effect of positive affectivity in the university students. Positive affectivity identified the relationship between optimism, and life satisfaction. Conversely, there is a negative relationship between pessimism and life satisfaction also.

Apart from positive affectivity, emotional approach coping may play crucial role on the psychological adjustment of the individuals. At first, Stanton and her colleagues (1994) found that women became less depressed and more satisfied with their lives over time when they used emotional approach coping during stressful events. Secondly, Berghuis and Stanton (2002) examined the effect of fertility problem of the couples. They found that if the men coped with this problem through the emotional processing and emotional expression, there was a significant decrease in their depressive symptoms. Additionally, using less avoidance and religious coping helped men to relieve their depressive symptoms. Among women, emotional approach coping was cited as a significant factor in preventing depressive symptoms. Besides, using highly problem solving coping, and less avoidant coping were seen as other protectors.

Stanton and her colleagues (1994) found that men became more depressed and less satisfied with their lives over time when they used emotional approach

coping during stressful events.

In spite of the fact that cognitive appraisal is associated with emotion, clarifying the relationship between cognitive appraisal of stress, and emotion is not an easy task due to the fact that cognitive appraisal is a very hard process to observe or to be aware of. However, such emotions help us to understand the process of cognitive appraisal while we are exposed to a stressful event. According to Steptoe and Vögele (1986), the cognitive appraisal process is often difficult to observe empirically because the individual may be unaware of any or all of the basic elements of an appraisal. They explained this situation by the sentence of “sensation focusing, intellectualization, denial and other strategies may only attenuate response insofar as they distract the individual from environmental threat” (p. 253). On the other hand, the appraisal process affects the quality, and intensity of the emotional reaction. For this reason, any effort to explain cognitive appraisal and emotion is meaningful.

When examining the complex relationships among these variables mentioned above, a model based on the literature findings is proposed (see Figure 1). According to this model, work stress predicts the type of primary appraisals. If the stress is perceived as challenge, then self-control, positive affect, problem-focused coping, and psychological adjustment are followed. In turn, psychological adjustment leads to positive affect. If the stress is perceived as threat, the individual perceives the event as uncontrollable. Therefore he becomes more likely to feel negative affect and rely on emotion-focused coping causing psychological distress (depression or anxiety). In turn, psychological distress leads to negative affectivity.

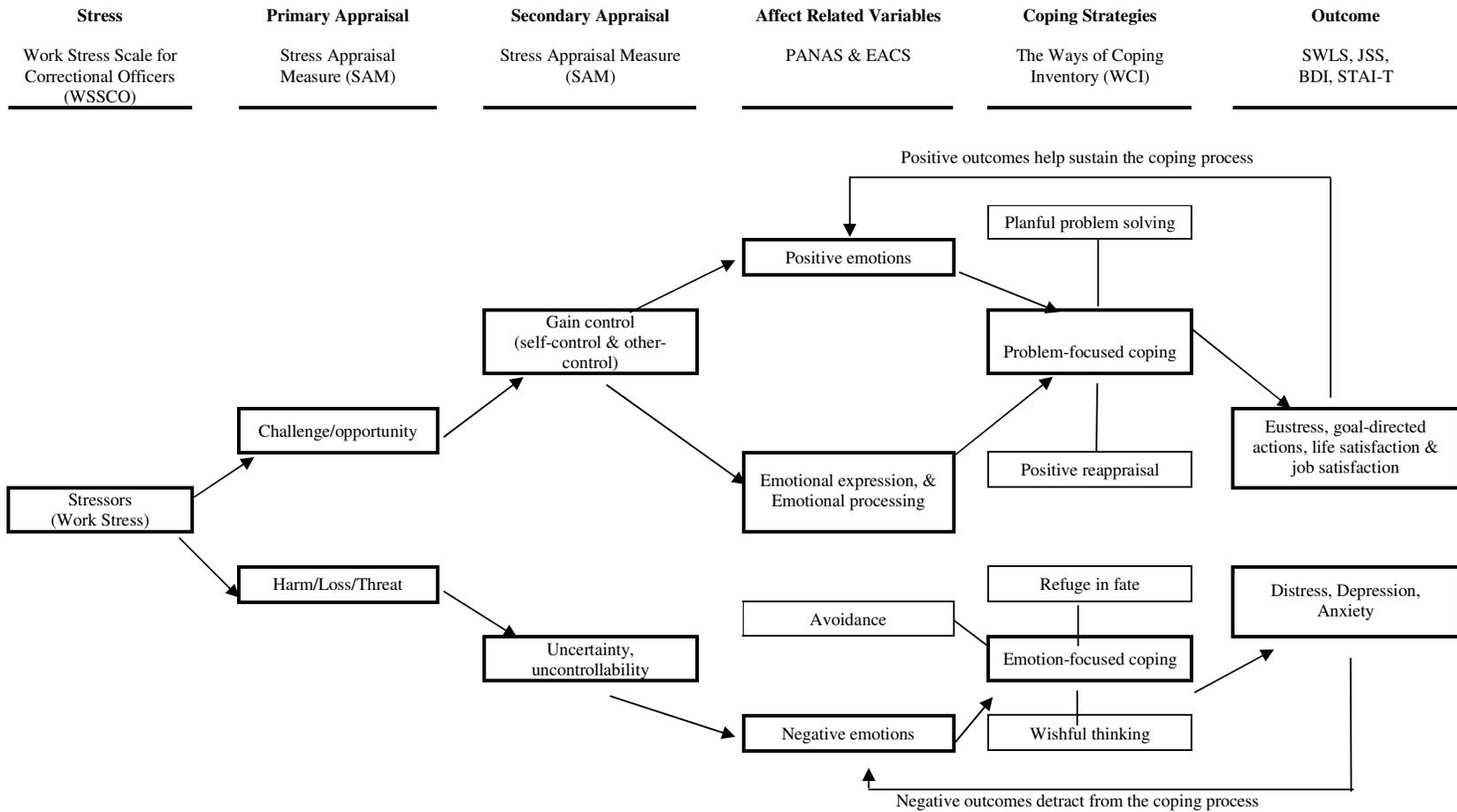


Figure-1: The Proposed Model

1.8 Aims of the Present Study

The probability of evaluation of the event as harm, loss, or threat in correctional settings is quite high among the correctional officers. Similarly, the determination process of the correctional officers regarding the coping resources to overcome the harm and threat is not clear. These officers usually lack any opportunity to share the emotional loads of work conditions even with their families because of special characteristics of their job, particularly due to the confidentiality that the job demands. In fact, most of the time, they may not even be aware of and distinguish their emotions clearly.

For these reasons, it is thought that correctional officers are one of the most appropriate participants for this study. To fully understand the experience of being a correctional officer, one should examine all components of transactional stress model that have not been examined with this population previously. After testing the hypotheses, it would be possible to generate a stress reducing intervention program which is developed particularly for correctional officers; this possibly makes this study an original work.

Although there is an extensive work done on cognitive appraisal of stress, coping strategies and emotion, the complete pattern and dimensions of their relationship have not been shown empirically. Besides, it is criticized that the effect of both primary, and secondary appraisals on coping has not been examined extensively yet (Link et al., 2005). Similarly, the effect of emotional disclosure on coping is not known well (Stroebe et al., 2005). For these reasons, the present study comprehensively focuses on examination of the relationship among cognitive and

affective dimensions of stress with coping, and psychological distress and well-being.

The purposes of the present study are to examine the extent to which correctional officers' cognitive appraisal is associated with stress and to explain the complex relationship between the stress-related measures such as cognitive appraisal of stress, affect factors, coping strategies, psychological distress and psychological adjustment.

Initially, several hypotheses are constituted based on literature findings for stress-related measures, and outcome of stress. Afterwards, the hierarchical regression analyses are employed in order to examine the role of cognitive appraisals, affect-related measures, and coping strategies on outcomes of stress. Then, based on the obtained findings the Structural Equation Modeling (SEM) is employed in order to develop a model explaining the associations between cognitive appraisals, affect related variables, coping strategies, and psychological outcomes.

1.9 Hypotheses of the Present Study

In terms of the associations among the stress-related measures, coping responses are influenced by cognitive appraisals. Challenge appraisals have been associated with more problem-focused coping (Bjork & Cohen, 1993; McCrea, 1984) while threat appraisals are linked to more emotion-focused coping (McCrea, 1984). Emotion-focused coping strategies are suggested to correlate with stress, and distress, and the effectiveness of any particular coping strategy depends on its appropriateness to the situation (Folkman & Moskowitz, 2004; Lazarus and Folkman, 1984).

In this framework, this study will test eighteen hypotheses with hierarchical regression analyses in five sets run for the data obtained from correctional officers.

First set of analyses run for the measures of *Primary Appraisal*: After controlling for the possible effects of the socio-demographic variables;

Hypothesis 1: Higher work stress will be associated with higher *threat perception*.

Hypothesis 2: Higher work stress will be associated with higher *centrality perception*.

Hypothesis 3: Higher work stress will be associated with higher *challenge perception*.

Second set of analyses run for the measures of *Secondary Appraisal*: After controlling for the possible effects of the socio-demographic variables, and work stress; among the primary appraisal measures,

Hypothesis 4: Higher threat perception will be associated with higher *uncontrollability perception* but lower *self-control* and lower *other-control* measures of secondary appraisal.

Hypothesis 5: Higher centrality perception will be associated with higher *uncontrollability perception* but lower *self-control* and lower *other-control* measures of secondary appraisal.

Hypothesis 6: Higher challenge perception will be associated with higher *self-control* and higher *other-control* perception but lower *uncontrollability perception* measures of secondary appraisal.

Third set of analyses run for the *Affect-Related* measures: After controlling the possible effects of the socio-demographic variables, work stress, and primary appraisal measures; among the secondary appraisal measures,

Hypothesis 7: Higher self-control and higher other-control perceptions will be associated with higher *Positive Affect*.

Hypothesis 8: Higher uncontrollability perceptions will be associated with higher *Negative Affect*.

Hypothesis 9: Higher self-control and higher other-control perceptions will be associated with higher *Emotional Expression*.

Hypothesis 10: Higher self-control and higher other-control perceptions will be associated with higher *Emotional Processing*.

Fourth set of analyses run for the *Coping Strategies*: After controlling for the possible effects of the socio-demographic variables, work stress, primary appraisal measures, and secondary appraisal measures; among the affect-related measures,

Hypothesis 11: Higher positive affect will be associated with more extensive use of *Problem-Focused Coping* strategies.

Hypothesis 12: Higher negative affect will be associated with more extensive use of *Emotion-Focused Coping* strategies.

Hypothesis 13: Higher emotional expression will be associated with more extensive use of *Seeking Social Support* among coping strategies.

Hypothesis 14: Higher emotional processing will be associated with more extensive use of *Problem-Focused Coping* strategies.

Fifth set of analyses run for *Psychological Distress* and *Well-Being*: After controlling for the possible effects of the socio-demographic variables, work stress,

primary appraisal measures, secondary appraisal measures, and affect-related measures; among the measures of coping strategies

Hypothesis 15: More extensive use of emotion-focused coping strategies will be associated with having higher *Depressive Symptoms*.

Hypothesis 16: Seldom use of problem-focused coping strategies will be associated with having higher *Trait Anxiety*.

Hypothesis 17: More extensive use of problem-focused coping strategies will be associated with having higher *Life Satisfaction*.

Hypothesis 18: More extensive use of problem-focused coping strategies will be associated with having higher *Job Satisfaction*.

Finally, based on the obtained results from these five sets of regression analyses different models will be suggested for 4 different outcomes, which are depressive symptoms, anxiety level, life satisfaction, and job satisfaction.

CHAPTER II

METHOD

2.1. Participants

A total of two hundred, and sixty-eight correctional officers from seven different prisons in Turkey participated in the present study. Participants were selected from maximum-security prisons (Ankara F Type, Ankara L1 Type, Bolu F Type), medium-security prisons (Nevşehir Closed and Kırşehir Closed), and minimum-security prisons (Bolu Opened and Sivas Opened). The permission was taken from the Republic of Turkey, Ministry of Justice, General Directorate of Prisons, and Detention House for all of the prisons, and all participants participated voluntarily in the present study.

The socio-demographic information about the participants was presented in Table-2 and in Table-3. In terms of institute type, approximately, sixty-one percent of the participants (n = 163) were from maximum-security prisons, thirty-one percent of the participants (n = 84) were from medium-security prisons, and eight percent of the participants (n = 21) were from minimum-security prisons.

Table-2: The Mean, Standard Deviation, Minimum and Maximum Values of The Demographic Variables

Measures	Mean	Std. Deviation	Min.	Max.
<i>Demographic variables</i>				
Age	36.02	7.25	20	55
Monthly income (Turkish Liras)	1225.62	872.48	800	10000
Duration in the job (in months)	118.32	89.01	1	333
Duration in the institute (in months)	91.09	86.76	1	333
Communication with prisoners (hours/ a day)	8.43	3.68	0	12

Two hundred and thirty eight males (88.81%) and 30 females (11.19%) served as participants in this study. The mean age of the participants was 36.02 (SD = 7.25) with a range of 20 to 55. The majority of the participants were married (n = 239; 85%) while 15% (n = 29) of them were single.

The mean average salary of the participants was 1225.6 YTL (SD = 872.48). The education levels of the participants were university graduation (n = 99; 36.94%), high school graduation (n = 155; 57.84%), and secondary school graduation (n = 14; 5.22%).

The subjects were primary or secondary managers (n = 5; 1.87%), psychologists (n = 2; 0.75%), social workers (n = 3; 1.12%), teachers (n = 9; 3.36%), supervisors of prison guards (n = 18; 6.72%), prison guards (n = 223; 83.21%), accountants or clerks (n = 4; 1.49%), and technicians (n = 4; 1.49%).

In terms of the total duration in job affiliation (in months), the mean duration was 118.32 (SD = 89.01) with a range of 1 to 333 months. In terms of time period within the current prison in years, the mean duration was 3.5 (SD = 6.5) with a range of 1-33 years. The majority of participants (n = 171; 63.81%) worked in shift

schedule while the others (n = 97; 36.19%) worked in regular schedule. The mean of communication with prisoners within one day was 8.43 hours (SD = 3.68).

Table-3: The Frequency and Percentage of Demographic Variables

Variables	Freq.	Percent.	Variables	Freq.	Percent.
<i>Education (graduation)</i>			<i>Working unit</i>		
Secondary school	14	5.22	Accounting unit	6	2.24
High school	155	57.84	Blocks	105	39.18
University	99	36.94	Canteen	2	0.75
<i>Gender</i>			<i>Consignee (Emanet para)</i>		
Female	30	11.19	Control center	19	7.09
Male	238	88.81	Driver room	2	0.75
<i>Marital Status</i>			<i>Educational service</i>		
Single	39	14.55	Entrance hole (Bina girişi)	9	3.36
Married	229	85.45	Execution office* (İnfaz kalemi)	10	3.73
<i>Prison type</i>			<i>Guards office</i>		
Minimum-security	21	7.84	Kitchen	4	1.49
Medium-security	84	31.34	Management	9	3.36
Maximum-security	163	60.82	Prison clinic (Revir)	3	1.12
<i>Shift Status</i>			<i>Prisoners acceptance</i>		
No	97	36.19	Psycho-social service	5	1.87
Yes	171	63.81	Rapid reaction/crisis center (Acil müdahale)	34	12.69
<i>Job</i>			<i>Reception for visitors</i>		
Accountant or clerk	4	1.49	Technical service	8	2.99
Manager	5	1.87	Workhouses (İş atölyeleri)	5	1.87
Prison guards	223	83.21	No information**	14	5.22
Psychologist	2	0.75			
Social worker	3	1.12			
Supervisor (to guards)	18	6.72			
Teachers	9	3.36			
Technicians	4	1.49			

* This office is responsible with the pursuance of conviction.

** Workers did not explain their working area since they may fear to lose their anonymity in spite of explaining ethic rules in researches to them, and taking their verbally informed consent.

2.2 Measures

2.2.1 Work Stress Scale for Correctional Officers (WSSCO)

Work Stress Scale for Correctional Officers (WSSCO; Durak, Şenol-Durak, & Gençöz, 2003; Şenol-Durak, Durak & Gençöz, 2006) is designed particularly for the correctional officers. This scale is a self report instrument, and consists of 35 items referring to the effects of given conditions upon the workers in the correctional settings. It is rated on a 5-point Likert type scale ranging from 0 (it has no effect at all) to 4 (it has a very strong effect). The internal consistency of the total scale was found as .94, and the item-total correlations ranged from .31 to .75. The internal consistency was found for the subscales of work overload, role conflict, and ambiguity, inadequacies in physical conditions of prison, threat perception, and general problems as .75, .87, .70, .83, .86, respectively. The test-retest reliability coefficient following a 21-day interval was found as .77, and for the subscales the test-retest reliability coefficients were .73, .71, .68, .68, and .78, for work overload, role conflict, and role ambiguity, inadequacies in physical conditions of prison, threat perception, and general problems subscales, respectively. It's concurrent, and criterion validity was found to be satisfactory. For the example items of WSSCO see the Appendix A.

2.2.2 The Stress Appraisal Measure (SAM)

The Stress Appraisal Measure (SAM; Peacock & Wong, 1990), a 24-item Likert-type scale on which items are rated from 0 (not at all) to 4 (extremely/ a great

amount), is used to assess cognitive appraisal of stress. The SAM is based on the theoretical dimensions of primary (threat, challenge, and centrality), and secondary (perceptions of controllable-by-self, controllable-by others, uncontrollable) appraisals of a stressful situation. The internal consistencies (alphas) for the various scales range from .51 to .90. In one study using the SAM (Anshel, Roberson, & Caputi, 1997), reliability coefficients for the six appraisal dimensions ranged from .65 to .90. However, centrality dimension did not work well in some researches (e.g., Roesch & Rowley, 2005). In this respect, the psychometric properties of the Turkish version of the scale were found satisfactory (Durak, Şenol-Durak & Gençöz, 2007). The psychometric properties of the scale are examined in a sample of university students, and in a sample of adults. The scale assesses the cognitive appraisals of both specific and global sources of stress. In the present study, the version of the scale for global stress appraisals was used. In the study of Durak and colleagues (2007), it was found that the scale was composed of six factors; namely, challenge, centrality, threat, self-control, other-control, and uncontrollability. The alpha coefficients were .70, .76, .76, .90, .81, .75 in the sample of university students, and .69, .77, .76, .87, .80, .73 in the sample of adults for challenge, centrality, threat, self-control, other-control, and uncontrollability, respectively. Also, as the criterion-related validity of the Scale, its relationship with The Ways of Coping Inventory (WCI), Positive, and Negative Affect Schedule (PANAS), Beck Depression Inventory (BDI), State-Trait Anxiety Inventory -Trait Form (STAI-T), and Social Desirability Scale (SDS) in the samples of both students and adults were found to be satisfactory. For the example items of SAM see the Appendix B.

2.2.3 The Emotional Approach Coping Scale (EACS)

The Emotional Approach Coping Scale (EACS) is used to assess emotional expression, and emotional processing. The EACS was developed by Stanton, Kirk and their colleagues (2000) in order to determine emotional approach coping depending on the functionalist theory of emotions (Campos, Mumme, Kermoian, & Campos, 1994; Levenson, 1994). Emotional approach coping involves the active processing, and expression of emotions (Stanton, Kirk et al., 2000, p. 1150).

The EACS consists of 16 items (and also 8-item version is available) measuring the constructs of emotional processing (eight items), and emotional expression (eight items). The EACS has 4-point response options (1 = I scarcely do this; 4 = I usually do this a lot). Internal consistencies were reported as follows: Cronbach's coefficients were .72 for emotional processing, and .82 for emotional expression. Test-retest reliabilities were .73 for emotional processing, and .72 for emotional expression. The scale has been used in several studies with breast cancer patients (Stanton, Danoff-Burg et al., 2000).

This scale was adapted into Turkish within the samples of university student, and adult by Şenol-Durak, Durak, and Gençöz (2007) with the reliability, and validity coefficients that were comparable to the original values. In line with the original scale, they found two-factor solution for the scale, namely emotional expression, and emotional processing. The Cronbach's alpha coefficient for the whole scale, emotional expression, and emotional processing were .91, .90, and .85 in the sample of adults, and .91, .91, and .86 in the sample of university students, respectively. The test-retest reliability coefficient following a 21-day interval was

found as .85, and for the subscales the test-retest reliability coefficients were .84, and .80, for emotional expression, and emotional processing respectively. Also, as the criterion-related validity of the Scale, its relationship with The Ways of Coping Inventory (WCI), Positive, and Negative Affect Schedule (PANAS), Beck Depression Inventory (BDI), State-Trait Anxiety Inventory -Trait Form (STAI-T), Rosenberg's Self-Esteem Scale (RSS), and Social Desirability Scale (SDS) in the samples of students, and adults were found to be satisfactory. For the example items of EACS see the Appendix C.

2.2.4 The Positive and Negative Affect Schedule (PANAS)

The PANAS (Watson, Clark, & Tellegen, 1988) is a 20-item self-report questionnaire designed to measure positive, and negative affect, and items are rated on a five-point Likert-scale (1 "very slightly or not at all" to 5 "extremely"). There are 10 items in each of the positive affect (PA), and negative affect (NA) scales. Internal consistency (alpha) estimates for the PANAS measuring mood across seven different time periods (same day to a year) range from .84 to .87 for the NA scale (Watson et al., 1988). Factor analyses support both the structure of the PA, and NA scales (Kercher, 1992; Nemanick & Munz, 1994; Watson et al., 1988). Correlations between the PANAS, measures of depression, and anxiety suggest convergent validity (Watson et al., 1988). The Turkish version of the scale was studied by Gençöz (2000). The Turkish version revealed internal consistency reliability as .83 for the PA, .86 for the NA, and a test-retest reliability as .40, and .54, for the PA, and NA, respectively. In Gençöz's study, the criterion-related validity of the scale was

studied through Beck Depression Inventory, and Beck Anxiety Scale, which revealed correlations of -.48, and -.22 for positive affectivity, respectively, and .51, and .47, for negative affectivity, respectively. For the example items of PANAS see Appendix D.

2.2.5 The Ways of Coping Inventory (WCI)

The Ways of Coping Inventory (WCI) was developed by Folkman and Lazarus (1980), and later revised by Folkman and Lazarus (1985). The scale is scored on a 4-point Likert scale from “not used” (0) to “used a great deal” (3), and aims to measure different types of coping. The original scale is composed of eight subscales. The subscales of problem-focused coping are suggested to be confrontive coping, and planful problem-solving. The subscales of the emotion-focused coping are suggested to be distancing, self-controlling, seeking social support, accepting responsibility, escape/avoidance, and positive reappraisal.

The adaptation of the scale into Turkish was made by Siva (1991). The Turkish form of the scale includes 74 items, and new items stating the fatalism, and superstition were added. The internal consistency of the scale is .90. Gençöz et al (2006) examined the hierarchical dimensions of coping styles in a Turkish sample, and found that WCI was composed of three higher order factors as problem-focused coping, emotion-focused coping, and indirect coping (seeking social support). For the example items of WCI see Appendix E.

2.2.6 Beck Depression Inventory (BDI)

Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) is a reliable and well-validated 21-item self-report measure of depressive symptoms. It assesses cognitive, emotional, motivational, and somatic symptoms of depression. The scale items included the themes of self-blame, feelings of punishment, body image, pessimism, loss of appetite, disturbance of sleep, fatigue, feelings of exhaustion, aggressiveness, feelings of guilt, loss of sexual impulse. Scores for each item range from 0 to 3 thus total scale score may range from 0 to 63. Higher scores indicate higher levels of depression symptoms.

This inventory is adapted into Turkish by Hisli (1988 & 1989) with reliability, and validity coefficients that are comparable to the original values. The split-half reliability of this version of BDI was found to be .74 (Hisli, 1988). The criterion validity of the Turkish version of BDI was found to be satisfactory (Hisli, 1988). For the example items of BDI see Appendix F.

2.2.7 The State-Trait Anxiety Inventory-Trait Form (STAI-T)

The State-Trait Anxiety Inventory (STAI) is a 40-item self-report scale developed by Spielberger, Gorsuch, and Lushene (1970, cited in Öner, 1997). The scale has two parts, as state, and trait anxiety inventories in order to measure the situational and general anxiety. Each part has 20 items which are formed based on the frame of “right now” in state form, and “in general” in trait form. In the process of inventory development, the authors benefited from Catell, and Scheier’s Anxiety Scale, Taylor’s Manifest Anxiety Scale, and Welsh’s Anxiety Scale.

In the present study, trait version of the STAI-T was used. STAI-T is used to assess the severity of anxiety symptoms generally felt by the respondent. The test-retest reliability of the scale ranged from .73 to .86, and the internal consistency varied between .86, and .92 for trait anxiety inventory (Spielberger et al., 1970, cited in Öner 1997). The criterion related validity was evaluated in the samples of students, and patients and was found to be satisfactory.

STAI was translated, and adapted to Turkish by Öner and Le Comte in 1985 by using both a normal sample, and a sample of psychiatric patients (Öner, 1997). In this study, test-retest reliabilities for trait anxiety inventory were found to be between .26, and .68, internal consistency coefficients ranged from .83 to .87, and item-total correlations ranged between .34, and .72. For criterion related validity, diagnosed patients were compared with normal sample, and it was found that the trait anxiety scores of patients were significantly higher than the normal sample's scores at $p < .01$ level. For the example items of STAI-T see Appendix G.

2.2.8 The Satisfaction with Life Scale (SWLS)

The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) is a self-report measure on which respondents indicate their degree of agreement with five statements about the satisfaction with life, such as “In most ways my life is close to my ideal”. Items are rated to on a 7-point Likert scale that ranges from strongly disagree to strongly agree. Higher scores on the SWLS indicate greater satisfaction with life. Considerable support for the psychometric qualities of the SWLS has been established on the basis of several studies (e.g., Diener et al.,

1985; Pavot & Diener, 1993; Pavot, Diener, Colvin, & Sandvik, 1991). The single-factor structure of the measure has been replicated in several times, and the total score is demonstrated as an indicator of psychological well-being (Pavot & Diener, 1993; Pavot et al., 1991). It is an internally consistent scale in which Cronbach's alpha coefficient tends to be in the upper .80 and test-retest reliability generally tends to be in the .64 to .84 range (Pavot & Diener, 1993). This inventory is adapted into Turkish by Gençöz, Durak, and Şenol-Durak (2007), and they obtained satisfactory psychometric properties for the scale. In their study with correctional officers, they found Cronbach's alpha coefficient as .83 and revealed sufficient criterion related validity. For the example items of SWLS see Appendix H.

2.2.9 The Job Satisfaction Scale (JSS)

Job Satisfaction Scale was developed by Durak-Batigün, & Hisli-Şahin (2006) through examination of the job satisfaction scales in the literature. It is a 32-item self-report questionnaire, and is answered on a five-point scale as 0%, 25%, 50%, 75%, and 100% satisfaction from characteristics of the job. They revealed 6 factors having satisfactory Cronbach's alphas between .53, and .94. They also supported the criterion related validity of the scale. For the example items of JSS see Appendix I.

2.2.10 The Demographic Information Form

To obtain demographic information (e.g., age, gender, education level,

marital status, total years in the job, etc.) of the participants, a questionnaire was developed (see Appendix J).

2.3 Procedure

In order to examine the associations among stress, stress related measures, and psychological distress or psychological adjustment in the correctional settings, the permission of data collection was obtained from the Republic of Turkey, Ministry of Justice, General Directorate of Prisons, and Detention House. Initially, a booklet containing the demographic information, and the measures given above was prepared. Then, the order of the scales was randomized to control for order effect. The booklet had a cover page containing an explanation about the present study, and questions about the demographic information.

Following the suggestions of Ministry of Justice, the researcher talked over the phone with the Chief Public Prosecutor (Cumhuriyet Başsavcısı), and Chief Prosecutor (Cumhuriyet Savcısı) who have been responsible for the prison, and the Management of Prison in order to constitute a schedule for collecting data. Then, the researcher made face to face interviews with all of them by following the hierarchical construct. They were informed about the aim and scope of the study. Afterwards, they determined the most appropriate time for collecting data. Sometimes, they chose this time one or two week after the initial interview because there happened to be either crises, general routine control, or other international visitors.

During the visits of the prisons, the researcher obeyed all of the rules of prisons and daily routines. For this purpose, he showed his identity card to the authorized person (prison guards, and soldiers) together with the letter of permission. He left his phones, moneys, and other materials to consignee room. Then, he passed through body search twice; in front of the prison, and in the prison entrance hall. Especially, in maximum security prison, his pupil of the eye mark or fingerprint was taken for the identity information used in the prison.

The researcher interviewed the correctional officers with the help of the psychologists, teachers or supervisors (of guards) at locations where managers requested such as in the corridors, library, meeting hall, kitchen, hobby center, crises center. Besides, the researcher also prepared a time schedule to meet with correctional officers working in shift status. Approximately, all of the participants were interviewed face to face in order to explain the scope, and aims of the research before the booklet administration. Additionally, contact numbers were given to all participants. All of them participated voluntarily with verbally informed consent.

A booklet was given to the correctional officers within a limited time period which was scheduled by the authorized persons. On the other hand, enough time were given to participants who did not have appropriate conditions (such as work overload). Also, the extensive explanations were given verbally before beginning to fill out. Then the booklet was given to them. After completion of the measures of booklet, the psychologists, teachers or supervisors (of guards) helped the researcher to send back the completed booklet via mail, since the researcher thought that visiting the prison once more might cause an obstacle for the prison routines.

CHAPTER III

RESULTS

Results are organized in three different sections. First, data cleaning, descriptive statistics of the variables (i.e., means and standard deviations), and correlation among the variables are presented. Then, the results of several t-test, and hierarchical regression analyses which were conducted to develop a model explaining the associations among cognitive appraisal of stress, affect factors, coping strategies, and psychological distress or psychological adjustment were put forward. Finally, several models were tested via SEM.

3.1 Data Cleaning, Descriptive Statistics, and Bivariate Correlations

3.1.1 Data Cleaning

Prior to the analyses, all data were examined through various SPSS programs for accuracy of data entry, missing values, fit between their distributions, and the assumptions of multivariate analysis. Twenty-one cases were found to have missing values higher than 5%, therefore these cases were deleted. In order to improve pairwise linearity, and reduce the extreme skewness, and kurtosis, the z scores for all

variables were computed. Two cases with extremely low z scores in their groups found to be univariate outliers therefore these cases were deleted. Using Mahalanobis distance with $p < .001$, four cases were identified as multivariate outliers in their own group. After extracting all of these cases, 268 cases were examined for the analyses.

3.1.2 Descriptive Statistics

Means standard deviations, and possible ranges of variables are demonstrated in Table-4.

3.1.3 Bivariate Correlations among the Variables

Bivariate correlations among the variables of the present study are demonstrated in Table-5. The outcomes, that are both psychological distress and adjustment measures, were significantly correlated with work stress, and stress-related variables.

As can be seen in Table-5, depression, as a variable of distress, was significantly correlated with work stress ($r = .49, p < .001$), centrality perception ($r = .18, p < .01$), threat perception ($r = .25, p < .001$), perception of other-control ($r = -.14, p < .05$), positive affect ($r = -.27, p < .001$), negative affect ($r = .58, p < .001$), problem-focused coping ($r = -.16, p < .01$), emotion-focused coping ($r = .24, p < .001$), and seeking social support ($r = -.22, p < .001$).

Table-4 Descriptive Information for the Measures of the Study

Measures	Mean	Std. Deviation	Min.	Max.
<i>Stress Related Variables</i>				
Total Work Stress	2.33	0.79	0	4
Overload	2.53	0.82	0	4
Role Conflict & Ambiguity	2.22	0.96	0	4
Threat Perception	2.36	0.89	0	4
Physical Inadequacies	2.31	1.03	0	4
General Problems	2.30	0.91	0	4
<i>Primary Appraisals</i>				
Challenge	1.87	0.88	0	4
Centrality	2.06	1.03	0	4
Threat	1.82	1.08	0	4
<i>Secondary Appraisals</i>				
Self-Control	2.03	0.96	0	4
Other-Control	1.19	0.99	0	4
Uncontrollability	1.43	0.97	0	4
<i>Affect Related Variables</i>				
Positive Affect	3.78	0.67	1	5
Negative Affect	3.12	0.72	1	5
Emotional Expression	2.35	0.81	0	4
Emotional Processing	2.61	0.74	0	4
<i>Coping Strategies</i>				
Problem-Focused Coping	2.57	0.54	0	4
Emotion-Focused coping	1.21	0.57	0	4
Seeking Social Support	2.16	0.76	0	4
<i>Psychological Distress</i>				
Depression	0.72	0.42	0	3
Trait Anxiety	1.34	0.55	0	3
<i>Psychological Adjustment</i>				
Life Satisfaction	2.08	1.46	0	6
Job Satisfaction	1.77	0.64	0	4

Table-5 Correlation among the Variables

	Depression	Trait Anx.	Life Satis.	Job Satis.	Work Stress	Work Over.	Role Conf. & Amb.	Threat Perc.	Physical In.	General Pr.	Challenge
Trait Anxiety	.435***										
Life Satisfaction	-.372***	-.283***									
Job Satisfaction	-.226***	-.179**	.297***								
Work Stress	.491***	.214***	-.369***	-.372***							
Work Overload	.411***	.143*	-.270***	-.238**	.815***						
Role conflict & Role Ambiguity	.400***	.146*	-.271***	-.432***	.898***	.639***					
Threat Perception	.440***	.228***	-.323***	-.262***	.873***	.665***	.734***				
Physical Inadequacies	.381***	.191**	-.314***	-.321***	.784***	.641***	.627***	.607***			
General Problems	.460***	.219***	-.403***	-.273***	.857***	.634***	.665***	.687***	.619***		
Challenge	.005	-.288***	.077	.205**	.076	.075	.094	-.008	.074	.079	
Centrality	.184**	.150*	-.046	-.002	.208***	.182**	.198***	.181**	.117	.183**	.329***
Threat	.249***	.443***	-.130*	-.006	.282***	.265***	.217***	.292***	.224***	.226***	.033
Self-Control	-.058	-.324***	.084	.129*	.072	.079	.067	.022	.044	.085	.446***
Other-Control	-.137*	-.265***	.201***	.109	-.074	-.031	-.038	-.090	-.110	-.068	.203***
Uncontrollability	.046	.212***	-.019	.011	.193***	.168**	.142*	.183**	.190**	.166**	.114
Positive Affect	-.267***	-.132*	.242***	.333***	-.109	.001	-.144*	-.091	-.055	-.114	.092
Negative Affect	.579***	.490***	-.264***	-.251***	.469***	.404***	.399***	.413***	.384***	.404***	-.129*
Emotional Expression	-.060	-.256***	.115	.065	.045	.067	.079	-.009	.028	.014	.226***
Emotional Processing	-.028	-.193***	.052	.025	.059	.055	.042	.053	.000	.085	.247***
Problem-Focused Coping	-.159**	-.315***	.053	.247***	-.006	.035	-.044	-.013	-.010	.027	.332***
Emotion-Focused Coping	.241***	.044	.029	.002	.176**	.124*	.141*	.183**	.150*	.154*	.133*
Seeking Social Support	-.224***	-.264***	.142*	.256***	-.143*	-.070	-.199***	-.109	-.154*	-.052	.148*

* $p < .05$ ** $p < .01$ *** $p < .001$

Table-5 (continued)

	Centrality	Threat	Self-Control	Other-Cont.	Uncontrollability	Positive Affect	Negative Affect	Emotional Expression	Emotional Processing	Problem-Focused Coping	Emotion-Focused Coping
Threat	.588***										
Self-Control	.146*	-.078									
Other-Control	.023	-.146*	.291***								
Uncontrollability	.473***	.613***	-.012	-.067							
Positive Affect	-.050	-.051	.177**	.142*	-.017						
Negative Affect	.206***	.382***	-.107	-.162**	.112	.018					
Emotional Expression	.112	-.007	.279***	.132*	-.088	.066	-.070				
Emotional Processing	.214***	.066	.232***	.084	-.045	.164**	-.027	.663***			
Problem-Focused Coping	.133*	-.001	.317***	.094	.054	.364***	-.220***	.127*	.310***		
Emotion-Focused Coping	.020	.059	.001	.057	.145*	-.081	.131*	-.127*	-.124*	-.101	
Seeking Social Support	.008	-.146*	.177**	.168**	-.125*	.192**	-.269***	.209***	.128*	.369***	-.133*

* $p < .05$ ** $p < .01$ *** $p < .001$

Trait anxiety, as another variable of distress, was significantly correlated with work stress ($r = .21, p < .001$), challenge perception ($r = -.29, p < .001$), centrality perception ($r = .15, p < .05$), threat perception ($r = .44, p < .001$), perception of self-control ($r = -.32, p < .001$), perception of other-control ($r = -.27, p < .001$), perception of uncontrollability ($r = .21, p < .001$), positive affect ($r = -.13, p < .05$), negative affect ($r = .49, p < .001$), emotional expression ($r = -.26, p < .001$), emotional processing ($r = -.19, p < .001$), problem-focused coping ($r = -.32, p < .001$), and seeking social support ($r = -.26, p < .001$).

Life satisfaction, as a variable of psychological adjustment, was significantly correlated with work stress ($r = -.37, p < .001$), threat perception ($r = -.13, p < .05$), perception of other-control ($r = .20, p < .001$), positive affect ($r = .24, p < .001$), negative affect ($r = -.26, p < .001$), and seeking social support ($r = .14, p < .05$).

Job satisfaction, as another variable of psychological adjustment, was significantly correlated with work stress ($r = -.37, p < .001$), challenge perception ($r = .21, p < .001$), perception of self-control ($r = .13, p < .05$), positive affect ($r = .33, p < .001$), negative affect ($r = -.25, p < .001$), problem-focused coping ($r = .25, p < .001$), and seeking social support ($r = .26, p < .001$).

3.2 Group Differences and Hierarchical Multiple Regressions

3.2.1 Group Differences

Prior to the regression analyses, all data were examined through various SPSS programs to reveal possible prison type and shift status differences on the measures of the study.

Several independent-samples t-test were conducted to evaluate the group differences in terms of prison type and shift status on the measures of work stress, primary appraisal measures, secondary appraisal measures, affect related measures, coping strategies, psychological distress, and psychological adjustment measures. The results are demonstrated in Table-6, and Table-7.

3.2.1.1 Group Differences in terms of Prison Type

To reveal the possible group differences in terms of Prison Type (i.e., Minimum & Medium Security Prisons vs. Maximum Security Prisons) several t-tests were conducted with the measures of the study. Results revealed that in terms of prison type, the only difference was observed for the life satisfaction measure, $t(266) = -2.765, p < .01$. According to this result, the correctional officers working in maximum security prisons ($M = 1.77, SD = 1.53$) had higher life satisfaction than the correctional officers working in minimum-medium security prisons ($M = 2.27, SD = 1.38$).

3.2.1.2 Group Differences in terms of Shift Status

In terms of shift status (No Shift vs. Shift Schedule), group differences were found to be significant on the following analyses:

1. An independent t -test revealed a significant group difference on experienced work stress, $t(266) = -2.784, p < .01$. The correctional officers working in shifts ($M = 2.43, SD = 0.78$) showed higher stress than the correctional officers working in regular ($M = 2.15, SD = 0.78$).

Table-6: Examination of Group Differences of Prison Types on Several DVs

Dependent Variables	Minimum-Medium Sec. Pr. Mean (SD)	Maximum-Security Pr. Mean (SD)	t (266)
<i>Work Stress</i>			
Total Stress	2.43 (0.74)	2.27 (0.81)	1.624
Work Overload	2.65 (0.72)	2.44 (0.87)	2.055*
Role conflict & Role Ambiguity	2.21 (1.00)	2.22 (0.94)	-0.107
Threat Perception	2.46 (0.88)	2.29 (0.89)	1.546
Physical Inadequacies	2.54 (0.91)	2.17 (1.08)	2.919**
General Problems	2.44 (0.83)	2.22 (0.96)	1.953*
<i>Primary Appraisal</i>			
Challenge	1.95 (0.96)	1.81 (0.82)	1.235
Centrality	2.15 (1.07)	2.00 (1.01)	1.221
Threat	1.97 (1.11)	1.73 (1.06)	1.803
<i>Secondary Appraisal</i>			
Self-control	1.99 (0.91)	2.05 (0.99)	-0.542
Other-control	1.09 (1.02)	1.26 (0.97)	-1.362
Uncontrollability	1.57 (1.04)	1.35 (0.93)	1.786
<i>Affect-Related Variables</i>			
Positive affect	3.83 (0.66)	3.74 (0.67)	0.988
Negative affect	3.17 (0.76)	3.08 (0.70)	0.927
Emotional expression	2.40 (0.86)	2.33 (0.78)	0.735
Emotional processing	2.64 (0.75)	2.60 (0.73)	0.458
<i>Coping Strategies</i>			
Problem-focused	2.60 (0.55)	2.55 (0.53)	0.786
Emotion-focused	1.25 (0.55)	1.18 (0.59)	0.859
Seeking social support	2.18 (0.83)	2.15 (0.72)	0.334
<i>Psychological Distress</i>			
Depression	0.78 (0.45)	0.68 (0.40)	1.839
Trait anxiety	1.42 (0.58)	1.30 (0.53)	1.728
<i>Psychological Adjustment</i>			
Life satisfaction	1.77 (1.53)	2.27 (1.38)	-2.765*
Job satisfaction	1.84 (0.63)	1.72 (0.64)	1.619

*p < .05 **p < .01

Table-7: Examination of Group Differences of Shift Status on Several DVs

Dependent Variables	No Shift Mean (SD)	Shift Mean (SD)	t (266)
<i>Work Stress</i>			
Total Stress	2.15 (0.78)	2.43 (0.78)	-2,784**
Work Overload	2.36 (0.81)	2.62 (0.82)	-2,502*
Role conflict & Role Ambiguity	2.05 (0.95)	2.31 (0.96)	-2,095*
Threat Perception	2.15 (0.85)	2.48 (0.89)	-2,995**
Physical Inadequacies	2.07 (1.09)	2.45 (0.98)	-2,902**
General Problems	2.17 (0.95)	2.38 (0.89)	-1,850
<i>Primary Appraisal</i>			
Challenge	1.94 (0.82)	1.82 (0.91)	1.064
Centrality	2.11 (0.98)	2.03 (1.07)	0.651
Threat	1.71 (1.06)	1.89 (1.09)	-1.306
<i>Secondary Appraisal</i>			
Self-control	2.13 (0.95)	1.96 (0.96)	1.407
Other-control	1.37 (1.07)	1.10 (0.93)	2.164*
Uncontrollability	1.31 (0.86)	1.51 (1.03)	-1.624
<i>Affect-Related Variables</i>			
Positive affect	3.92 (0.67)	3.70 (0.66)	2.591**
Negative affect	3.04 (0.73)	3.16 (0.72)	-1.250
Emotional expression	2.47 (0.76)	2.29 (0.83)	1.784
Emotional processing	2.68 (0.67)	2.58 (0.77)	1.141
<i>Coping Strategies</i>			
Problem-focused	2.55 (0.55)	2.59 (0.53)	-0.587
Emotion-focused	1.19 (0.57)	1.22 (0.58)	-0.394
Seeking social support	2.24 (0.82)	2.12 (0.73)	1.248
<i>Psychological Distress</i>			
Depression	0.65 (0.38)	0.75 (0.44)	-1.917
Trait anxiety	1.24 (0.57)	1.40 (0.54)	-2.323*
<i>Psychological Adjustment</i>			
Life satisfaction	2.35 (1.35)	1.92 (1.50)	2.363*
Job satisfaction	1.88 (0.63)	1.70 (0.63)	2.157*

* p < .05 ** p < .01

2. An independent t -test revealed a significant group difference on other-control measure of secondary appraisal, $t(266) = 2.164$, $p < .05$. The correctional officers working in shifts ($M = 1.10$, $SD = 0.93$) appraised lower other-control perception than the correctional officers working in regular schedule ($M = 1.37$, $SD = 1.07$).
3. An independent t -test revealed a significant group difference on positive affect, $t(266) = 2.591$, $p < .01$. The correctional officers working in shifts ($M = 3.70$, $SD = 0.66$) showed lower positive affect than the correctional officers working in regular schedule ($M = 3.92$, $SD = 0.67$).
4. An independent t -test revealed a significant group difference on trait anxiety, $t(266) = -2.323$, $p < .05$. The correctional officers working in shifts ($M = 1.40$, $SD = 0.54$) showed higher trait anxiety than the correctional officers working in regular schedule ($M = 1.24$, $SD = 0.57$).
5. An independent t -test revealed a significant group difference on life satisfaction, $t(266) = 2.363$, $p < .05$. The correctional officers working in shifts ($M = 1.92$, $SD = 1.50$) showed lower life satisfaction than the correctional officers working in regular schedule ($M = 2.35$, $SD = 1.35$).

6. An independent t -test revealed a significant group difference on job satisfaction, $t(266) = 2.157, p < .05$. The correctional officers working in shifts ($M = 1.70, SD = 0.63$) showed lower job satisfaction than the correctional officers working in regular schedule ($M = 1.88, SD = 0.63$).

3.2.2 Five Sets of Hierarchical Multiple Regressions

Five sets of hierarchical multiple regression analyses were conducted to examine the association among the variables of the study. Hierarchical multiple regression analyses were performed in five sets to reveal the associates of the (i) primary appraisal measures, (ii) secondary appraisal measures, (iii) affect-related measures, (iv) coping strategies, and finally (v) psychological distress and psychological adjustment measures.

3.2.2.1 Variables Associated with the Primary Appraisal Factors

Hierarchical multiple regression analyses were conducted to reveal the significant associates of Primary Appraisal Factors; namely, challenge, centrality, and threat. Variables were entered into the equation via two steps. In order to control for the possible effects of socio-demographic variables (i.e., gender, age, education, marital status, monthly income, years in job, years in the institution, shift status, duration of communication with prisoners), these first step variables were entered into the equation via stepwise method.

After controlling for the socio-demographic variables that were significantly associated with the dependent variable, the factors of work stress (i.e., overload, role conflict, and ambiguity, threat perception, physical inadequacies, and general problems) were entered into the equation on the second step.

3.2.2.1.1 Variables Associated with Challenge

Hierarchical regression analysis run for the Challenge factor (see Table-8A) revealed that, among the control variables, Gender (being female) had a significant association ($\beta = -.18$, $t(266) = -2.90$, $p < .005$) with Challenge, and this variable explained 3% of the variance ($F[1, 266] = 8.42$, $p < .005$). Following Gender, Duration of Communication with the Prisoners was found to be significantly associated ($\beta = -.13$, $t(265) = -1.97$, $p < .05$) with Challenge, and this variable increased explained variance to 5% ($F \text{ change}[1, 265] = 3.89$, $p < .05$). After controlling for these factors, among the factors of Work Stress, no factors had have significant association with the Challenge; though with the entrance of all Work Stress factors explained variance increased to 7% ($F \text{ change}[5, 260] = 1.35$, n.s.).

Therefore, totally only two control variables, namely Gender (being female) and Communication with the Prisoners were found to be significantly associated with Challenge.

3.2.2.1.2 Variables Associated with Centrality

As a result of hierarchical multiple regression analysis conducted for the Centrality Factor (see Table-8B), neither control variables nor the factors of Work

Stress revealed significant association with Centrality, though Work Stress factors totally explained 5% of the variance ($F [5, 262] = 2.74, p < .05$).

Table-8: Variables Associated with Primary Appraisals of Stress

Predictors in set		F for set	t for w/in set	df	Beta (β)	Model R ² Change
		Predictors				
A. Dependent Variable: CHALLENGE						
I.	<i>Control variables</i>	8.42***		1, 266		.031
	Gender		-2.90***	266	-.18	
II.	<i>Control variables</i>	3.89*		1, 265		.014
	Communication w/ prisoners		-1.97*	265	-.13	
III.	<i>Stress</i>	1.35		5, 260		.024
	Overload		1.18	260	.11	
	Role conflict & ambiguity		.99	260	.10	
	Threat perception		-1.81	260	-.18	
	Physical inadequacies		.482	260	.04	
	General problems		.51	260	.05	
B. Dependent Variable: CENTRALITY						
I.	<i>Stress</i>	2.742*		5, 262		.050
	Overload		.96	262	.09	
	Role conflict & ambiguity		1.19	262	.17	
	Threat perception		.32	262	.03	
	Physical inadequacies		-.92	262	-.08	
	General problems		.84	262	.78	
C. Dependent Variable: THREAT						
I.	<i>Control variables</i>	5.34*		1, 266		.020
	Communication w/ prisoners		2.31*	266	.14	
II.	<i>Stress</i>	4.86****		5, 261		.084
	Overload		1.20	261	.11	
	Role conflict & ambiguity		-.36	261	-.04	
	Threat perception		2.10*	261	.21	
	Physical inadequacies		.34	261	.03	
	General problems		.16	261	-.02	

* $p < .05$ ** $p < .01$ *** $p < .005$ **** $p < .001$

Note. Gender was coded as 1 for females, and 2 for males

3.2.2.1.3 Variables Associated with Threat

According to the results of the hierarchical regression analysis run for the Threat factor (see Table-8C), among the control variables, Communication with the Prisoners was found to be significantly associated ($\beta = .14, t (266) = 2.31, p < .05$)

with Threat, and this variable explained 2% of the variance ($F [1, 266] = 5.34, p < .05$). After controlling for this factor, among the factors of Work Stress, only Threat Perception ($\beta = .21, t (261) = 2.10, p < .05$) had significant association with Threat; and with the entrance of all Work Stress factors explained variance increased to 10% ($F \text{ change } [5, 261] = 4.86, p < .001$).

Therefore, totally only two variables, namely Communication with the Prisoners, and among work stress factors Threat Perception were found to be significantly associated with the Threat.

3.2.2.2 Variables Associated with the Secondary Appraisal Factors

Hierarchical multiple regression analyses were conducted to reveal the significant associates of measures of Secondary Appraisals; namely, Self-Control, Other-Control, and Uncontrollability. Variables were entered into the equation via three steps. In order to control for the possible effects of socio-demographic variables (i.e., gender, age, education, marital status, monthly income, years in job, years in the institution, shift status, duration of communication with prisoners), these first step variables were entered into the equation via stepwise method.

After controlling for the socio-demographic variables that were significantly associated with the dependent variable, the factors of work stress (i.e., overload, role conflict & ambiguity, threat perception, physical inadequacies, and general problems) were entered into the equation on the second step. Finally, on the third step, primary appraisal factors (i.e., challenge, centrality, and threat) were entered into the equation.

Table-9: Variables Associated with Secondary Appraisals of Stress

Predictors in set		F for set	t for w/in set Predictors	df	Beta (β)	Model R ² Change
A. Dependent Variable: SELF-CONTROL						
I.	<i>Stress</i>	0.78		5, 262		.015
	Overload		.86	262	.08	
	Role conflict & ambiguity		.62	262	.06	
	Threat perception		-1.22	262	-.13	
	Physical inadequacies		-.35	262	-.03	
	General problems		1.05	262	-.10	
II.	<i>Primary Appraisal</i>	23.13****		3, 259		.208
	Challenge		7.01****	259	.42	
	Centrality		1.21	259	.09	
	Threat		-2.29*	259	-.16	
B. Dependent Variable: OTHER-CONTROL						
I.	<i>Control variables</i>	8.47***		1, 266		.031
	Communication w/ prisoners		-2.91***	266	-.18	
II.	<i>Stress</i>	0.88		5, 261		.016
	Overload		1.32	261	.12	
	Role conflict & ambiguity		.57	261	.06	
	Threat perception		-.97	261	-.10	
	Physical inadequacies		-1.39	261	-.12	
	General problems		-.27	261	-.03	
III.	<i>Primary Appraisal</i>	4.54***		3, 258		.048
	Challenge		2.64**	258	.17	
	Centrality		.69	258	.06	
	Threat		-2.02**	258	-.16	
C. Dependent Variable: UNCONTROLLABILITY						
I.	<i>Stress</i>	2.48*		5, 262		.045
	Overload		.40	262	.04	
	Role conflict & ambiguity		-.53	262	-.05	
	Threat perception		1.03	262	.10	
	Physical inadequacies		1.30	262	.11	
	General problems		.39	262	.04	
II.	<i>Primary Appraisal</i>	51.72****		3, 259		.358
	Challenge		.66	259	.03	
	Centrality		2.53*	259	.16	
	Threat		8.15****	259	.51	

* p < .05 ** p < .01 *** p < .005 **** p < .001

3.2.2.2.1 Variables Associated with Self-Control

As a result of the regression analysis run for the Self-Control factor (see Table-9A), among the control variables, no variables revealed significant association with the Self-Control. Similarly, among the factors of Work Stress, no factor had significant association with Self-Control, though these variables explained 2% of the

variance ($F [5, 262] = 0.78, n.s.$). Finally, among the Primary Appraisal factors, Challenge ($\beta = .42, t (259) = 7.01, p < .001$), and Threat ($\beta = -.16, t (259) = -2.29, p < .05$) revealed positive, and negative associations respectively; and with the entrance of all primary appraisal factors explained variance increased to 22% (F change $[3, 259] = 23.13, p < .001$).

Therefore, totally only two variables, namely higher Challenge and lower Threat perceptions were found to be significantly associated with the Self-Control.

3.2.2.2.2 Variables Associated with Other-Control

According to the results of the regression analysis run for the Other-Control factor (see Table-9B), among the control variables, Communication with the Prisoners was found to be singly associated with other-control perception ($\beta = -.18, t (266) = -2.91, p < .005$) and this variable explained 3% of the variance ($F [1, 266] = 8.47, p < .005$). After controlling for this factor, among the factors of Work Stress, no factors had significant association with the Other-Control, though as a result of entrance of these variables explained variance increased to 5% ($F [5, 261] = 0.88, n.s.$). Finally, among the Primary Appraisal factors, Challenge ($\beta = .17, t (258) = 2.64, p < .01$), and Threat ($\beta = -.16, t (258) = -2.02, p < .05$) revealed positive, and negative associations respectively; and with the entrance of all primary appraisal factors explained variance increased to 10% (F change $[3, 258] = 4.54, p < .005$). Therefore, totally three variables namely, communication with the prisoners, higher Challenge, and lower Threat perceptions were found to be significantly associated with the secondary appraisal of Other-Control.

3.2.2.2.3 Variables Associated with Uncontrollability

The regression analysis run for the Uncontrollability factor (see Table-9C) revealed that, among the control variables, no variables had significant association with the Uncontrollability. Similarly, among the factors of Work Stress, no factor revealed significant association with Uncontrollability, though these variables totally explained 5% of the variance ($F [5, 262] = 2.48, p < .05$). Finally, among the Primary Appraisal factors, Centrality ($\beta = .16, t (259) = 2.53, p < .01$), and Threat ($\beta = .51, t (259) = 8.15, p < .001$) revealed positive associations with Uncontrollability; and with the entrance of all primary appraisal factors explained variance increased to 40% ($F \text{ change } [3, 259] = 51.72, p < .001$).

Therefore, totally only two variables, namely Centrality and Threat were found to be significantly associated with the Uncontrollability measure of secondary appraisal.

3.2.2.3 Variables Associated with Affect Related Measures

Hierarchical multiple regression analyses were conducted to reveal the significant associates of Affect related measures; namely, Positive Affect, Negative Affect, Emotional Expression, and Emotional Processing. Variables were entered into the equation via four steps. In order to control for the possible effects of socio-demographic variables (i.e., gender, age, education, marital status, monthly income, years in job, years in the institution, shift status, duration of communication with prisoners), these first step variables were entered into the equation via stepwise method.

After controlling for the socio-demographic variables that were significantly associated with the dependent variable, total work stress (i.e., WSSCO) was entered into the equation on the second step. On the third step, primary appraisal factors (i.e., challenge, centrality, and threat) were entered into the equation. Finally, on the fourth step, Secondary appraisal factors (i.e., self-control, other-control, and uncontrollability) were entered into the equation.

3.2.2.3.1 Variables Associated with the Positive Affect

According to the results of the regression analysis run for the Positive Affect (see Table-10A), among the control variables, Shift Status (being in regular schedule) revealed significant association ($\beta = -.16$, $t(266) = -2.59$, $p < .01$) with the Positive Affect, and this variable explained 3% of the variance ($F[1, 266] = 6.71$, $p < .01$). After controlling for this factor, Work Stress did not reveal a significant association with Positive Affect, and with the entrance of this variable explained variance remained 3% ($F \text{ change}[1, 265] = 1.92$, n.s.). Following Work Stress, Primary Appraisal factors did not reveal significant associations with Positive Affect; though with the entrance of all primary appraisal factors explained variance increased to 5% ($F \text{ change}[3, 262] = 1.23$, n.s.). Finally, among the Secondary Appraisal factors, only higher Self-Control ($\beta = .16$, $t(259) = 2.26$, $p < .05$) had significant association with the Positive Affect; and with the entrance of all secondary appraisal factors explained variance increased to 8% ($F \text{ change}[3, 259] = 2.82$, $p < .05$).

Table-10: Variables Associated with Affect

Predictors in set		F for set	t for w/in set Pred.	df	Beta (β)	Model R ² Change
A. Dependent Variable: POSITIVE AFFECT						
I.	<i>Control variables</i>	6.71**		1, 266		.025
	Shift		-2.59**	266	-.16	
II.	<i>Stress</i>	1.92		1, 265		.007
	Total Stress		-1.38	265	-.09	
III.	<i>Primary Appraisal</i>	1.23		3, 262		.013
	Challenge		1.81	262	.12	
	Centrality		-1.22	262	-.10	
	Threat		.49	262	.04	
IV.	<i>Secondary Appraisal</i>	2.82*		3, 259		.030
	Self-control		2.26*	259	.16	
	Other-control		1.23	259	.08	
	Uncontrollability		.55	259	.04	
B. Dependent Variable: NEGATIVE AFFECT						
I.	<i>Control variables</i>	4.49*		1, 266		.017
	Communication w/ prisoners		2.12*	266	.13	
II.	<i>Stress</i>	71.06****		1, 265		.208
	Total Stress		8.43****	265	.46	
III.	<i>Primary Appraisal</i>	11.96****		3, 262		.093
	Challenge		-3.24****	262	-.18	
	Centrality		.49	262	.03	
	Threat		3.78****	262	.25	
IV.	<i>Secondary Appraisal</i>	3.66*		3, 259		.028
	Self-control		-.67	259	-.04	
	Other-control		-1.01	259	-.05	
	Uncontrollability		-3.04***	259	-.20	
C. Dependent Variable: EMOTIONAL EXPRESSION						
I.	<i>Control variables</i>	6.64**		1, 266		.024
	Income (monthly)		2.58**	266	.16	
II.	<i>Stress</i>	0.70		1, 265		.003
	Total Stress		.84	265	.05	
III.	<i>Primary Appraisal</i>	5.28****		3, 262		.055
	Challenge		3.04***	262	.20	
	Centrality		1.16	262	.09	
	Threat		-1.12	262	-.09	
IV.	<i>Secondary Appraisal</i>	5.22***		3, 259		.052
	Self-control		2.96***	259	.20	
	Other-control		.67	259	.04	
	Uncontrollability		-2.21*	259	-.17	
D. Dependent Variable: EMOTIONAL PROCESSING						
I.	<i>Stress</i>	0.94		1, 266		.004
	Total Stress		.97	266	.06	
II.	<i>Primary Appraisal</i>	7.76****		3, 263		.081
	Challenge		3.03***	263	.19	
	Centrality		2.23*	263	.18	
	Threat		-.65	263	-.05	
III.	<i>Secondary Appraisal</i>	4.02**		3, 260		.041
	Self-control		2.08*	260	.14	
	Other-control		.16	260	.01	
	Uncontrollability		-2.68**	260	-.20	

* p < .05 ** p < .01 *** p < .005 **** p < .001

Note. Shift was coded as 0 for no, and 1 for yes

Therefore, totally only two variables, namely Working Regular Schedule (no shift) and appraisal of Self-Control were found to be significantly associated with the Positive Affect.

3.2.2.3.2 Variables Associated with the Negative Affect

According to the results of the regression analysis run for the Negative Affect (see Table-10B), among the control variables, Duration of Communication with Prisoners revealed significant association ($\beta = .13$, $t(266) = 2.12$, $p < .05$) with the Negative Affect, and this variable explained 2% of the variance ($F[1, 266] = 4.49$, $p < .05$). After controlling for this factor, Work Stress ($\beta = .46$, $t(265) = 8.43$, $p < .001$) revealed significant association with Negative Affect, and with the entrance of this variable explained variance increased to 23% ($F \text{ change}[1, 265] = 71.06$, $p < .001$). Following Work Stress, among Primary Appraisal factors, Challenge ($\beta = -.18$, $t(262) = -3.24$, $p < .001$), and Threat ($\beta = .25$, $t(262) = 3.78$, $p < .001$) revealed negative, and positive associations respectively; and with the entrance of all primary appraisal factors explained variance increased to 32% ($F \text{ change}[3, 262] = 11.96$, $p < .001$). Finally, among Secondary Appraisal factors, only lower Uncontrollability perceptions ($\beta = -.20$, $t(259) = -3.04$, $p < .01$) had significant association with the Negative Affect; and with the entrance of all secondary appraisal factors explained variance increased to 35% ($F \text{ change}[3, 259] = 3.66$, $p < .01$).

Therefore, totally five variables, namely Duration of Communication with Prisoners, Work Stress, Perception of lower Challenge, higher Threat, and lower Uncontrollability were found to be significantly associated with the Negative Affect.

3.2.2.3.3 Variables Associated with the Emotional Expression

According to the results of the regression analysis run for the Emotional Expression measure (see Table-10C), among the control variables, Monthly Income revealed significant association ($\beta = .16$, $t(266) = 2.58$, $p < .01$) with the Emotional Expression, and this variable explained 2% of the variance ($F[1, 266] = 6.64$, $p < .01$). After controlling for this factor, Work Stress did not reveal significant association with Emotional Expression, though as a result of entrance of this variable explained variance increased 3% ($F \text{ change } [1, 265] = 0.70$, n.s.). Following Work Stress, among the Primary Appraisal factors, only Challenge ($\beta = .20$, $t(262) = 3.04$, $p < .005$) revealed positive association; and with these variables in the equation explained variance increased to 8% ($F \text{ change } [3, 262] = 5.28$, $p < .001$). Finally, among Secondary Appraisal factors, higher Self-Control ($\beta = .20$, $t(259) = 2.96$, $p < .005$), and lower Uncontrollability ($\beta = -.17$, $t(259) = -2.21$, $p < .05$) perceptions had significant associations with the Emotional Expression; and with the entrance of all secondary appraisal factors explained variance increased to 14% ($F \text{ change } [3, 259] = 5.22$, $p < .005$).

Therefore, totally four variables, namely higher monthly income, perceptions of higher Challenge, higher Self-Control, and lower Uncontrollability were found to be significantly associated with the Emotional Expression.

3.2.2.3.4 Variables Associated with the Emotional Processing

According to the results of the regression analysis run for the Emotional Processing measure (see Table-10D), among the control variables, no factors had

significant association with the Emotional Processing. Similarly, Work Stress did not reveal a significant association with the Emotional Processing, and this variable explained no meaningful variance (F change [1, 266] = 0.94, n.s.). Following Work Stress, among the Primary Appraisal factors, Challenge ($\beta = .19$, $t(263) = 3.03$, $p < .005$), and Centrality ($\beta = .18$, $t(263) = 2.23$, $p < .05$) revealed positive associations; and with the Primary Appraisal factors explained variance increased to 9% (F change [3, 263] = 7.76, $p < .001$). Finally, among the Secondary Appraisal factors, higher Self-Control ($\beta = .14$, $t(260) = 2.08$, $p < .05$), and lower Uncontrollability perceptions ($\beta = -.20$, $t(260) = -2.68$, $p < .01$) had significant associations with the Emotional Processing; and with the entrance of all secondary appraisal factors explained variance increased to 13% (F change [3, 260] = 4.02, $p < .01$).

Therefore, totally four variables, namely perceptions of higher Challenge, higher Centrality, higher Self-Control, and lower Uncontrollability were found to be significantly associated with the Emotional Processing.

3.2.2.4 Variables Associated with the Coping Strategies

Hierarchical multiple regression analyses were conducted to reveal the significant associates of Coping Strategies; namely, Problem-Focused Coping, Emotion-Focused Coping, and Seeking Social Support. Variables were entered into the equation via five steps. In order to control for the possible effects of socio-demographic variables (i.e., gender, age, education, marital status, monthly income, years in job, years in the institution, shift status, duration of communication with prisoners), these first step variables were entered into the equation via stepwise method.

After controlling for the socio-demographic variables that were significantly associated with the dependent variable, total work stress (i.e., WSSCO) was entered into the equation on the second step. On the third step, primary appraisal factors (i.e., challenge, centrality, and threat) were entered into the equation. Secondary appraisal factors (i.e., self-control, other-control, and uncontrollability) were entered into the equation on the fourth step. Finally, on the fifth step, Affect related variables (i.e., positive, and negative affects, and emotional expression, and emotional processing) were entered into the equation.

3.2.2.4.1 Variables Associated with the Problem-Focused Coping

According to the results of the regression analysis run for the Problem-Focused Coping (see Table-11A), among the control variables, no factors had significant association with the Problem-Focused Coping. Similarly, Work Stress did not reveal significant association with the Problem-Focused Coping, and this variable explained no meaningful variance (F change [1, 266] = 0.01, n.s.). Following Work Stress, among Primary Appraisal factors, only Challenge ($\beta = .32$, $t(263) = 5.02$, $p < .001$) revealed positive association; and with Primary Appraisal factors in the equation 11% of the variance has been explained (F change [3, 263] = 11.11, $p < .001$). Among the Secondary Appraisal factors, higher Self-Control ($\beta = .22$, $t(260) = 2.29$, $p < .001$) had significant association with the Problem-Focused Coping; and with the entrance of all secondary appraisal factors explained variance increased to

Table-11: Variables Associated with Coping Strategies

Predictors in set		F for set	t for w/in set Predictors	df	Beta (β)	Model R ² Change
A. Dependent Variable: PROBLEM-FOCUSED COPING						
I.	<i>Stress</i>	0.01		1, 266		.000
	Total Stress		-.10	266	-.00	
II.	<i>Primary Appraisal</i>	11.11****		3, 263		.112
	Challenge		5.02****	263	.32	
	Centrality		.73	263	.06	
	Threat		-.46	263	-.04	
III.	<i>Secondary Appraisal</i>	3.73*		3, 260		.037
	Self-control		3.29****	260	.22	
	Other-control		-.34	260	-.02	
	Uncontrollability		.54	260	.04	
IV.	<i>Affect</i>	18.58****		4, 256		.191
	Positive affect		5.91****	256	.32	
	Negative affect		-4.35****	256	-.28	
	Emotional expression		-2.59**	256	-.18	
	Emotional processing		3.97****	256	.28	
B. Dependent Variable: EMOTION-FOCUSED COPING						
I.	<i>Stress</i>	8.47***		1, 266		.031
	Total Stress		2.91***	266	.18	
II.	<i>Primary Appraisal</i>	1.81		3, 263		.020
	Challenge		2.28*	263	.15	
	Centrality		-1.28	263	-.10	
	Threat		.87	263	.07	
III.	<i>Secondary Appraisal</i>	2.51		3, 260		.027
	Self-control		-1.28	260	-.09	
	Other-control		1.16	260	.07	
	Uncontrollability		2.23*	260	.17	
IV.	<i>Affect</i>	2.82*		4, 256		.039
	Positive affect		-1.38	256	-.09	
	Negative affect		1.87	256	.14	
	Emotional expression		-1.20	256	-.10	
	Emotional processing		-.75	256	-.06	
C. Dependent Variable: SEEKING SOCIAL SUPPORT						
I.	<i>Control variables</i>	4.03*		1, 266		.015
	Communication w/ prisoners		-2.01*	266	-.12	
II.	<i>Control variables</i>	3.94*		1, 265		.014
	Monthly income		-1.99*	265	-.12	
III.	<i>Stress</i>	4.86*		1, 264		.018
	Total Stress		-2.20*	264	-.13	
IV.	<i>Primary Appraisal</i>	3.06*		3, 261		.032
	Challenge		1.98*	261	.13	
	Centrality		.88	261	.07	
	Threat		-1.80	261	-.14	
V.	<i>Secondary Appraisal</i>	2.61*		3, 258		.027
	Self-control		1.62	258	.11	
	Other-control		1.43	258	.09	
	Uncontrollability		-1.35	258	-.10	
VI.	<i>Affect</i>	7.17****		4, 254		.091
	Positive affect		3.23****	254	.19	
	Negative affect		-3.50****	254	-.25	
	Emotional expression		2.75**	254	.21	
	Emotional processing		-1.14	254	-.09	

* p < .05 ** p < .01 *** p < .005 **** p < .001

15% (F change [3, 260] = 3.73, $p < .001$). Finally, among the Affect-Related variables, higher Positive Affect ($\beta = .32$, $t(256) = 5.91$, $p < .001$), and higher Emotional Processing ($\beta = .28$, $t(256) = 3.97$, $p < .001$) but lower Negative Affect ($\beta = -.28$, $t(256) = -4.35$, $p < .001$), and lower Emotional Expression ($\beta = -.18$, $t(256) = -2.59$, $p < .01$) were significant; and all Affect variables increased the explained variance to 34% (F change [4, 256] = 18.58, $p < .001$).

Therefore, totally six variables, namely higher Challenge, and Self-Control perceptions, higher Positive Affect, and Emotional Processing, but lower Negative Affect, and Emotional Expression were found to be significantly associated with the Problem-Focused Coping.

3.2.2.4.2 Variables Associated with the Emotion-Focused Coping

According to the results of the regression analysis run for the Emotion-Focused Coping (see Table-11B), among the control variables, no factors had significant association with the Emotion-Focused Coping. Work Stress ($\beta = .18$, $t(266) = 2.91$, $p < .005$) revealed significant association with Emotion-Focused Coping, and this variable explained 3% of the variance (F change [1, 266] = 8.47, $p < .005$). Following Work Stress, among Primary Appraisal factors, only Challenge ($\beta = .15$, $t(263) = 2.28$, $p < .05$) revealed positive association; and Primary Appraisal factors increased the explained variance to 5% (F change [3, 263] = 1.81, n. s.). Among Secondary Appraisal factors, higher Uncontrollability ($\beta = .17$, $t(260) = 2.23$, $p < .05$) had significant association with the Emotion-Focused Coping; and with the entrance of all secondary appraisal factors explained variance increased

to 8% (F change [3, 260] = 2.50, n.s.). Finally, among the Affect measures, no factors had significant association with the Emotion-Focused Coping, though as a result of entrance of these affect related variables explained variance increased to 12% (F change [4, 256] = 2.82, $p < .05$).

Therefore, totally three variables, namely Work Stress, Challenge, and Uncontrollability appraisals were found to be significantly associated with the Emotion-Focused Coping. However, for the Challenge, and Uncontrollability factors F for the set was not significant, indicating that we should only consider Work Stress as a significant associate of Emotion-Focused Coping.

3.2.2.4.3 Variables Associated with the Seeking Social Support

According to the results of the regression analysis run for the Seeking Social Support (see Table-11C), among the control variables, shorter Duration of Communication with Prisoners revealed significant association ($\beta = -.12$, $t(266) = -2.01$, $p < .05$) with the Seeking Social Support, and this variable explained 2% of the variance (F [1, 266] = 4.03, $p < .05$). Following Duration of Communication with Prisoners, lower monthly income was found to be significantly associated ($\beta = -.12$, $t(265) = -1.99$, $p < .05$) with Seeking Social Support, and this variable increased explained variance to 3% (F change [1, 265] = 3.94, $p < .05$). After controlling for these factors, lower Work Stress ($\beta = -.13$, $t(264) = -2.20$, $p < .05$) revealed significant association with Seeking Social Support, and with the entrance of this variable explained variance increased to 5% (F change [1, 264] = 4.86, $p < .05$). Following Work Stress, among Primary Appraisal factors, only Challenge ($\beta = .13$, $t(261) = 1.98$, $p < .05$) revealed positive associations; and with the entrance of

all primary appraisal factors explained variance increased to 8% (F change [3, 261] = 3.06, $p < .05$). Among Secondary Appraisal factors, no factors had significant association with the Seeking Social Support, though as a result of entrance of these variables explained variance increased 11% (F change [3, 258] = 2.61, n.s.). Finally, among the Affect-Related variables, higher Positive Affect ($\beta = .19$, $t(254) = 3.23$, $p < .001$), and higher Emotional Expression ($\beta = .21$, $t(254) = 2.75$, $p < .01$), but lower Negative Affect ($\beta = -.25$, $t(254) = -3.50$, $p < .001$) were significant; and all Affect variables increased the explained variance to 20% (F change [4, 254] = 7.17, $p < .001$).

Therefore, totally seven variables, namely shorter of Communication with the Prisoners, lower Monthly Income, lower Work Stress, higher Challenge perception, higher Positive Affect, and Emotional Expression, but lower Negative Affect were found to be significantly associated with the Seeking Social Support.

3.2.2.5 Variables Associated with Psychological Distress and Well-Being

Hierarchical multiple regression analyses were conducted to reveal the significant associates of psychological distress, and well-being measures; namely, depressive symptoms, trait anxiety, life satisfaction, and job satisfaction. Variables were entered into the equation via six steps. In order to control for the possible effects of socio-demographic variables (i.e., gender, age, education, marital status, monthly income, years in job, years in the institution, shift status, duration of communication with prisoners), these first step variables were entered into the equation via stepwise method.

After controlling for the socio-demographic variables that were significantly associated with the dependent variable, total work stress (i.e., WSSCO) was entered into the equation on the second step. On the third step, primary appraisal factors (i.e., challenge, centrality, and threat) were entered into the equation. Secondary appraisal factors (i.e., self-control, other-control, and uncontrollability) were entered into the equation on the fourth step. As the fifth step, Affect related variables (i.e., positive, and negative affects, and emotional expression, and emotional processing) were entered into the equation. Finally, on the sixth step, coping strategies (i.e., problem-focused coping, emotion-focused coping, and seeking social support) were entered into the equation.

3.2.2.5.1 Variables Associated with the Depressive Symptoms

According to the results of the regression analysis run for the Depressive Symptoms (see Table-12A), among the control variables, Years in Job revealed significant association ($\beta = .22$, $t(266) = 3.66$, $p < .001$) with the Depressive Symptoms, and this variable explained 5% of the variance ($F [1, 266] = 13.41$, $p < .001$). After controlling the effect of Years in Job, Work Stress ($\beta = .47$, $t(265) = 8.70$, $p < .001$) revealed significant association with Depressive Symptoms, and with the entrance of this variable explained variance increased to 26% ($F \text{ change } [1, 265] = 75.61$, $p < .001$).

Table-12: Variables Associated with Psychological Distress

	Predictors in set	F for set	t for w/in set Predictors	df	Beta (β)	Model R ² Change
A. Dependent Variable: DEPRESSIVE SYMPTOMS						
I.	<i>Control variables</i>	13.41 ^{****}		1, 266		.048
	Total years in job		3.66 ^{****}	266	.22	
II.	<i>Stress</i>	75.61 ^{****}		1, 265		.211
	Total Stress		8.70 ^{****}	265	.47	
III.	<i>Primary Appraisal</i>	1.79		3, 262		.015
	Challenge		-.91	262	-.05	
	Centrality		.91	262	.06	
	Threat		1.11	262	.08	
IV.	<i>Secondary Appraisal</i>	4.35 ^{***}		3, 259		.035
	Self-control		-1.13	259	-.07	
	Other-control		-1.34	259	-.07	
	Uncontrollability		-3.04 ^{****}	259	-.20	
V.	<i>Affect</i>	23.42 ^{****}		4, 255		.186
	Positive affect		-5.36 ^{****}	255	-.25	
	Negative affect		8.45 ^{****}	255	.47	
	Emotional expression		-1.06	255	-.06	
	Emotional processing		.17	255	.01	
VI.	<i>Coping</i>	3.04 [*]		3, 252		.018
	Problem-focused		.51	252	.03	
	Emotion-focused		2.91 ^{***}	252	.14	
	Seeking social support		-.67	252	-.03	
B. Dependent Variable: TRAIT ANXIETY						
I.	<i>Control variables</i>	14.96 ^{****}		1, 266		.053
	Age		3.87 ^{***}	266	.23	
II.	<i>Control variables</i>	5.09 [*]		1, 265		.018
	Communication w/ prisoners		2.26 [*]	265	.14	
III.	<i>Stress</i>	8.27 ^{***}		1, 264		.028
	Total Stress		2.88 ^{***}	264	.17	
IV.	<i>Primary Appraisal</i>	29.13 ^{****}		3, 261		.226
	Challenge		-5.27 ^{****}	261	-.29	
	Centrality		-.23	261	-.02	
	Threat		6.17 ^{****}	261	.41	
V.	<i>Secondary Appraisal</i>	6.01 ^{****}		3, 258		.044
	Self-control		-3.11 ^{***}	258	-.18	
	Other-control		-1.97 [*]	258	-.11	
	Uncontrollability		-1.07	258	-.07	
VI.	<i>Affect</i>	11.72 ^{****}		4, 254		.098
	Positive affect		-1.22	254	-.06	
	Negative affect		5.65 ^{****}	254	.32	
	Emotional expression		-1.95 [*]	254	-.12	
	Emotional processing		-.85	254	-.05	
VII	<i>Coping</i>	3.41 [*]		3, 251		.021
	Problem-focused		-3.04 ^{***}	251	-.18	
	Emotion-focused		-.64	251	-.03	
	Seeking social support		-.01	251	-.00	

* p < .05 ** p < .01 *** p < .005 **** p < .001

Following Work Stress, among the Primary Appraisal Factors no factors had significant association with the Depressive Symptoms, though as a result of entrance of these variables explained variance increased 27% (F change [3, 262] = 1.79, n.s.). Among the Secondary Appraisal factors, lower Uncontrollability ($\beta = -.20$, $t(259) = -3.04$, $p < .005$) had significant association with the Depressive Symptoms; and with the entrance of all secondary appraisal factors explained variance increased to 31% (F change [3, 259] = 4.35, $p < .005$). Following these appraisal factors, among the Affect-Related measures, Negative Affect ($\beta = .47$, $t(255) = 8.45$, $p < .001$), and low Positive Affect ($\beta = -.25$, $t(255) = -5.36$, $p < .001$) were significant; and all Affect-Related variables increased the explained variance to 50% (F change [4, 255] = 23.42, $p < .001$). Finally, among Coping Strategies only Emotion-Focused-Coping ($\beta = .14$, $t(252) = 2.91$, $p < .005$) was found to be significantly associated with the Depressive Symptoms; and with the entrance of the Coping Strategies explained variance increased to 51% (F change [3, 252] = 3.04, $p < .05$).

Therefore, totally six variables, namely Years in Job, Work Stress, lower Uncontrollability perception, higher Negative Affect but lower Positive Affect, and finally higher Emotion-Focused Coping were found to be significantly associated with the Depressive Symptoms.

3.2.2.5.2 Variables Associated with the Trait Anxiety

According to the results of the regression analysis run for the Trait Anxiety (see Table-12B), among the control variables, Age revealed significant association ($\beta = .23$, $t(266) = 3.87$, $p < .001$) with the Trait Anxiety, and this variable explained 5%

of the variance ($F [1, 266] = 14.96, p < .001$). Following age, duration of communication with the prisoners was found to be significantly associated ($\beta = .14, t (265) = 2.26, p < .05$) with anxiety, and this variable increased explained variance to 7% ($F \text{ change } [1, 265] = 5.09, p < .05$). After controlling for these factors, Work Stress ($\beta = .17, t (264) = 2.88, p < .005$) revealed significant association with Trait Anxiety, and with the entrance of this variable explained variance increased to 10% ($F \text{ change } [1, 264] = 8.27, p < .005$). Following Work Stress, among Primary Appraisal factors, Challenge ($\beta = -.29, t (261) = -5.27, p < .001$), and Threat ($\beta = .41, t (261) = 6.17, p < .001$) revealed negative, and positive associations respectively; and with the entrance of all primary appraisal factors explained variance increased to 33% ($F \text{ change } [3, 261] = 29.13, p < .001$). Among Secondary Appraisal factors, lower Self-Control ($\beta = -.18, t (258) = -3.11, p < .005$), and Other-Control ($\beta = -.11, t (258) = -1.97, p < .05$) perceptions had significant association with the Trait Anxiety; and with the entrance of all secondary appraisal factors explained variance increased to 37% ($F \text{ change } [3, 258] = 6.01, p < .001$). Following these appraisal factors, among the Affect-Related measures, higher Negative Affect ($\beta = .32, t (254) = 5.65, p < .001$), and lower Emotional Expression ($\beta = -.12, t (254) = -1.95, p < .05$) were significant; and all Affect-Related variables increased the explained variance to 47% ($F \text{ change } [4, 254] = 11.72, p < .001$). Finally, among Coping Strategies only lower levels of Problem-Focused-Coping ($\beta = -.18, t (251) = -3.04, p < .005$) was found to be significantly associated with the Trait Anxiety; and with the entrance of the Coping Strategies explained variance increased to 49% ($F \text{ change } [3, 251] = 3.41, p < .05$).

Therefore, totally 10 variables, namely Being Older, longer Communication with the Prisoners, Work Stress, having lower Challenge, Self-Control, and Other-Control perceptions but higher Threat perceptions, higher Negative Affect but lower Emotional Expression, and finally lower levels of Problem-Focused Coping were found to be significantly associated with the Trait Anxiety.

3.2.2.5.3 Variables Associated with the Life Satisfaction

According to the results of the regression analysis run for the Life Satisfaction (see Table-13A), among the control variables, Age (being younger) revealed significant association ($\beta = -.25$, $t(266) = -4.20$, $p < .001$) with the Life satisfaction, and this variable explained 6% of the variance ($F[1, 266] = 17.61$, $p < .001$). Following age, Gender (being female) was found to be significantly associated ($\beta = -.17$, $t(265) = -2.81$, $p < .005$) with Life Satisfaction, and this variable increased explained variance to 9% ($F \text{ change } [1, 265] = 7.87$, $p < .005$). After controlling for these factors, lower Work Stress ($\beta = -.33$, $t(264) = -5.96$, $p < .001$) revealed a significant association with Life satisfaction, and with the entrance of this variable explained variance increased to 20% ($F \text{ change } [1, 264] = 35.52$, $p < .001$). Following Work Stress, among the Primary Appraisal factors, no factors had significant association with the Life Satisfaction, and as a result of entrance of these variables explained variance remained 20% ($F \text{ change } [3, 261] = 0.44$, n.s.). Among Secondary Appraisal factors, Other-Control ($\beta = .14$, $t(258) = 2.49$, $p < .05$) had significant association with the Life satisfaction; and with the entrance of all secondary appraisal factors explained variance increased to 24% ($F \text{ change } [3, 258] =$

Table-13: Variables Associated with Psychological Adjustment

	Predictors in set	F for set	t for w/in set Predictors	df	Beta (β)	Model R ² Change
A. Dependent Variable: LIFE SATISFACTION						
I.	<i>Control variables</i>	17.61****		1, 266		.062
	Age		-4.20***	266	-.25	
II.	<i>Control variables</i>	7.87***		1, 265		.027
	Gender		-2.81***	265	-.17	
III.	<i>Stress</i>	35.52****		1, 264		.108
	Total Stress		-5.96****	264	-.33	
IV.	<i>Primary Appraisal</i>	0.44		3, 261		.004
	Challenge		1.01	261	.06	
	Centrality		.04	261	.00	
	Threat		-.30	261	-.02	
V.	<i>Secondary Appraisal</i>	3.97**		3, 258		.035
	Self-control		1.03	258	.07	
	Other-control		2.49*	258	.14	
	Uncontrollability		1.78	258	.13	
VI.	<i>Affect</i>	3.75**		4, 254		.043
	Positive affect		3.27****	254	.19	
	Negative affect		-1.45	254	-.10	
	Emotional expression		1.76	254	.13	
	Emotional processing		-.76	254	-.06	
VI	<i>Coping</i>	1.37		3, 251		.012
I	Problem-focused		-.51	251	-.04	
	Emotion-focused		1.93	251	.11	
	Seeking social support		.27	251	.02	
B. Dependent Variable: JOB SATISFACTION						
I.	<i>Control variables</i>	4.65*		1, 266		.017
	Shift		-2.16*	266	-.13	
II.	<i>Control variables</i>	5.60*		1, 265		.020
	Education level		-2.37*	265	-.15	
III.	<i>Stress</i>	37.63****		1, 264		.120
	Total Stress		-6.13****	264	-.35	
IV.	<i>Primary Appraisal</i>	7.03****		3, 261		.063
	Challenge		4.18****	261	.25	
	Centrality		-1.46	261	-.11	
	Threat		2.36*	261	.17	
V.	<i>Secondary Appraisal</i>	0.80		3, 258		.007
	Self-control		1.20	258	.08	
	Other-control		.67	258	.04	
	Uncontrollability		.28	258	.02	
VI.	<i>Affect</i>	7.21****		4, 254		.079
	Positive affect		5.14****	254	.28	
	Negative affect		-1.90	254	-.13	
	Emotional expression		1.37	254	.10	
	Emotional processing		-1.76	254	-.13	
VI	<i>Coping</i>	2.78*		3, 251		.022
I	Problem-focused		1.22	251	.08	
	Emotion-focused		1.52	251	.08	
	Seeking social support		1.84	251	.11	

* p < .05 ** p < .01 *** p < .005 **** p < .001

Note. Gender was coded as 1 for females, and 2 for males; Shift was coded as 0 for no, and 1 for yes

3.97, $p < .01$). Following these appraisal factors, among the Affect-Related Variables, Positive Affect ($\beta = .19$, $t(254) = 3.27$, $p < .001$) was significant; and all Affect-Related variables increased the explained variance to 28% (F change [4, 254] = 3.75, $p < .01$). Finally, among Coping Strategies, no factors had significant association with the Life Satisfaction, however as a result of entrance of these variables explained variance increased 29% (F change [3, 251] = 1.37, n.s.).

Therefore, totally five variables, namely being older, being female, having lower Work Stress, higher Other-Control perception, and finally having higher Positive Affect were found to be significantly associated with the Life Satisfaction.

3.2.2.5.4 Variables Associated with the Job Satisfaction

According to the results of the regression analysis run for the (see Table-13B), among the socio-demographic variables, being in a regular schedule (no shift status) revealed significant association ($\beta = -.13$, $t(266) = -2.16$, $p < .05$) with the Job Satisfaction, and this variable explained 2% of the variance (F [1, 266] = 4.65, $p < .05$). Following Shift Status, Education was found to be negatively associated ($\beta = -.15$, $t(265) = -2.37$, $p < .05$) with Job Satisfaction, and this variable increased explained variance to 4% (F change [1, 265] = 5.60, $p < .05$). After controlling for these factors, lower Work Stress ($\beta = -.35$, $t(264) = -6.13$, $p < .001$) revealed significant association with Job Satisfaction, and with the entrance of this variable explained variance increased to 16% (F change [1, 264] = 75.62, $p < .001$).

Following Work Stress, among Primary Appraisal factors, Challenge ($\beta = .25$, $t(261) = 4.18$, $p < .001$), and Threat ($\beta = .17$, $t(261) = 2.36$, $p < .05$) perceptions revealed

positive associations; and with the entrance of all primary appraisal factors explained variance increased to 22% (F change [3, 261] = 7.03, $p < .001$). No factors had significant association with the Job Satisfaction among the Secondary Appraisal factors, though as a result of entrance of these variables explained variance increased 23% (F change [3, 258] = 0.80, n.s.). Following these appraisal factors, among the Affect-Related measures, Positive Affect ($\beta = .29$, $t(254) = 5.14$, $p < .001$) was significant; and all Affect-Related variables increased the explained variance to 31% (F change [4, 254] = 7.21, $p < .001$). Finally, among Coping Strategies, no factors had significant association with the Job Satisfaction, however as a result of entrance of these variables explained variance increased 33% (F change [3, 251] = 2.78, $p < .05$).

Therefore, totally six variables, namely being in a regular schedule (not working in Shifts), having lower Education, and lower Work Stress, higher Challenge, and Threat perceptions, and finally Positive Affect were found to be significantly associated with the Job Satisfaction.

A summary of the hierarchical regression analyses is demonstrated in Table-14.

Table-14: General Summary of Hierarchical Regression Analyses

		DEPENDENT VARIABLES																	
		Primary appraisals			Secondary appraisals			Affect related variables				Coping strategies		Distress		Well-being			
		Challenge	Centrality	Threat	Self-Control	Other-Control	Uncontrolab.	Positive Affect	Negative Aff.	Emot.Expres.	Emot.Proces.	Problem-Foc.	Emotion-Foc.	Seek. Soc. Sup	Depression	Trait Anxiety	Life Satisfact.	Job Satisfact.	
PREDICTORS	Socio-Demographic Variables	Age														+	.		
		Gender	-															.	
		Monthly Income								+				.					
		Education																	.
		Years in Job														+			
		Shift Status							.										.
		Commun. w/ Prisoners	-		+		-			+					-		+		
	Work Stress	Total Stress							+				+	-	+	+	-	-	
		Overload																	
		Role Conflict-Ambiguity																	
		Threat Perception			+														
		Physical Inadequacies																	
		General Problems																	
	Primary Appraisals	Challenge				+	+		-	+	+	+	+	+		-		+	
		Centrality						+			+								
		Threat				-	-	+	+							+		+	
	Secondary Appraisals	Self-Control						+		+	+	+				-			
		Other-Control														-	+		
		Uncontrollability							-	-	-		+		-				
	Affect related Variables	Positive Affect										+		+	-		+	+	
		Negative Affect										-		-	+	+			
		Emotional Expression										-		+		-			
		Emotional Processing										+							
	Coping Strategies	Problem-Focused Coping														.			
		Emotion-Focused Coping													+				
		Seeking Social Support																	
	Total R²		.07	.05	.10	.22	.10	.40	.08	.35	.14	.13	.34	.12	.20	.51	.49	.29	.33

* Gender was coded as Female = 1, Male = 2, and "Shift Status" was coded as No = 0, Yes = 1

** Grey area demonstrated the variables that were not entered into equation

3.3 Testing the Models

3.3.1 Model Identification

In the model identification step, the proposed model for each dependent variable namely, depression, trait anxiety, life satisfaction, and job satisfaction, was constructed based on the results of the regression analyses explained above. The variables and factors that determine the model were classified in this step.

The observed or indicator variables are directly measured variables, and can be both dependent, and independent variables. Observed variables were comprised of the dimensions of the primary appraisal, secondary appraisal, affect related measures, and coping strategies. Four variables were selected in this model as an outcome variable, namely depression, anxiety, life satisfaction, and job satisfaction. As illustrated in figures demonstrated below, the observed variables were presented in the figure by rectangle.

3.3.2 Models Testing for Depression

3.3.2.1 Model Estimation

After the model identification, the measurement model was tested. The measurement of each observed variable is essential in order to get a psychometrically sound model in SEM (Bollen & Long, 1993; Byrne, 2001). When ratio between χ^2 , and degrees of freedom (df) is smaller than three, the model is suggested to have a good fit regardless of the p value (Sümer, 2000).

After the model identification, the validity of measurement model was tested to acquire related factors in the depression scores of the correctional officers by means of using chi square (χ^2) difference test. The result of chi square difference test demonstrated that the measurement model was not adequate to test depression scores of the correctional officers; $\chi^2 (25, n = 268) = 147.629, p < .001, (\chi^2 / df = 5.905)$. According to some Goodness of Fit Tests the model did not fit the data as well; Root Mean Square Error (RMSEA; Browne & Cudeck, 1993) = .136, The Comparative Fit Index (CFI; Bentler, 1990) = .759, The Relative Fit Index (RFI; Bollen, 1986) = .609, The Incremental Fit Index (IFI, Bollen, 1989) = .764. When looking at the observed variables (Figure-2), the most powerful relationship was obtained between the threat, and uncontrollability perception (.61). However, the least powerful relationship was obtained between the work stress, and challenge perception (.08).

3.3.2.2 Model Modification

The post hoc model modifications were performed in order to develop a better fitting model. Model estimation results revealed a misfit in the modification indexes in the AMOS output. After the model estimation step of SEM, model modification was conducted with the specification search (over 5.000 probability estimates). The modifications that were suggested by the AMOS program were presented in Table-15 for the depression.

3.3.2.3 Model Testing and Model Respecification

The model for Depression was respecified according to the recommendations

of AMOS program in order to obtain adequate fit. By means of applying the suggestions of model modification, the accepted model was tested. After deleting the non-significant paths from the model, and adding the recommended path to the model, modified model revealed adequate fit, $\chi^2 (17, n = 268) = 38.397, p < .01$.

Furthermore, the χ^2 ratio was below the suggested 3:1 ratio ($\chi^2 / df = 2.259$). Goodness of fit index showed that the fit could be regarded as adequate; RMSEA = .069, CFI = .942, IFI = .944, RFI = .840.

Table-15 Suggested Modifications (Variables to be Added) by AMOS Program to Improve the Fit of Hypothesized Model for Testing Depression

Observed-Observed Variables Relationship	Added Paths	Work Stress	→	Negative Affect
	Removed Paths	Threat	→	Uncontrollability
		Uncontrollability	→	Negative affect

When looking at the observed variables in the depression model (Figure-3), the most powerful relationship was obtained between negative affect, and depression (.47). However, the least powerful relationship was obtained between work stress, and challenge perception (.08).

Work Stress Primary Appraisals Secondary Appraisals Affect Coping Strategies Outcome

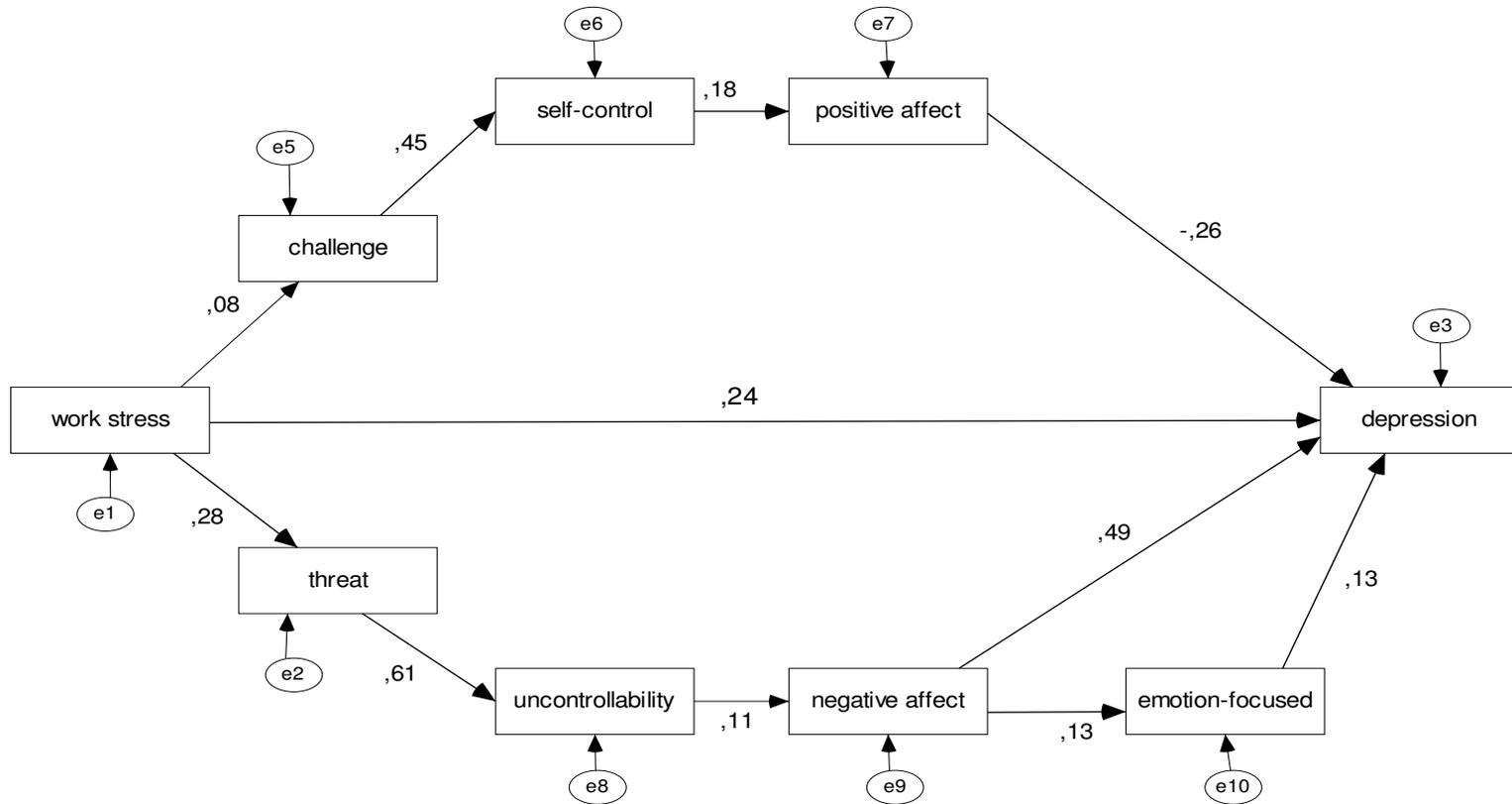


Figure-2: The Measurement Model of Depression

Direct and indirect effects were also investigated in SEM models. At first, direct effects are mentioned. Work stress was directly related with depression (Regression Estimate = .23, $p < .001$). Work stress explained 5.29% variance on depression directly. Secondly, indirect effects were explained in more detail. When testing the effect of work stress on depression via primary and secondary appraisals, affect related variables, and coping five situations appeared. Work stress did not significantly affect the depression scores of the correctional officers via threat, negative affect, and emotion-focused coping (Regression Estimate = .0012, $p = n.s.$). Work stress did not significantly affect depression scores of the correctional officers through threat, and negative affect (Regression Estimate = .0355, $p = n.s.$).

Similarly, work stress did not significantly affect depression scores of the correctional officers through negative affect, and emotion-focused coping (Regression Estimate = .0061, $p = n.s.$). Work stress did not significantly affect depression scores of the correctional officers via challenge perception, self-control, and positive affect (Regression Estimate = -.0016, $p = n.s.$). However, work stress significantly affected depression scores of the correctional officers through negative affect (Regression Estimate = .1833, $p < .05$). Therefore, significant effect of work stress on depression was explained by the negative appraisal styles. Totally, 45.5% of variance was explained by the all variables. Indirect effects explained 22.45% of variance on depression.

Work Stress Primary Appraisals Secondary Appraisals Affect Coping Strategies Outcome

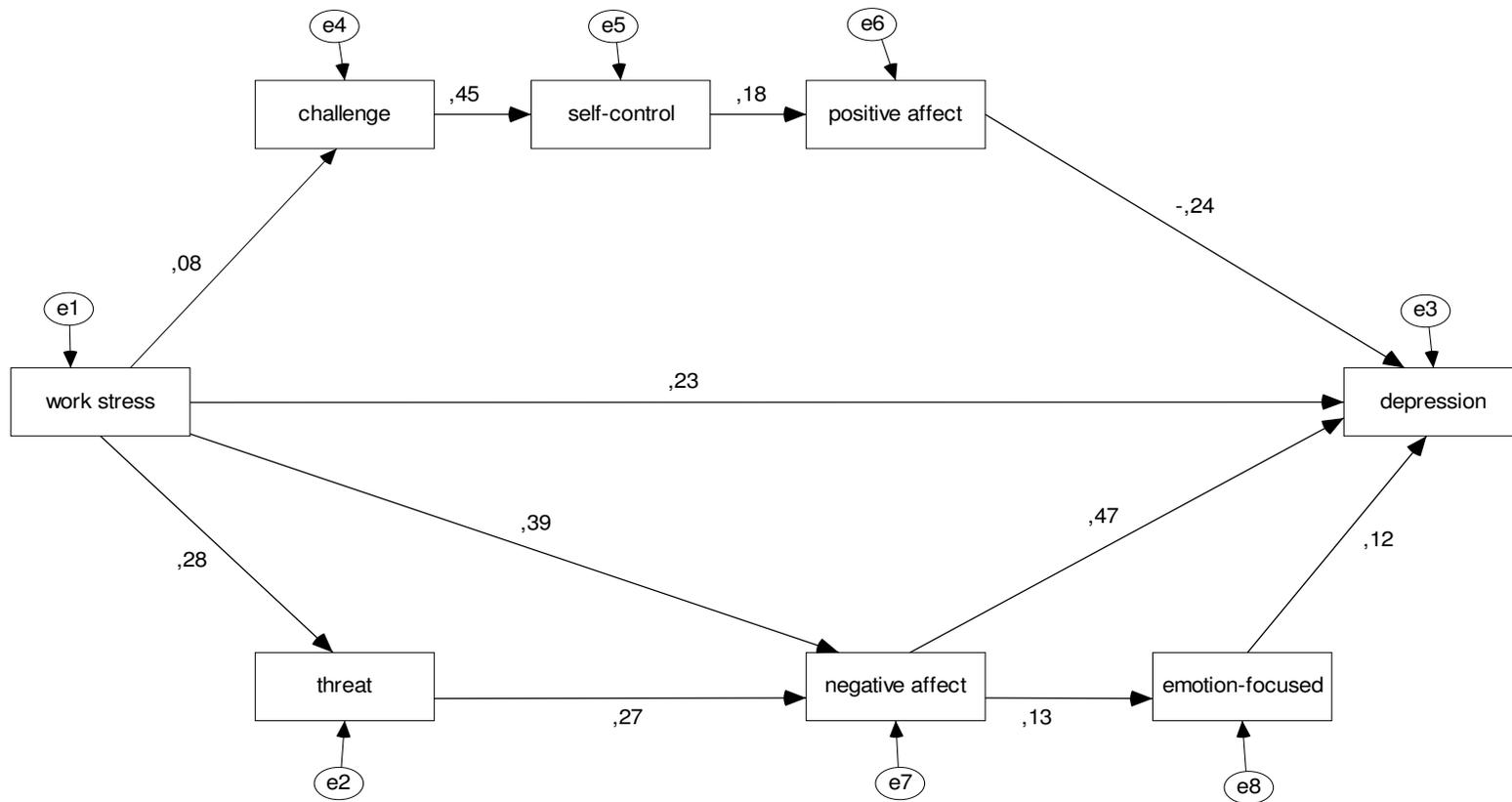


Figure-3: The Modified Model of Depression

3.3.3 Models Testing for Anxiety

3.3.3.1 Model Estimation

After the model identification, the validity of measurement model was tested to acquire related factors in the anxiety scores of the correctional officers by means of using chi square difference test. The result of chi square difference test demonstrated that the variables were correlated with each other, and measurement model was adequate to test anxiety scores of the correctional officers; χ^2 (27, n = 268) = 69.265, $p < .001$. Furthermore, the χ^2 ratio was below the suggested 3:1 ratio ($\chi^2 / df = 2.565$). Goodness of fit index showed that the fit could be regarded as adequate; RMSEA = .077, CFI = .912, IFI = .915, RFI = .780. When looking at the observed variables (Figure-4), the most powerful relationship was obtained between threat and uncontrollability perception (.61). However, the least powerful relationship was obtained between the work stress, and challenge perception (.08).

Direct and indirect effects were also investigated in SEM models. At first, direct effects are mentioned. However, there were no direct effects in the present model. When testing the effect of work stress on anxiety via primary and secondary appraisal, affect related variables, and coping strategies twelve paths appeared all of which explained 24.01% percent of variance (Table-16).

Among all pathways, two pathways were significant. At first, work stress significantly affected the anxiety scores of the correctional officers via threat perception (Regression Estimate = .0868, $p < .05$). Secondly, work stress significantly affected the anxiety scores of the correctional officers via negative affect (Regression Estimate = .1160, $p < .05$).

Work Stress Primary Appraisals Secondary Appraisals Affect Coping Strategies Outcome

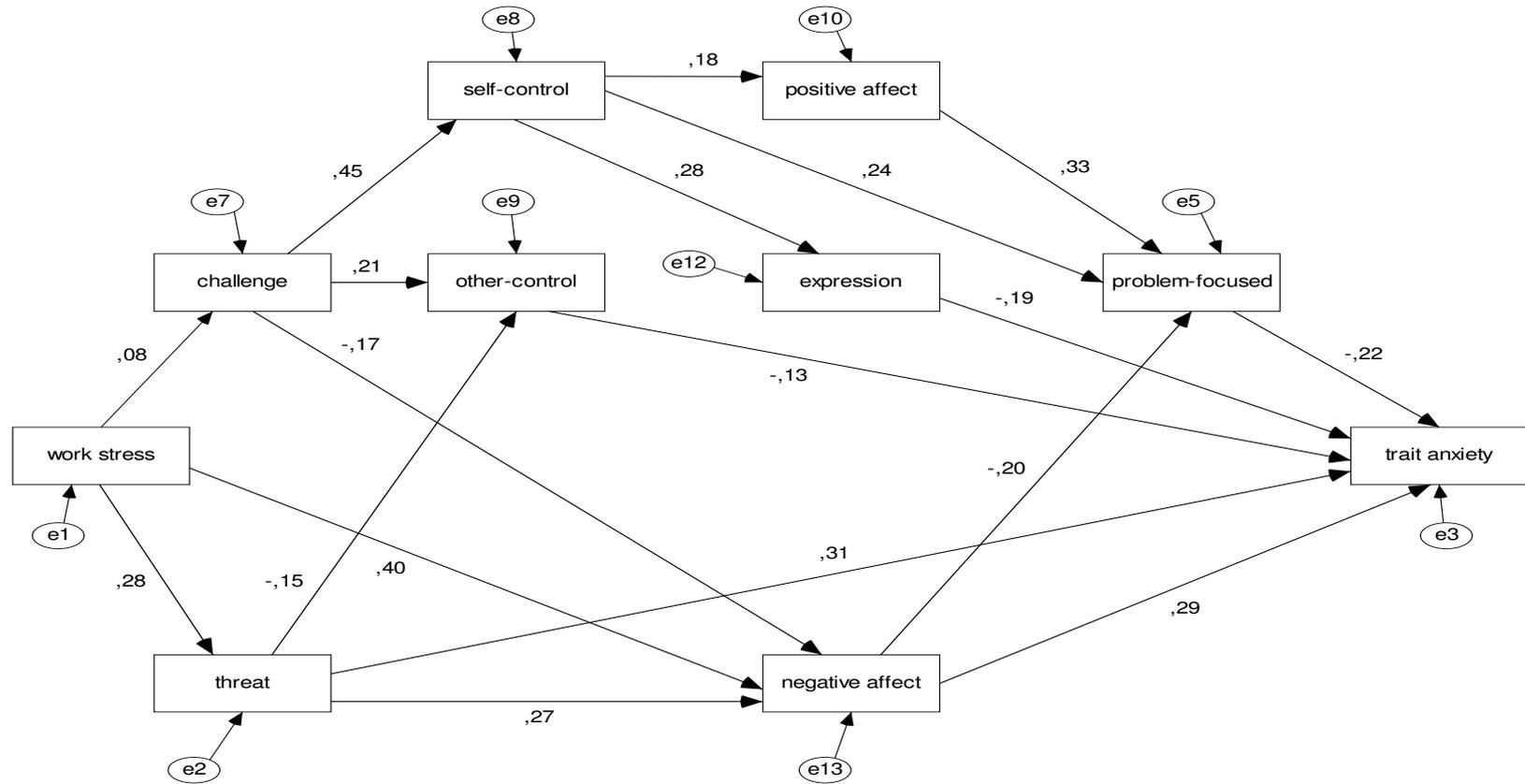


Figure-4: The Model of Trait Anxiety

Table-16: Indirect Effects Associated with the Anxiety Scores of the Correctional Officers

1.	Work Stress (.28) Threat Perception (.27) Negative Affect (.29) Trait Anxiety
2.	Work Stress (.28) Threat Perception (.31) Trait Anxiety
3.	Work Stress (.28) Threat Perception (-.15) Other-Control Perception (-.13) Trait Anxiety
4.	Work Stress (.28) Threat Perception (.27) Negative Affect (-.20) Problem-Focused Coping (-.22) Trait Anxiety
5.	Work Stress (.40) Negative Affect (.29) Trait Anxiety
6.	Work Stress (.40) Negative Affect (-.20) Problem-Focused Coping (-.22) Trait Anxiety
7.	Work Stress (.08) Challenge Perception (-.17) Negative Affect (-.20) Problem-Focused Coping (-.22) Trait Anxiety
8.	Work Stress (.08) Challenge Perception (-.17) Negative Affect (.29) Trait Anxiety
9.	Work Stress (.08) Challenge Perception (.21) Other-Control Perception (-.13) Trait Anxiety
10.	Work Stress (.08) Challenge Perception (.45) Self-Control Perception (.28) Emotional Expression (-.19) Trait Anxiety
11.	Work Stress (.08) Challenge Perception (.45) Self-Control Perception (.18) Positive Affect (.33) Problem-Focused Coping (-.22) Trait Anxiety
12.	Work Stress (.08) Challenge Perception (.45) Self-Control Perception (.24) Problem-Focused Coping (-.22) Trait Anxiety

Total Indirect Effect: 24.01%

3.3.4 Models Testing for Life Satisfaction

3.3.4.1 Model Estimation

After the model identification, the validity of measurement model was tested to acquire related factors in the life satisfaction scores of the correctional officers by

means of using chi square difference test.

The result of chi square difference test demonstrated that the variables were correlated with each other, and measurement model was adequate to test life satisfaction scores of the correctional officers; χ^2 (12, n = 268) = 25.721, $p < .05$. Furthermore, the χ^2 ratio was below the suggested 3:1 ratio ($\chi^2 / df = 2.143$). Goodness of fit index showed that the fit could be regarded as adequate; RMSEA = .065, CFI = .921, IFI = .925, RFI = .769. When looking at the observed variables (Figure-5), the most powerful relationship was obtained between challenge perception, and self-control perception (.45). However, the least powerful relationship was obtained between the work stress, and challenge perception (.08).

Direct and indirect effects were also investigated in SEM models. At first, direct effects are mentioned. Work stress, and life satisfaction relationship was significant (Regression Estimate = -.34, $p < .001$). Three indirect relationships were established in the present study. When testing the effect of work stress on life satisfaction via threat, and other-control perception, significant relationship was not observed (Regression Estimate = -.0063, $p = n.s.$).

Similarly, work stress did not significantly affect life satisfaction scores of the correctional officers through challenge perception, and other-control perception (Regression Estimate = .0025, $p = n.s.$). Besides, work stress did not significantly affect life satisfaction scores of the correctional officers via challenge perception, self-control perception, and positive affect (Regression Estimate = .0012, $p = n.s.$). All variables explained 34.03% percent of variance on life satisfaction.

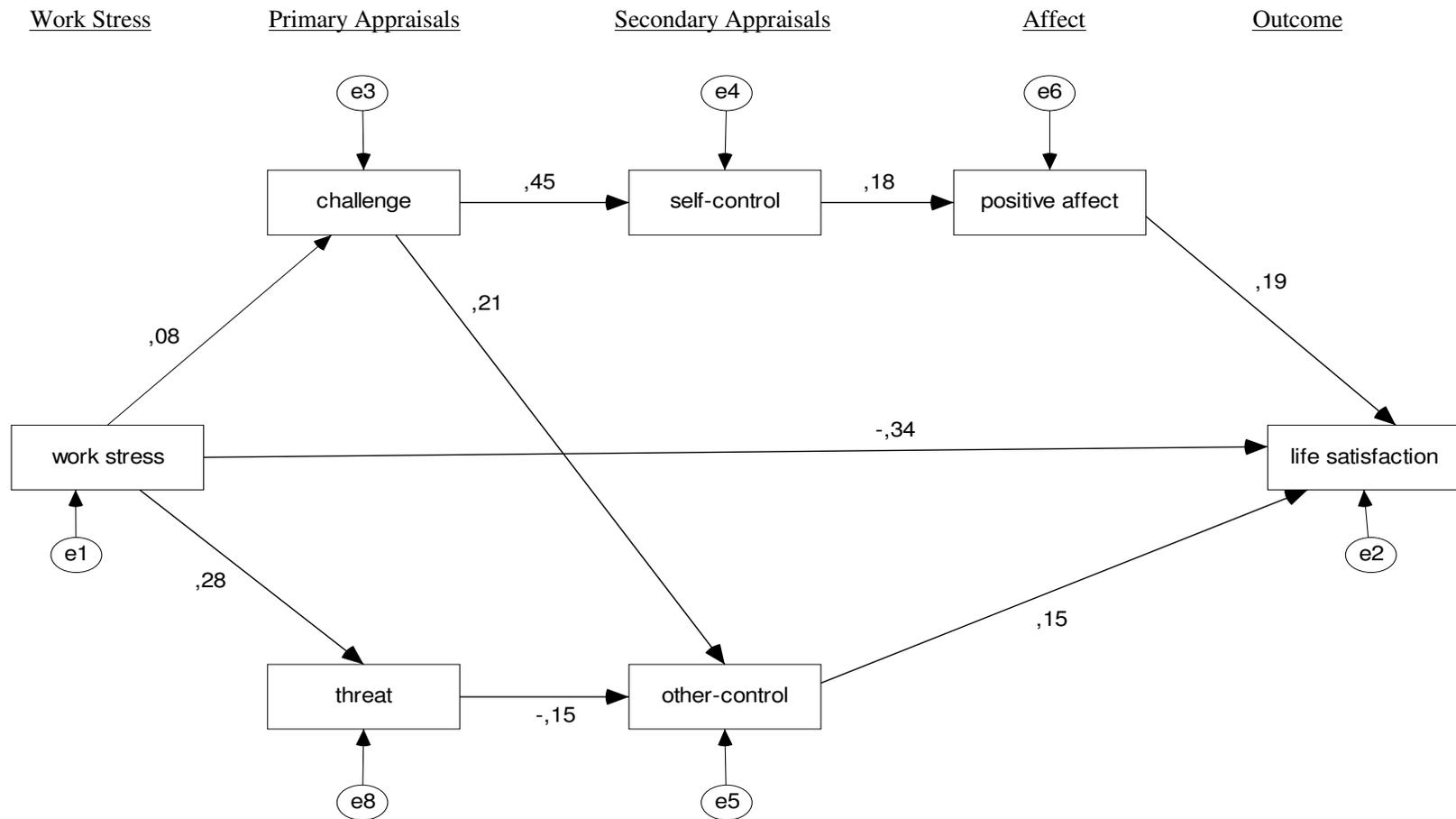


Figure-5: The Model of Life Satisfaction

3.3.5 Models Testing for Job Satisfaction

3.3.5.1 Model Estimation

After the model identification, the validity of measurement model was tested to acquire related factors in the anxiety scores of the correctional officers by means of using chi square difference test. The result of chi square difference test demonstrated that the variables were correlated with each other, and measurement model was adequate to test anxiety scores of the correctional officers; χ^2 (7, n = 268) = 8.996, $p = \text{n.s.}$ Moreover, the χ^2 ratio was below the suggested 2:1 ratio ($\chi^2 / df = 1.285$). Goodness of fit index showed that the fit could be regarded as adequate; RMSEA = .033, CFI = .988, IFI = .989, RFI = .897. When looking at the observed variables (Figure-6), the most powerful relationship was obtained between the challenge perception, and self-control perception (.45). However, the least powerful relationship was obtained between the work stress, and challenge perception (.08).

Direct and indirect effects were also investigated in SEM models. At first, direct effects are mentioned. Work stress was directly, and negatively related with job satisfaction (Regression Estimate = -.39, $p < .001$).

Secondly, indirect effects were explained in more detail. When testing the effect of work stress on anxiety via primary and secondary appraisal, and affect related variables three paths appeared. Work stress significantly affected the job satisfaction scores of the correctional officers via threat perception of the individuals (Regression Estimate = .00308, $p = \text{n.s.}$). Work stress significantly affected the job satisfaction scores of the correctional officers via only challenge perception as well

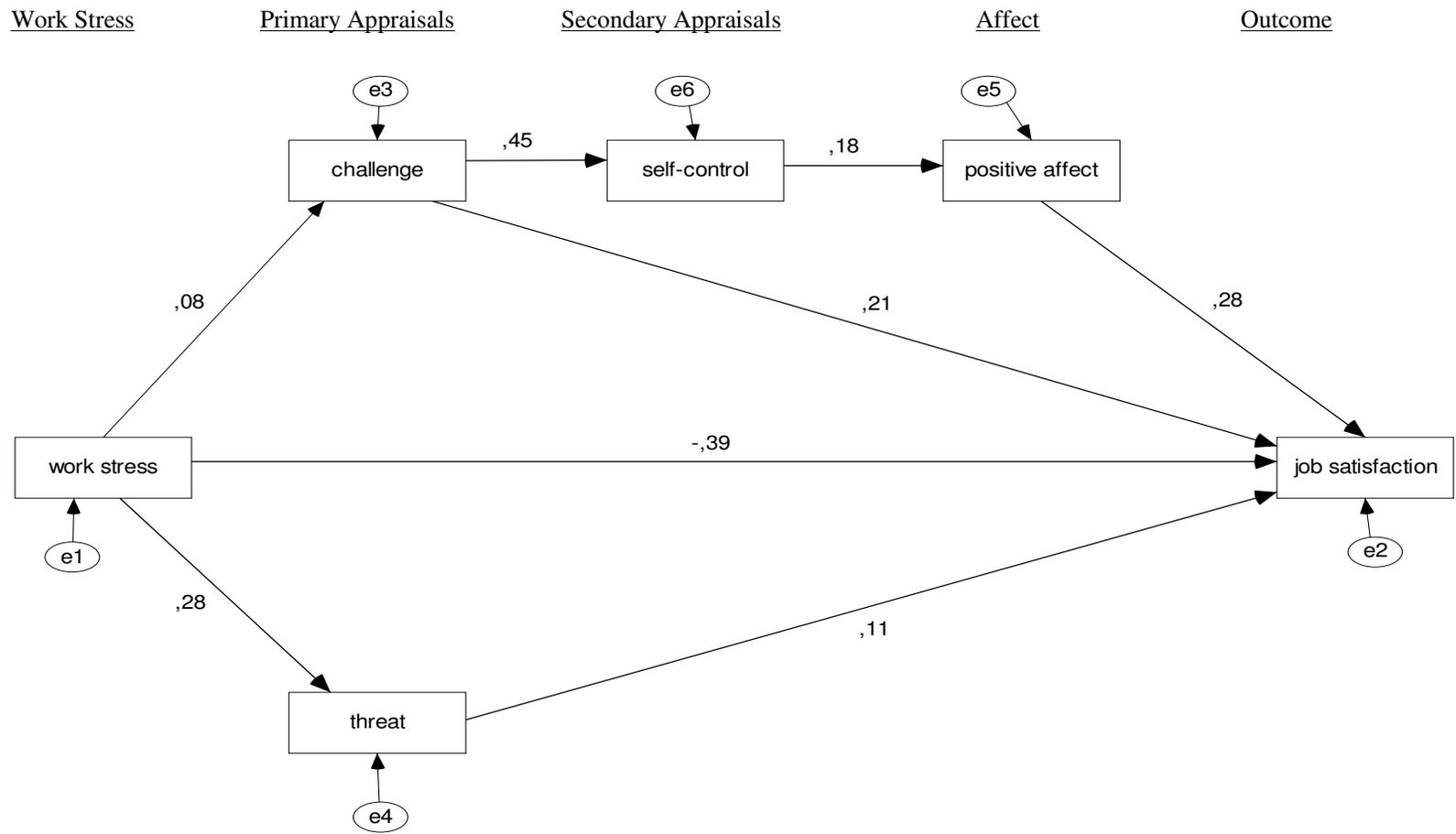


Figure-6: The Model of Job Satisfaction

(Regression Estimate = .0168, $p = n.s.$). Work stress significantly affected the job satisfaction scores of the correctional officers via challenge perception, and self-control perception, and positive affect of the individuals (Regression Estimate = .0018, $p = n.s.$). All variables explained 34.1% percent of variance on the job satisfaction.

CHAPTER FIVE

DISCUSSION

Stress and its related factors have been taken as a main research interest area for many researchers due to the deleterious impacts of stress on health. While explaining stress related factors, the researchers usually focus on explaining the individual differences of the people while they respond to stressful events. When encountered with stress, some people develop serious psychological or physical problems. Some other people on the other hand, do not develop problems and also effectively cope with the aftereffects of the stressful situation. There are two main factors which are important for the stress researchers in their observations regarding individual responses to stress. These are, firstly, the effect of personal or environmental factors on the individual's well being, and secondly the transactions between the person and the environment. Within this framework, the cognitive appraisal of stress has been found to be having considerable impacts on emotional, cognitive and behavioral consequences of stress.

Stress research suggests that, in order to evaluate how an individual can cope with stress, cognitive appraisal of stress should be taken into consideration. It is the cognitive appraisal of stress of the individual which initiates the emotional and

coping processes that in the end induce the effects towards the psychological distress or psychological well-being for the individual.

Based on the Cognitive Transactional Model of Lazarus and Folkman (1984), the present study focused on not only stress, and its cognitive appraisal but also affect processes, and coping strategies for explaining distress (depression, and trait anxiety), and psychological adjustment (life satisfaction, and job satisfaction).

The present study intended to examine the extent to which correctional officers' cognitive appraisal is associated with stress, affect, coping strategies, and psychological outcomes. Furthermore, four models were developed, and tested the impact of work stress among the correctional officers by means of conducting several regression analyses, and using Structural Equation Modeling in Amos 7.00.

This chapter presents a summary of the results, and discusses the findings in relation to the current literature regarding stress and hypotheses of this study. The strengths and the limitations of the present study, the possible therapeutic implications of the study, and the suggestions for future research are also discussed.

4.1 Discussion of the Results

Before developing an interactional model starting up with “cognitive appraisal of stress” to psychological health, numerous analyses were conducted to see correlations among variables, group differences, and the predictive strength of various variables for the dependent variables of the present study.

4.1.1 Bivariate Correlations

First, the bivariate correlations among the variables were examined.

Generally, the results were in line with the expected framework and there were no unexpected results as regards to the directional relationship between correlations.

Depression was positively correlated with work stress, the perception of centrality, and threat, negative affect, and emotion-focused coping while it was negatively correlated with the perception of other-control, positive affect, problem-focused coping, and seeking social support.

Trait anxiety was positively correlated with work stress, the perception of centrality, threat, and uncontrollability, and negative affect; while it was negatively correlated with the perception of challenge, self-control perception, and other-control, positive affect, emotional expression, emotional processing, problem-focused coping, and seeking social support.

Life satisfaction was positively correlated with the perception of other-control, positive affect, and seeking social support; whereas it was negatively correlated with work stress, the perception of threat, and negative affect.

Job satisfaction was positively correlated with the perception of challenge, self-control perception, positive affect, problem-focused coping, and seeking social support; while it was negatively correlated with work stress, and negative affect.

All of these correlations were consistent with the findings of many studies in literature (e.g., Anshel & Kaissidis, 1997; Compas et al., 1988; Lazarus & Folkman, 1984; Roecker et al., 1996). There were no surprising correlations among the variables. This can be interpreted as an indicator of the accuracy of the data which

could be possible thanks to the faithful approach of the participants to the study as well as the attentive data collecting procedures.

4.1.2 Analyses Revealing Group Differences

Before testing the main hypotheses of the study, the group differences in terms of prison type and shift status were examined for the work stress, primary appraisal measures, secondary appraisal measures, affect related measures, coping strategies, psychological distress, and psychological adjustment. According to the results, correctional officers working in shifts had higher work stress, and trait anxiety, less other-control perception, positive affect, life satisfaction, and job satisfaction as compared to those who were working in a regular scheme. Moreover, correctional officers working in maximum-security prisons must have had higher life satisfaction than those working in minimum- or medium-security prisons due to the effect of working area, types of work, and income difference.

The correctional officers working in maximum security prisons had to interact with the prisoners who had records of heavier crimes as compared those who were working in minimum- or medium-security prisons. This may be an effect decreasing life satisfaction of the correctional officers, however group differences demonstrated that working in maximum security prisons provided more life satisfaction. This result can be interpreted that maximum-security prisons can provide clearer, and less ambiguous roles after Ministry of Justice redefine the jobs in the correctional officers (Şenol, 2003). According to the current scheme, as different from the maximum-security prisons, the correctional officers working in

minimum- or medium-security prisons can be faced with the roles beyond their responsibilities (e.g. being household errands of the higher officers) or they may have difficulty to predict the results of their behavior, which are formed by the view of the authorized persons. The manager of the prison may assign a correctional officer a duty not related with the procedures in the prison or he/she may make sudden changes in the roles or working area of the correctional officer, all of which might indicate a stressful work environment for the correctional officer. These factors may have negative affects on correctional officer's life satisfaction. This is consistent with the findings of Rafferty and Griffin (2006) who suggest that frequent change leads anxiety on the employees due to unpredictability of change.

Furthermore, the physical conditions can be better in maximum security prisons than the other type of prisons due to the reason that the correctional officers working in maximum security prisons are more likely to encounter risks of being threatened. The better physical conditions might be working towards adding to the life satisfaction of the officers in the maximum security prisons. Another factor that might be adding to the life satisfaction of the maximum security officers could be the fact that adequate number of personnel is working in maximum-security prisons which provides a lower work overload for these correctional officers as compared to those who work in other types of prisons. Due to definite working hours, the correctional officers in maximum security prisons spend more time with their families, and significant others than the correctional officers working in minimum- or medium-security prisons. All of these factors can explain the finding that the life satisfaction of workers in maximum-security prisons is higher than the other workers.

The results regarding the shifting procedures revealed that the correctional officers who are working in changing shifts showed higher levels of work overload, role conflicts and ambiguity. On the other hand, the correctional officers working in regular schedule face with less work problems such as crises conditions. In line with the literature (Botha & Pienaar, 2006; Şenol-Durak et al., 2006; Triplett, Mullings, & Scarborough, 1996), night shifts, and work stress were positively correlated. Besides, positive affect, life satisfaction, and job satisfaction are associated variable in themselves. Therefore, working in shifts may decrease all of these factors because of higher work overload, role conflicts, and ambiguity. During the data collection, officers working in shift status frequently complained about their difficulty to adapt the daily life routine. These officers emphasized the difficulty they had in communicating with their spouses and children because of their work style. They spend most of their time at bed in order to get some rest and prepare themselves for the next shift. These observations may explain the decrement in the life satisfaction, and job satisfaction of correctional officers working in shift status.

In terms of appraisal components, and core relational themes associated with six emotions, Smith and his colleagues (1993) suggested that core relational theme under the emotion of fear or anxiety were the perception of danger or threat. Consistent with this point of view, working in changing shifts may cause feelings of danger or threat which are the important feelings behind trait anxiety for many reasons. The possibility of facing with crises (suicide attempts of a prisoner, struggles or fights among the prisoners, obligations of hypervigilance to the prisoners escape attempts etc.) in night shifts is higher than in regular time. Also, lower number of personnel during shifts as compared to regular working hours may

cause the crises to be perceived more seriously than they really are. Therefore, the findings seem to be inline with the expectations.

4.1.3 Multiple Regression Analyses

Several hierarchical multiple regression analyses were conducted to test for the main hypotheses of the present study. They were run in five sets to reveal the associates of primary appraisal measures, secondary appraisal measures, affect-related measures, coping strategies, and finally outcomes (psychological distress or psychological adjustment), respectively.

In order to obtain significant associates of Primary Appraisal Factors; namely, challenge, centrality, and threat, variables were entered into the equation via two steps; socio- demographic variables (i.e., gender, age, education, marital status, monthly income, years in job, years in the institution, working scheme (changing shifts vs. regular scheme), duration of communication with prisoners) at the first step, and the dimensions of work stress (i.e., overload, role conflict, and ambiguity, threat perception, physical inadequacies, and general problems) in the second step.

As for the challenge appraisal, firstly gender (being female) was found to be a significant factor. Similar result was obtained by Devonport and Lane (2006) with different participants. They found that women undergraduate students perceived the dissertation as more challenging than male students when encountering the dissertation stress. Secondly, shorter duration of communication with the prisoners was significantly associated with challenge perception. Correctional officers working with longer time to communicate with prisoners may expose to the verbal or

nonverbal threatened behavior of the prisoners. Therefore, communication with the prisoners may decrease the positive reappraisal (Devonport & Lane, 2006) and the possibility of potential gain (Karademas & Kalantzi-Azizi, 2004; Peacock & Wong, 1990).

Neither socio-demographic variables nor the sub-dimensions of work stress were found to be associated with the perception of centrality. This result may be consistent with the preference of omitting this dimension by many researchers who prefer to examine challenge and threat as the primary appraisals (e.g., Roesch & Rowley, 2005).

As for the associates of threat appraisal, the communication with prisoners, and the threat perception dimension of WSSCO were found to be significant. Correctional officers working with longer time to communicate with prisoners may expose to the verbal or nonverbal threatened behavior of the prisoners. Therefore, communication with the prisoners may increase the evaluations of potential harm or loss in a specific situation (Karademas & Kalantzi-Azizi, 2004; Meeks, Woodruff-Borden, & Depp, 2003; Rowley et al., 2005). Threat dimension of the WSSCO, and threat perception was also associated in the present study. Threat dimensions of WSSCO is composed of six items which are “The risk of being threatened particularly due to my position”, “Being involved in arguments, and fights with prisoners”, “Fearing crime report about myself”, “Being under suspicion on a misconduct”, “Having to be cautious all the time at work”, “In the community, my job is referred to as “key keeper” rather than “prison guard”, “Encountering unusual events (e.g., run away, rebellion, fire) in the work place” (Şenol-Durak et al., 2006). Thus these experiences lead to perception of threat, which is an expected finding.

In order to obtain significant associates of the secondary appraisal, following the socio-demographic variables, sub-dimensions of the work stress, and primary appraisals were entered into equation in the separate steps. Challenge and threat were associated with the perception of self-control. While challenge was positively associated with self-control perception, threat was negatively related. Correctional officers who were able to find possible gains in their job perceived events as controllable by themselves. When the officers perceive the possible threats in their job, their self-control perception diminished. Besides, self-control perception and work stress relationship was not found to be significant in the present study, similar to Dopke and Milner's (2000) research conducted with the mothers dealing with the noncompliance of their children.

Shorter communication with the prisoners, higher challenge, and lower threat perceptions were significantly associated with the appraisal of other-control. Correctional officers may experience difficulties in their communication with the prisoners especially during the custody periods, thus the correction of the prisoners' misbehaviors, and the rehabilitation becomes more difficult (Armstrong & Griffin, 2004; Şenol-Durak et al., 2006; Farkas, 1999; Wright, 1993). Thus they prefer to make shorter communications with the prisoners, and tried get help from other by perceiving the situation being under the control of others rather than their own. This result may also be interpreted as working with lower number of personnel especially working in night shifts. During the data collection procedure, the officers complained that while their colleagues working in other countries (i.e., United States, Canada etc.) works in teams with sufficient members of the individuals, they could not. On the other hand, as perceptions of challenge increased, their other-

control perceptions increased as well. Alternatively, when perceptions of threat increased, their perception of other-control decreased. Most probably, when the situation is perceived as a threat, correctional officers felt themselves helpless, and appraised the situation as being beyond the control of even others. However, when it is perceived as a challenge, they appraised the situation as controllable at least by some other.

Primary appraisal factors of centrality and threat were associated with the perception of uncontrollability. The correctional officers perceived higher centrality and threat had higher scores on the uncontrollability. The finding regarding the relationship between threat and uncontrollability was consistent with the previous findings (i.e., Dopke & Milner, 2000). However, centrality and uncontrollability relationship was not established before. It seems that as they perceived the situation more central, they felt more concern about it and the tendency of uncontrollability perceptions increased.

In order to obtain significant associates of the affect related variables, after socio-demographic variables, general work stress, primary appraisals, and secondary appraisals were entered into equation in the separate steps. Being in a no shift and perception of self-control perception revealed significant associations with PA. Correctional officers working in changing shifts had lower scores on the PAs compared to those who work in regular scheme. During the data collection, officers working in changing shifts frequently complained about the difficulty in spending time with pleasurable activities. They were resting at home at the end of the shift that led the difficulty to spare time to the loved ones. Apart from shift status, while perception of self-control increased, PA of the correctional officers increased as

well. The perception of self-control may lead to positive feelings which trigger the PA in the prison. Therefore, they may feel a “psychological break” when they face with some controllable (Folkman & Moskowitz, 2000).

Besides, high level of duration of communication with prisoners, work stress, threat and low level of challenge, uncontrollability were significantly associated with NA. It is possible to face with negative stressful events (e.g., rebellious behaviors or fights between inmates etc.) when communicating with prisoners that may increase the NA in the correctional officers. The findings regarding the relationship of NA and stress are consistent with the previous findings as well (Watson & Clark, 1984). Additionally, it is known that NA is associated with threat and uncontrollability whereas PA is closely related to challenge appraisal (Folkman & Moskowitz, 2000). Additionally, Dopke and Milner (2000) obtained significant association between stress, threat, uncontrollability, and NA previously. Thus, the results of the present study seem to be consistent with the literature findings except for the result of uncontrollability and NA relationship. The correctional officers might felt the negative affect when exposing stress under their control. On the other hand, stress beyond their control did not create the negative affect. It might be due to being reluctant to more responsible which exceeded their control ability.

Monthly income, perception of challenge, self-control perception, and uncontrollability were significantly associated with the emotional expression of the correctional officers. Monthly income and emotional expression relationship may be explained by the position of the officers in the institution. Generally, officers with higher monthly income are those who are working in the managerial positions. Therefore, rather than the monthly income, power of authority may be closely linked

with the emotional expression. Since challenge and self-control appraisals include approach kind of nature and uncontrollability include avoidance (Fergusson et al., 1999) the observed results for these variables were in line with the expectations. In other words, ability to see possible benefits, and ability to control the outcomes of the events may increase the emotional expression of the correctional officers. On the other hand, when the event is evaluated as uncontrollable, emotional expression may decrease.

Perceptions of challenge, centrality, self-control perception, and uncontrollability were found to be significantly associated with the emotional processing. Unlikely to the emotional expression, centrality was related to emotional processing. When the personal significance of the event increased, the emotional processing of the correctional officers increased. In other words, the people try to figure out their real feelings and acknowledge them in case the event is significant to them. On the other hand, likewise in the emotional expression, challenge, self-control perception, and uncontrollability were associated with emotional processing. All of them may be related to the emotional processing due to possessing an approach or avoidance nature of the specific appraisal patterns (Fergusson et al., 1999).

In order to obtain significant associates of the coping strategies, after socio-demographic variables, general work stress, primary appraisals, secondary appraisals, and affect related variables were entered into equation in the separate steps. As for the problem-focused coping, higher challenge (Fergusson et al., 1999; Peacock et al., 1993), and self-control perceptions (Folkman & Lazarus, 1980; Peacock et al., 1993), higher positive affect, and emotional processing but lower

negative affect, and emotional expression (Folkman & Lazarus, 1988) were significantly associated with the problem-focused coping as consistent with the literature. In the emotion-focused coping, while regression weight of challenge, and uncontrollability were significant, set of primary, and secondary appraisal were not significant. Therefore, these variables were accepted as not significant. Forsythe and Compas (1987) did not find a significant relationship between uncontrollability, and emotion-focused coping similar to the present study. Therefore, emotion-focused coping results partially supported the recent findings. Only significant association was found between the work stress, and emotion-focused coping. In other words, when the work stress increased, correctional officers' tendency to use emotion-focused coping increased as well. As for seeking social support, as a coping strategy; shorter communication with the prisoners, lower monthly income, lower work stress, higher challenge perception, positive affect, emotional expression, and lower negative affect were found to be significant associates. When the communication with the prisoners decreased, seeking social support increased. Spending more time with the individuals who are important for the person (i.e., friends at work) is provided by lower communication with prisoners. When the monthly income decreased, seeking social support increased. This result may be related with another variable, authority. Correctional officers who have lower income generally did not have authoritative role in the prison. Therefore, they may need the guidance of other officers having higher status (i.e., managers or the supervisors of the correctional officers), in order to solve their problems. Similarly, Wener (2006) argued that having opportunity to take direct supervision lead job satisfaction in the prison environment. Moreover, as correctional officers evaluated the situation being more

challenging, their tendency to seek social support to solve the problem increases. Furthermore, higher positive affect, and emotional expression, but lower negative affect relationship with the seeking social support was found to be significant, these findings are not established in the previous literature.

In order to obtain significant associates of the psychological distress, and psychological adjustment, after socio-demographic variables, general work stress, primary appraisals, secondary appraisals, affect related variables, and coping strategies were entered into equation in the separate steps. At first, psychological distress was examined through the depression and trait anxiety. Secondly, psychological adjustment was examined through life satisfaction, and job satisfaction.

Years in job, work stress, uncontrollability perception, negative affect, and lack of positive affect, and finally higher emotion-focused coping were found to be significantly associated with the depressive symptoms of the correctional officers. Years in job, and depression relationship may be related with the officers' perception of the stressful events as unsolvable as the time passes by work stress and depression relationship finding was consistent with the study of Şenol-Durak et al. (2006), who argued that work stress increased the depression scores of the correctional officers. Increments in NA (Kahn et al., 2003) and emotion-focused coping (Stanton et al., 1994), and decrement in the PA (Folkman & Moskowitz, 2000) were found to be associated with depression symptoms; these findings were consistent with the literature. It was found that increments in the uncontrollability perception (Honey et al., 2003) were related with depression. However, in the present study, decrement in

the uncontrollability perception was found to be associated with depression symptoms. This could be explained by the fact that the perception of uncontrollability provided the sense of relief in the correctional setting. On the other hand, this finding might be result of the suppressor effect.

Age, communication with the prisoners, work stress, lower challenge, higher threat perceptions, lower self-control and other-control perceptions, negative affect, lack of emotional expression, and lower problem-focused coping were associated with trait anxiety scores of the correctional officers. When age of the correctional officers increased, vulnerability to experience threat increased. Similarly, communication with the prisoners increased the likelihood of experiencing threat (i.e., fights between prisoners, breaking the rules of the prisoners, and rebellious acts). Work stress, and anxiety relationship was again consistent with the study of Şenol-Durak et al. (2006) who argued that work stress increased the anxiety scores of the correctional officers. Likewise in the present study, increment in the threat perception (Flett et al., 1999; Spielberger & Vagg, 1984), and NA (Andrade et al., 2001; Meeks et al., 2003), decrement in the emotional expression (Iwamitsu, Shimoda, Abe, Tani, Okawa, & Buck, 2005), and problem-focused coping (Hemenover & Dienstbier, 1998) were established as associated variables with the trait anxiety previously. Like Iwamitsu his colleagues (2005) explained the negative relationship between emotional expression, and trait anxiety, these results may be due to learned helplessness, and hopelessness. In other words, it is possible that correctional officers did not use problem-focused coping, and did not disclose their emotions to significant others since they evaluated situations as unsolvable.

Being younger, being female, having lower work stress, higher other-control perception, and having higher PA were associated with the life satisfaction of the correctional officers. It is known that younger people may be more hopeful and happy while older individuals are dissatisfied their life due to unfulfilled goals in their lives (Ehrlich, & Isaacowitz, 2002). Participants being younger age (Ehrlich, & Isaacowitz, 2002), and females (Stanton et al., 1994) are more likely to get satisfied with their life. Similar results were obtained in the present study also. Besides, higher PA, and life satisfaction relationship in the present study was consistent with the previous findings (Chang et al., 2003). On the other hand, while İmamoğlu and Kılıç (1999) obtained the consistent relationship between self-control perception, and life satisfaction, other-control, and life satisfaction relationship was established in the present study.

Working in regular schedules, lower education and work stress, higher challenge and threat perceptions, and PA were significantly associated with the job satisfaction. During the data collection process, correctional officers who were working in changing shifts indicated that resting days were very useful for them for doing family related tasks. This might be increasing their job satisfaction. They consider that they abide by the consequences of the shifting scheme in order to gain free time at the end. Additionally, education, and job satisfaction were negatively related. Correctional officers with lower education status may consider this job as the last chance. On the other hand, higher educated officers may feel role conflict that decreased their job satisfaction. As established previously for the correctional officers (Deitch et al., 2004) as well as for the other jobs (Brough, 2005; Noelker et al., 2006; Piko, in press), lower work stress were significantly associated with higher

the job satisfaction. Likewise, as emphasized previously (Andres & Grayson, 2003), individuals perceiving possible benefits from events and perceive challenge, had higher scores on job satisfaction. Besides, threat, and job satisfaction was positively related. This result might demonstrate that threat scores of the correctional officers was increased since correctional officers enforce the rules in the institution. They might show that their job satisfaction was increased even under working in the threat conditions. Therefore, they showed the importance of work by means of giving higher scores on both threat, and job satisfaction. Alternatively, this finding might be explained by the suppressor effect.

4.1.4 Testing the Models for Psychological Distress and Psychological Adjustment

In order to examine the relationship between primary appraisal measures, secondary appraisal measures, affect related measures, and coping strategies on the psychological distress, and adjustment four models were tested based on the results of the regression analyses.

At first, the model for depression was tested at twice. Although the variables were correlated with each other, the measurement model was not adequate to test depression scores of the correctional officers. Model respecification yielded to remove the effect of threat-uncontrollability, and uncontrollability-negative affect relationship, though these links had been established in the previous researches (Dopke & Milner, 2000). Moreover, work stress, and negative affect relationship was added at the final model. Consistent with the previous results (Patterson, 2003;

Curbow et al., 2000; Tennant, 2001), work stress was positively related with depression. Among the indirect effects, only NA had a power to mediate the relationship between work stress, and depression significantly. However, the relationship between work stress and depression could not be explained through threat, challenge, self-control, positive affect, and emotion-focused coping. These variables did not demonstrate unique indirect effects either. In fact, all variables (namely, threat, challenge, self-control, positive affect, and emotion-focused coping) combined to influence depression scores of the correctional officers.

Secondly, a model was generated for the anxiety scores of the correctional officers. Most powerful relationship was obtained between threat, and uncontrollability perception. The least powerful relationship was obtained between the work stress, and challenge perception, which was consistent with the previous assumptions (i.e., Skinner & Brewer, 2002). In the anxiety model, more indirect pathways were tested than in the depression model. Among all pathways, two pathways yielded significant results. At first, work stress significantly affected the anxiety scores of the correctional officers via threat perception. In other words, as the threat perception of the individuals increased work stress, and anxiety scores became stronger. This was an expected result since the definition of threat includes a hypervigilance, and bias to threat related information (Calvo & Cano-Vindel, 1997). High anxious individuals evaluated the events as more threatening than low anxious individuals (Spielberger & Vagg, 1984). Secondly, work stress significantly affected the anxiety scores of the correctional officers through negative affect. On the other hand, the effect of positive affect did not yield significant results. Similarly, it is known that while NA and anxiety are related concepts, PA, and anxiety are unrelated

(Gençöz, 2002; Clark & Watson, 1991; Watson et al., 1988). On the other hand, the effect of other-control perception, self-control perception, emotion-focused coping, and problem-focused coping variables did not yield indirect effects on the anxiety scores. All of these variables acted in combination to influence anxiety scores of the correctional officers.

Thirdly, on the model generated for the life satisfaction of the correctional officers, work stress, and life satisfaction relationship was found as significant. Likewise, previous findings (Watson, & Clark, 1984) also argued that, work stress was negatively related with the life satisfaction. On the other hand, indirect effects of threat, challenge, self-control, and other-control perception were not observed. All of these variables acted in combination to influence life satisfaction.

Fourthly, a model developed for the job satisfaction was examined. A significant negative association between work stress, and job satisfaction was established before (Brough, 2005; Noelker et al., 2006; Piko, in press). In line with the life satisfaction model, indirect effects were not found to have significant effects. On the other hand, among the factors on this model the effect of self-control (İmamoğlu & Kılıç, 1999), and PA (Duckworth et al., 2005) had been emphasized before, however the relative role of threat perception, and challenge perception on the life satisfaction scores of especially correctional officers remains unknown. In the present study, the combination of all influenced the life satisfaction scores of the correctional officers.

4.1.5 The Conclusion

In conclusion, the result of each hypothesis whether it was supported, partially supported, or not supported is explained in the following text.

After controlling for the possible effects of the socio-demographic variables;

Hypothesis 1: Higher work stress will be associated with higher *threat perception*. *This hypothesis was supported.*

Hypothesis 2: Higher work stress will be associated with higher *centrality perception*. *This hypothesis was not supported.*

Hypothesis 3: Higher work stress will be associated with higher *challenge perception*. *This hypothesis was not supported.*

After controlling for the possible effects of the socio-demographic variables, and work stress; among the primary appraisal measures,

Hypothesis 4: Higher threat perception will be associated with higher *uncontrollability perception* but lower *self-control* and lower *other-control* measures of secondary appraisal. *This hypothesis was supported.*

Hypothesis 5: Higher centrality perception will be associated with higher *uncontrollability perception* but lower *self-control* and lower *other-control* measures of secondary appraisal. *This hypothesis was partially supported.*

Hypothesis 6: Higher challenge perception will be associated with higher *self-control* and higher *other-control* perception but lower *uncontrollability perception* measures of secondary appraisal. *This hypothesis was partially supported.*

After controlling the possible effects of the socio-demographic variables, work stress, and primary appraisal measures; among the secondary appraisal measures,

Hypothesis 7: Higher self-control and higher other-control perceptions will be associated with higher *Positive Affect*. ***This hypothesis was partially supported.***

Hypothesis 8: Higher uncontrollability perceptions will be associated with higher *Negative Affect*. ***This hypothesis was not supported.***

Hypothesis 9: Higher self-control and higher other-control perceptions will be associated with higher *Emotional Expression*. ***This hypothesis was partially supported.***

Hypothesis 10: Higher self-control and higher other-control perceptions will be associated with higher *Emotional Processing*. ***This hypothesis was partially supported.***

After controlling for the possible effects of the socio-demographic variables, work stress, primary appraisal measures, and secondary appraisal measures; among the affect-related measures,

Hypothesis 11: Higher positive affect will be associated with more extensive use of *Problem-Focused Coping* strategies. ***This hypothesis was supported.***

Hypothesis 12: Higher negative affect will be associated with more extensive use of *Emotion-Focused Coping* strategies. ***This hypothesis was not supported.***

Hypothesis 13: Higher emotional expression will be associated with more extensive use of *Seeking Social Support* among coping strategies. ***This hypothesis was supported.***

Hypothesis 14: Higher emotional processing will be associated with more extensive use of *Problem-Focused Coping* strategies. *This hypothesis was supported.*

After controlling for the possible effects of the socio-demographic variables, work stress, primary appraisal measures, secondary appraisal measures, and affect-related measures; among the measures of coping strategies

Hypothesis 15: More extensive use of emotion-focused coping strategies will be associated with having higher *Depressive Symptoms*. *This hypothesis was supported.*

Hypothesis 16: Seldom use of problem-focused coping strategies will be associated with having higher *Trait Anxiety*. *This hypothesis was supported.*

Hypothesis 17: More extensive use of problem-focused coping strategies will be associated with having higher *Life Satisfaction*. *This hypothesis was not supported.*

Hypothesis 18: More extensive use of problem-focused coping strategies will be associated with having higher *Job Satisfaction*. *This hypothesis was not supported.*

4.2 Strengths and Limitations of the Present Study

The results of the present study should be considered in the light of several methodological limitations.

First, the generalization of the results may have certain methodological limitations. Selecting correctional officers as the sample of the present study is very

reasonable because numerous studies demonstrated that working in a correctional setting is very stressful (e.g., Şenol-Durak et al., 2006). They stated that their working conditions were very stressful, and risky. They were exhausted due to night shifts, work overload, insufficient division of labor, ambiguous instructions, manager's attitudes, feelings of worthlessness, economical problems, being threatened etc. All of these reasons were consistent with the items of WSSCO.

However, gathering the data from different samples is needed in order to see the generalizability of the results such as, other workers who work in highly stressful condition (e.g., nurses). Additionally, gathering data from correctional officers having different jobs in the prison (i.e., managers, psychologists, teachers, prison guards) might limit to generalize results.

The cross-sectional design is another limitation of the present study. The picture of the changes of stress, stress resistance factors, and symptoms over time could not be obtained by this study. To investigate changes over time, a cross-sequential or longitudinal study is needed.

4.3 Therapeutic Implications

Interventions prepared for the correctional officers play a considerable role on the psychological well-being of these officers who work in highly stressful conditions. Therefore, it is vital to offer intervention programs for the adjustment of these officers and support their psychological well being in order to establish a sustainable work environment for them. Likewise in a study conducted with police officers (Brough, 2005), it was observed that the correctional officers suffer from hardship in stopping their worries about the problems they face at job, which was

also evident during the interview in the data collection phase. Brough (2005) found similar results in her study, while police officers had difficulty to unwind their job, ambulance, and fire workers did not.

One important implication of these findings is that teaching correctional officers to replace negative appraisal (e.g., threat) with positive appraisals (e.g., challenge) following events perceived as highly stressful may result in a more effective adaptation to stress. Additionally, demands of their job can be explained since knowing the demands of stress may utilize appropriate coping strategies (Devonport & Lane, 2006).

In some countries, employees are responsible to promote psychological well-being of the employers such as Australia (Brough, 2005). In Turkey, some rules can be set for the workers having highly stressful jobs.

4.4 Suggestions for Future Researches

Further research is necessary using demographically diverse populations to strengthen the validity of the study findings. Using a cross-sequential design wherein data are obtained from each subject during at least one follow-up assessment will be more appropriate in order to see the effects of stress, and stress resistance factors on symptomatology. Also, conducting a longitudinal study with samples from a large general population can be suggested. The use of a longitudinal design in future research would enable examination of the effects of targeted interventions on stress, stress resistance factors, and psychological well-being.

Further efforts to identify other factors that are not addressed in this study that might influence cognitive emotional processes seemed to be important.

Appraisal process may be affected by both the personal, and the environmental resources (Meeks et al., 2003). For instance, conscientiousness (Rafferty & Griffin, 2006), neuroticism (Hemenover, 2001; Rafferty & Griffin, 2006), extroversion (Hemenover, 2001), hardiness (Chan, 2003; Hamilton & James, 2006), and attribution style (Dopke & Milner, 2000) are some personal resources that might influence the cognitive emotional processing. Besides, the effect of some organizational, (i.e., leader support, Rafferty & Griffin, 2006; organizational commitment, Griffin & Hepburn, 2005), and environmental resources (i.e., social support, Kahn et al., 2003) on this process should also be evaluated in the future. Additionally, self efficacy whose effect were questioned previously (Benight, & Bandura, 2004; Karademas, & Kalantzi-Azizi, 2004) can be taken into account within this framework. These factors should be studied in the future researches.

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APPENDICES

APPENDIX A: Work Stress Scale for Correctional Officers (WSSCO)

Cezaevi çalışanları, işyerlerinde ve yaşamlarının diğer alanlarında (aile hayatı, sağlık, sosyal yaşam vb.) stres yaratan birçok durumla karşı karşıya kalmaktadır. Strese yol açabilecek bazı durumlar aşağıda sıralanmıştır. Sıralanan bu durumların şu an *sizi ne kadar etkilediğini* uygun rakamı işaretleyerek belirtiniz. Lütfen, hiçbir maddeyi boş bırakmayınız.

Examples of the items:

1. Ekonomik sıkıntılar ve yetersizlikler
4. Personel, mahkûm ve mahkûm yakınlarının cezaevi kurallarını bozma girişimleri
18. Herhangi bir yanlışta töhmet altında kalmak
29. Gece nöbetlerinin uykusuzluk nedeniyle yıpratıcı olması

APPENDIX B: The Stress Appraisal Measure (SAM)

Bu anket, kiřilerin stresle ilgili *genel dūřünce, duygu ve tepkilerini* içermektedir. Lütfen, strese maruz kaldığınızda verdiğiniz tepkileri, aklınızdan geçen düşünceleri ve hissettiklerinizi göz önünde bulundurarak aşağıda verilen ifadeleri okuyunuz ve sizin için *en uygun rakamı daire içine alarak* değerlendiriniz. Doğru ya da yanlış cevap yoktur. Lütfen, *tüm soruları* cevaplayınız.

Examples of the items:

1. Stres, tamamen çaresiz bir durumdur
10. Stres, beni daha da güçlü bir kiři yapabilir
14. Stresle baş etmek için gerekli niteliklere sahibim
23. Stresin üstesinden gelmem için bana yardım edebilecek birisi var

APPENDIX C: The Emotional Approach Coping Scale (EACS)

Bu anket, stresli durumlarla karşılaşan kişilerin ne tür tepkiler verdiğini değerlendirmektedir. Stresli durumlarla karşılaştığınızda ne hissettiğinizi, ne düşündüğünüzü ve ne tür tepkiler verdiğinizi göz önünde bulundurarak her bir ifadeyi dikkatle okuyunuz ve sizin için *en uygun rakamı* daire içine alınız. Doğru ya da yanlış cevap yoktur. Lütfen, *tüm soruları* cevaplayınız.

Examples of the items:

3. Duygularımı ifade ederken özgür davranırım
11. Duygularımı tam anlamak için onları irdelerim

APPENDIX D: Positive and Negative Affect Schedule (PANAS)

Bu ölçek, farklı duyguları tanımlayan bir takım sözcükler içermektedir. *Son iki hafta* nasıl hissettiğinizi düşünüp her maddeyi okuyun. Uygun cevabı her maddenin yanında ayrılan yere (*puanları daire içine alarak*) işaretleyiniz. Cevaplarınızı verirken aşağıdaki puanları kullanınız.

Examples of the items:

1. İlgili
2. Sıkıntılı

APPENDIX E: The Ways of Coping Inventory (WCI)

Aşağıda, önemli olabilecek olaylar karşısında kişilerin davranış, düşünce ve tutumlarını belirten bazı cümleler verilmiştir. Lütfen, her cümleyi dikkatle okuyunuz. Yaşamınızda karşılaştığınız sorunlarla başa çıkmak için, bu cümlelerde anlatılanları ne sıklıkla kullandığınızı *size uygun gelen rakamı* daire içine alınız. Hiçbir cümleyi cevapsız bırakmamaya çalışınız.

Examples of the items:

1. Aklımı kurcalayan şeylerden kurtulmak için değişik işlerle uğraşırım
52. Problemleri adım adım çözmeye çalışırım

APPENDIX F: Beck Depression Inventory

Aşağıda, kişilerin ruh durumlarını ifade ederken kullandıkları bazı cümleler verilmiştir. Her madde, bir çeşit ruh durumunu anlatmaktadır. Her maddede o ruh durumunun derecesini belirleyen 4 seçenek vardır. Lütfen bu seçenekleri dikkatle okuyunuz. Son bir hafta içindeki (şu an dahil) kendi durumunuzu göz önünde bulundurarak, size en uygun ifadeyi bulunuz. Daha sonra o maddenin yanındaki harfin üzerine (X) işareti koyunuz.

Examples of the items:

- 1.(a) Kendimi üzgün hissetmiyorum.
(b) Kendimi üzgün hissediyorum.
(c) Her zaman için üzgünüm ve kendimi bu duygudan kurtaramıyorum.
(d) Öylesine üzgün ve mutsuzum ki dayanamıyorum.

2. (a) Gelecekte umutsuz değilim.
(b) Geleceğe biraz umutsuz bakıyorum.
(c) Gelecekte beklediğim hiçbir şey yok.
(d) Benim için bir gelecek yok ve bu durum düzelmeyecek.

APPENDIX G: The State-Trait Anxiety Inventory-Trait Form (STAI-T)

Aşağıda, kişilerin kendilerine ait duygularını anlatmada kullandıkları bir takım ifadeler verilmiştir. Her ifadeyi okuyunuz, sonra da *genel olarak* nasıl hissettiğinizi uygun rakamı işaretlemek suretiyle belirtiniz. Doğru ya da yanlış cevap yoktur. Herhangi bir ifadenin üzerinde fazla zaman sarf etmeksizin *genel olarak* nasıl hissettiğinizi gösteren cevabı işaretleyiniz.

Examples of the items:

1. Genellikle keyfim yerindedir
8. Güçlüklerin yenemeyeceğim kadar biriktiğini hissedirim
20. Son zamanlarda kafama takılan konular beni tedirgin eder

APPENDIX H: The Satisfaction with Life Scale (SWLS)

Aşağıdaki ifadelere katılıp katılmadığınızı görüşünüzü yansıtan rakamı maddenin başındaki boşluğa yazarak belirtiniz. Doğru ya da yanlış cevap yoktur. Sizin durumunuzu yansıttığını düşündüğünüz rakam bizim için en doğru yanıttır. Lütfen açık ve dürüst şekilde yanıtlayınız.

Examples of the items:

1. Pek çok açıdan ideallerime yakın bir yaşamım var
4. Şimdiye kadar, yaşamda istediğim önemli şeyleri elde ettim

APPENDIX I: The Job Satisfaction Scale (JSS)

Aşağıda, kişilerin iş yaşamlarıyla ilgili 32 konu verilmiştir. Her birinin yanında o konunun sizi ne kadar tatmin ettiğine (doyum verdiği) ilişkin %0 ile %100 arasında değişen bir ölçek vardır. Lütfen her maddeyi dikkatle okuyup sizi ne derece tatmin ettiğini yandaki (X) işareti koyarak işaretleyiniz.

Examples of the items:

11. İş yerimdeki sorunların çözülmesine idarenin yaklaşımı
23. İş yerimdeki çalışma saatlerim
30. Yaptığım işin yeteneklerime uygunluğu

APPENDIX J: Demographic Information Form

Bu araştırma, Adalet Bakanlığı izni ile ceza infaz kurumlarında çalışanların karşılaştıkları stres verici olayları, olaylara verdikleri tepkileri ve tepkileri etkileyecek etkenleri araştırmak amacıyla yapılmaktadır. Bu amaçla size verilen anketlerdeki soruları yanıtlamanız istenmektedir.

Buradaki anketlere vereceğiniz cevaplar ve kişisel (demografik) bilgiler sadece araştırma amacıyla kullanılacak ve kesinlikle GİZLİ tutulacaktır. Lütfen soruların başındaki yönergeleri dikkatlice okuyunuz ve size en uygun gelen seçeneği işaretleyiniz. Lütfen cevaplanmamış soru bırakmayınız. Çalışmaya yönelik sorularınızı 536 691 55 77 no'lu telefon numarasını arayarak ya da mithatdurak@yahoo.com e-posta adresine yazarak bana iletebilirsiniz.

ÇALIŞMAYA OLAN KATKINIZ VE VERDİĞİNİZ CEVAPLARDAKİ SAMİMİYETİNİZ İÇİN TEŞEKKÜR EDERİM.

Uzm. Psk. Mithat DURAK
Orta Doğu Teknik Üniversitesi

- Yaşınız: _____
- Cinsiyetiniz: Bayan Erkek
- Medeni Haliniz:
 Bekar Evli Ayrı Boşanmış
- Eğitim durumunuz:
 İlkokul mezunu Lise mezunu Yüksek lisans/doktora mezunu
 Ortaokul mezunu Üniversite mezunu
- Ailenizin aylık toplam geliri: _____ YTL
- Mesleğiniz: _____
- Cezaevinde çalıştığınız birim: _____
- Şu an icra ettiğiniz MESLEKTEKİ TOPLAM çalışma yılınız: ____yıl ____ay
- ŞU AN ÇALIŞMAKTA OLDUĞUNUZ KURUMDAKİ hizmet yılınız: : _____yıl _____ay
- Vardiya sistemiyle mi çalışıyorsunuz? Hayır Evet Kaçlı vardiya? ____ 'li vardiya
- Hükümlü-tutuklularla bir günde (24 saatlik bir sürede) ne kadar iletişim kuruyorsunuz? _____Saat

APPENDIX K: Turkish Summary

Stres, bireyin duygu durumu ve davranışlarını etkilemektedir. Strese uzun süre maruz kalma ve stresle etkin şekilde baş edememe çeşitli rahatsızlıkların ortaya çıkması riskini doğurmaktadır. Çok sayıda araştırmacı stresin bireyin ruhsal ve fiziksel sağlığı üzerindeki olumsuz etkilerini farklı rahatsızlıklarla stres arasındaki ilişkiyi açıklayarak ortaya koymuştur. Kalp damar hastalıkları (Lloyd, Wing & Orchard, 1996), astım (Smyth, Soefer, Hurewitz, Kliment & Stone, 1999), kronik baş ağrısı (De Benedittis & Lorenzetti, 1992) ve irritabl kolon sendromu (Dancey, Taghavi & Fox, 1998) gibi fiziksel sağlık problemlerin yanı sıra kaygı bozuklukları (Lundberg, 1996), depresyon (Miner, & Dowd, 1996; Ravindran, Griffiths, Merali, & Anisman, 1996; Stader & Hokanson, 1998) ve alkol kullanımı (Cooper, Russell, Skinner, Frone, & Mudar, 1992; Largo-Wight, Peterson, & Chen, 2005) gibi duygudurum ve davranış sorunlarının stresle ilişkili olduğu belirtilmektedir. Bu yüzden hem araştırmacılar hem de uygulayıcılar için stresle ilgili etkenleri açıklamak ve bireyin sağlığını etkileyen bireysel ve çevresel stres faktörleri içeren bir model geliştirip test etmek önem taşımaktadır.

Bu metinde; stres, stresin bilişsel değerlendirmesi, stresin bilişsel değerlendirmesinde etkin olan değişkenler, işyeri stresi ve cezaevi çalışanlarında işyeri stresi ile ilgili literatür bulguları açıklanacaktır. Çalışmanın amaçları doğrultusunda, işyeri stresi, stresin birincil değerlendirmesi, stresin ikincil değerlendirilmesi, duygu durumuyla ilgili değişkenler, baş etme stratejileri ve stresin sonuçları arasındaki ilişkiler incelenecektir. Ayrıca, stres ve sonuçları arasındaki ilişkide etkin rol oynayan faktörleri içeren etkileşimsel modeller ortaya konulacaktır.

1.1 Literatür Özeti

Stresi tanımlayan ve stresle ilgili etkenleri açıklamada yaygın olarak kabul gören yaklaşımlardan biri Lazarus ve Folkman'ın (1984) "Bilişsel Transaksiyonel Model"idir (Cognitive Transactional Model). Model stresi, bilişsel bileşenlerin, bireysel ve çevresel etkenlerin ve bu etkenler arasındaki etkileşimin yer aldığı bir süreç olarak görmektedir. "Bireyin kendi baş etme kapasitesini zorladığı, aştığı ve sağlığını tehdit ettiği şeklinde değerlendirilen bireysel ve çevresel etkenlerin etkileşimi" stres olarak tanımlanmaktadır (Lazarus & Folkman, 1984, p. 19). Bu modele göre bireyin stresle nasıl baş ettiğini açıklamada stresin bilişsel değerlendirmesi dikkate alınmalıdır.

Bilişsel değerlendirme, herhangi bir stres durumunun kişi için tehdit içerip içermediğinin değerlendirilmesini ve kişinin bu olayla baş etmek için vereceği tepkileri belirlemeyi içerir (Folkman ve ark., 1986). Bireyin olayla nasıl baş edeceğine karar vermesinden önce olayı nasıl değerlendirdiği ya da yorumladığı bu açıdan önemlidir. Bir başka deyişle, bilişsel değerlendirmenin stres verici durum ve bu duruma verilecek reaksiyon üzerinde aracı bir etkisi bulunmaktadır (Karademas, & Kalantzi-Azizi, 2004). Stresin algılanması, yönetilmesi ve sonlandırılmasında stres durumunun bilişsel olarak değerlendirilmesi belirleyicidir (Largo-Wight ve ark., 2005).

Bilişsel değerlendirme kavramını ele alan araştırmacılar "*birincil değerlendirme*" ve "*ikincil değerlendirme*" kavramlarını öne sürmektedir (Lazarus & Folkman, 1984). Birincil değerlendirme, bireyin stres uyarısını kişilik gelişimi için fırsat (challenge) olarak algılaması ya da bu uyarını çok önemli bir olay olarak görmesi (centrality) ve kayba neden olacak tehdit edici (threat) bir olay şeklinde

yorumlamasıdır (Peacock, & Wong, 1990). İkincil değerlendirme ise, kişinin stresi ve kendisinde var olan kaynakları göz önünde bulundurarak söz konusu stres verici durumla nasıl baş edeceğine karar vermesini içeren bir süreçtir (Bookman ve ark., 2000; Folkman, & Lazarus, 1986; Largo-Wight ve ark., 2005). Bu boyut stresin birey tarafından kontrol edilebilir (self-control), stresin diğerleri tarafından sağlanacak katkı ile kontrol edilebilir (other-control) veya stresin kontrol edilemez bir olay olarak algılanması (uncontrollability) şeklinde üç boyutu barındırır.

Stresin bilişsel değerlendirmesinde; duygu durumu ile ilgili süreçler (olumlu ya da olumsuz duygu) (Örn., Fredrickson & Joiner, 2002; Watson, Clark, & Tellegen, 1988), duygusal yaklaşım yoluyla baş etme (duyguyu dışa vurma-ifade etme ve duyguyu işleme) (Stanton, Kirkve ark., 2000) ve baş etme stratejilerinin rolü (Karademasve Kalantzi-Azizi, 2004) son yıllardaki literatürde ele alınmaktadır. Stres yaratan bir durum karşısında bu değişkenlerin etkileşimi iki tür sonuç yaratmaktadır. Olumsuz sonuçlar, depresyon ve kaygı bozuklukları ile çoğunlukla ilişkilendirilmektedir (Meeks ve ark., 2003). Öte yandan, stres durumları karşısında bireylerin olumlu deneyimler de yaşayabildiği bilinmektedir. Örneğin, stresin birincil ve ikincil değerlendirmesinin baş etme stratejileri ile birlikte kanserli hastalarda sağlıkla ilgili davranışsal özelliklerin kazandırılmasında etkili olduğu görülmüştür (Link ve ark., 2005). Bu tür pozitif sonuçlar arasında birbiriyle yakından ilişkili iki kavram olan yaşam doyumu ve iş doyumu da araştırılmaktadır (Ünal ve ark., 2001). Değişkenler arasındaki ilişkiler Şekil-1'de (sayfa 49) daha net bir şekilde gösterilmektedir.

Bilişsel değerlendirmenin stres üzerindeki rolü çeşitli stres türleri ele alınarak açıklanmaya çalışılmaktadır. Bu bağlamda işyeri stresi araştırmacıların ele aldıkları

önemli bir stres türüdür. Çok sayıda araştırmacı işyeri stresinin; tükenmişlik, psikosomatik yakınmalar, alkol kullanımı, kaygı ve depresyon gibi fiziksel ve ruhsal sorunların (Anderson, 2000; Curbow ve ark., 2000; Garland, 2004; Longve ark., 1992; Lowman, 1993; Lundberg, 1996; Muchinsky, 1997; Patterson, 2003; Piko, baskıda; Tennant, 2001) yanı sıra örgüte bağlılığın azalması, iş tatminsizliği, performansın düşmesi, işe devamsızlık, işyeri kazalarının artması gibi çeşitli örgütsel sorunlara yol açtığını ortaya koymuştur (Auerbach ve ark., 2003; Brough, 2005; Curbow ve ark., 2000; Frankenhaeuser, 1991; Griffin, & Hepburn, 2005; Hills & Norvell, 1991; Lim & Teo, 1999; Luvé ark., 2005; Noelker ve ark., 2006; Piko, in pres; Tennant, 2001).

İşyeri stresinin sonuçlarını ve sonuçları ile ilişkili bireysel ve çevresel etkenleri araştırmak amacıyla yüksek oranda strese maruz kaldığı düşünülen örneklerle (örneğin, polisler, itfaiye erleri, ambulans görevlileri vb.) çalışılmıştır (Brough, 2005). Bu tür örneklerden birini de cezaevi çalışanları oluşturmaktadır. Cezaevi çalışanları, cezaevindeki iyileştirme sürecinde (Fisher-Giorlando, & Jiang, 2000; Lambert, Hogan, Barton, & Clarke, 2002) ve cezaevinde kalan hükümlü ve tutukluların toplumdan uzak tutulmalarında (Botha, & Pienaar, 2006) önemli bir rol üstlenmektedir. Diğer ülkelere benzer şekilde (Fisher-Giorlando, & Jiang, 2000) ülkemizde de cezaevine giren kişilerin sayısında günden güne bir artış olduğu bilinmektedir. Bu durum, yetkili kişiler tarafından yeni önlemlerin alınmasını kaçınılmaz kılmıştır. Türkiye’de Adalet Bakanlığı tarafından hem cezaevinin fiziksel koşullarının iyileştirilmesi hem de çalışanların iş tanımlarının yeniden yapılması da bu tür önlemlere örnektir (Şenol, 2003). Rafferty ve Griffin’e (2006) göre, değişim dönemleri çalışanlarda kaygı durumunu tetiklemektedir. Bu yüzden, bu tür

değişimlerin cezaevi personeli üzerindeki etkisini inceleme bu kişilere yapılacak iyileştirme çalışmalarını belirlemede önem taşımaktadır.

1.2 Araştırmanın Amacı

Cezaevi ortamının yoğun stres içeren doğası personelde tehdit algısını tetikleyebilmekte ve personelin sağlığı üzerinde olumsuz etkiler yaratabilmektedir. Ayrıca, bu personelin stresle baş etmede ne tür stratejileri tercih ettiği net değildir. İşin doğası gereği personel, iş yerinde yaşadığı olumsuzlukları sevdikleri, yakınları ve aileleri ile paylaşamamakta ve sonucunda da yoğun bir duygusal yükü baş etmek zorunda kalmaktadır. Cezaevinde çalışma deneyimini tüm boyutları ile anlayabilme amacıyla Bilişsel Transaksiyonel Model (Cognitive Transactional Model) çerçevesinde daha önceki literatür bulguları da dikkate alınarak işyeri stresi, stresin birincil değerlendirmesi, stresin ikincil değerlendirilmesi, duygu durum, baş etme stratejileri ve stresin sonuçları arasındaki ilişkinin incelenmesi bu çalışmanın temel amacını oluşturmaktadır.

2. Yöntem

2.1 Katılımcılar

Türkiye'nin yedi farklı ceza infaz kurumunda çalışan 268 kişi bu çalışmaya katılmıştır. Yüksek güvenlikli (Ankara F Tipi, Ankara L1 Tipi, Bolu F Tipi), orta güvenlikli (Nevşehir Kapalı, Kırşehir Kapalı) ve düşük güvenlikli (Bolu Açık, Sivas Açık) cezaevlerinde çalışan görevliler arasında araştırmaya katılmayı gönüllü olarak kabul edenler araştırma örneklemini oluşturmuştur. Katılımcıların sosyo-demografik özellikleri Tablo-2 ve Tablo-3'te ayrıntılı olarak verilmiştir. Katılımcıların 238'i

(%88.81) erkek ve 30'u (%11.19) bayandır. Katılımcıların yaşlarının ortalaması 36.02 (Standart Sapma = 7.25) ve aylık gelir ortalaması 1225.6 YTL'dir (Standart Sapma = 872.48). Katılımcıların 99'u üniversite mezunu (%36.94), 155'i lise mezunu (%57.84) ve 14'ü ortaokul mezunudur (%5.22), Katılımcılar, yöneticilerden (n = 5; %1.87), psikologlardan (n = 2; %0.75), sosyal hizmet uzmanlarından (n = 3; %1.12), öğretmenlerden (n = 9; %3.36), infaz koruma baş memurlarından (n = 18; %6.72), infaz koruma memurlarından (n = 223; %83.21), muhasebecilerden (n = 4; %1.49) ve teknisyenlerden (n = 4; %1.49) seçilmiştir. Çalışanların toplam çalışma süresi 1 ile 333 ay arasında değişkenlik göstermektedir (M = 118.32, Standart Sapma = 89.01).

2.2 Psikometrik Ölçme Araçları

2.2.1 Cezaevi Çalışanları İçin İş Stresi Ölçeği (ÇÇİSÖ)

Durak ve arkadaşları (2003) ile Şenol-Durak ve arkadaşları (2006) tarafından cezaevi çalışanlarına özgü olarak geliştirilmiş olan bu ölçek 35 maddeden oluşmaktadır. Ölçek, 5'li Likert tipi tarzındadır. Ölçek, iş yükü fazlalığı, rol çatışmaları ve rol belirsizliği, cezaevindeki fiziksel koşulların yetersizliği, tehdit algısı ve genel problemler olarak isimlendiren 5 alt ölçeği içermektedir.

2.2.2 Stres Değerlendirme Ölçeği (SDÖ)

Stresin bilişsel değerlendirmesi için geliştirilen SDÖ 24 maddeden oluşan 5'li Likert tipi bir ölçektir (Peacock & Wong, 1990). Ölçek, birincil (primary appraisals) ve ikincil (secondary appraisals) bilişsel değerlendirmeyi ölçmek üzere geliştirilmiştir. Birincil bilişsel değerlendirme, olayı kişilik gelişimi için fırsat olarak

görme (challenge), olaya önem verme (centrality) ve olayı tehdit edici bir olgu olarak algılama (threat) alt boyutlarından oluşmaktadır. İkincil bilişsel değerlendirme ise olay üzerinde kendilik kontrolü (self-control), olayı diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama (other-control) ve olayı kontrol dışı bir olgu olarak algılama (olayın kontrol edilemeyeceğini düşünme, uncontrollability) boyutlarını içermektedir. Diğer birincil bilişsel alt değerlendirme ölçeklerinin aksine olaya verilen önem boyutunun bazı çalışmalarda iyi çalışmadığı vurgulanmıştır (örn., Roesch & Rowley, 2005). Ölçeğin Türk örnekleminde psikometrik özellikleri ölçülmüş ve tatmin edici sonuçlar elde edilmiştir (Durak ve arkadaşları, 2007).

2.2.3 Duygusal Yaklaşım Yoluyla Baş Etme Ölçeği (DYYBÖ)

Stanton, Kirk ve arkadaşları (2000) tarafından duyguyu dışa vurma (duyguyu ifade etme) ve duyguyu işleme boyutlarını ölçmek için geliştirilmiştir. 16 maddeden oluşan ölçek, Şenol-Durak ve arkadaşları (2007) tarafından Türk örnekleminde uygulanmış ve tatmin edici sonuçlara ulaşılmıştır.

2.2.4 Olumlu ve Olumsuz Duygu Durum Ölçeği (OODDÖ)

Watson ve arkadaşları (1988) tarafından 20 madde halinde geliştirilen 5'li Likert tipi bir ölçektir. Olumlu (10 madde) ve olumsuz (10 madde) duygu durumu belirlemek için geliştirilen ölçeğin Gençöz (2000) tarafından Türk örnekleminde standardizasyonu yapılmıştır.

2.2.5 Stresle Baş Etme Yolları Ölçeği (SBEÖ)

Folkman ve Lazarus (1980, 1985) tarafından geliştirilen ölçek 74 maddeden

oluşmaktadır. Siva (1991) tarafından Türkçe standardizasyonu yapılmıştır. Gençöz ve arkadaşları (2006) ölçeğin problem odaklı baş etme, duygu odaklı baş etme ve dolaylı baş etme olarak üç faktörü olduğunu ortaya koymuştur.

2.2.6 Beck Depresyon Envanteri (BDE)

Beck ve arkadaşları (1961, 1979) tarafından depresyonun bilişsel, motivasyonel ve somatik belirtilerini değerlendirmek için geliştirilen ölçek 21 maddeden oluşmaktadır. İlk formun (1961’de geliştirilen form) Türkçe’ye uyarlaması Beck Depresyon Ölçeği adı altında, Tegin (1980) tarafından; 1979 yılında geliştirilen ikinci formun ise Türkçe’ye uyarlaması Beck Depresyon Envanteri adı altında Hisli (1988, 1989) tarafından yapılmıştır. Bu çalışmada Hisli’nin çevirisini yaptığı formu kullanılmıştır.

2.2.7 Durumluk Sürekli Kaygı Ölçeği-Sürekli Kaygı Formu (DSKÖ-SKF)

Spielberger ve arkadaşları (1970, Akt., Öner, 1997) tarafından geliştirilen ölçek, durumsal kaygıyı (20 madde) ve sürekli kaygıyı (20 madde) belirleyen maddelerden oluşturulmaktadır. Öner ve Le Comte (1985) tarafından Türk örneğine standardize edilen ölçeğin bu çalışmada sürekli kaygıyı inceleyen formu kullanılmıştır.

2.2.8 Yaşam Doyumu Ölçeği (YDÖ)

Yaşam doyumunu belirlemek için geliştirilen ölçek, daha önceki çalışmalar temel alınarak belirlenen 5 maddeden oluşturulmuştur (Diener ve arkadaşları, 1985).

Gençöz ve arkadaşları (2007) tarafından Türk örnekleme çevrilen ölçeğin psikometrik özellikleri tatmin edicidir.

2.2.9 İş Doyumu Ölçeği (İDÖ)

Durak-Batıgün ve Hisli-Şahin (2006) tarafından iş doyumunu belirlemek için geliştirilen ölçek 32 maddeden oluşmaktadır. 5'li Likert tipi bir ölçektir. Ölçeğin psikometrik özellikleri tatmin edicidir.

2.2.10 Demografik Bilgi Formu

Çalışanların yaş, cinsiyet, eğitim durumu, medeni durumu ve meslekteki toplam çalışma yılı gibi değişkenleri belirlemek için oluşturulmuştur.

2.3 İşlem

Veri toplama süreci için ceza infaz kurumlarının bağlı bulunduğu Türkiye Cumhuriyeti Adalet Bakanlığı Ceza ve Tevkifevleri Genel Müdürlüğünden izin alınmıştır. Ölçüm araçlarını içeren bir araştırma kitapçığı hazırlanmıştır. Bu kitapçıkta araştırma amacını açıklayan bir ön bilgi yazılı olarak katılımcılara verilmiştir.

Ceza ve Tevkifevleri Genel Müdürlüğünün önerileri doğrultusunda, öncelikle çalışmanın yapılacağı ceza infaz kurumunun bağlı bulunduğu Cumhuriyet Başsavcısı, ceza infaz kurumundan sorumlu olan Cumhuriyet Savcısı ve Cezaevi Müdürü ile veri toplama sürecini planlayabilmek için telefonda görüşülmüştür. Bu süreci, her yönetici ile hiyerarşik sıra gözetilerek görüşmeler yapılması ve araştırma amacı ve kapsamı konusunda detaylı bilgi verilmesi izlemiştir. Kurum işleyişini

aksatmamak için ceza infaz kurumunun belirlediği uygun zamanda ziyaret yapılması önemsenmiştir. Bu doğrultuda, ceza infaz kurumundaki kriz dönemleri, rutin kontroller ya da ulusal ve uluslar arası ziyaretçiler nedeniyle araştırma için önerilen takvimde bazı gecikmeler yaşanmıştır.

Cezaevindeki ziyaretler sırasında, araştırmacı ceza infaz kurumundaki bütün kurallara ve günlük plandaki işleyişe aynen uymuştur. Bu amaçla araştırmacı, kimlik kartını görevlilere (infaz koruma memurları ve askerler) izin yazısı ile birlikte göstermiştir. Parasını, telefonunu ve diğer kişisel eşyalarını giriş kısmına bırakmıştır. Daha sonra cezaevi önünde ve ceza infaz kurumu binasının giriş bölümünde araştırmacının iki kez üst araması yapılmıştır. Ayrıca, yüksek güvenlikli cezaevlerinde cezaevi içinde kullanılacak kimlik kartı için gözbebeği ya da parmak izi verilmiştir.

Araştırmacı ceza infaz kurumundaki çalışanlarla çalışma yerlerinde (cezaevindeki odaların bulunduğu koridorlar, kütüphane, görüşme salonu, mutfak, acil müdahale merkezi vb.) psikologlar, öğretmenler ve ceza infaz kurumundaki baş memurların yardımı yoluyla görüşmüştür. Ayrıca, cezaevinde vardiyalı görevlilerle de planlama doğrultusunda görüşülmüştür. Hemen hemen tüm katılımcılarla yüz yüze görüşülmüş, onlara araştırmanın amacı ve kapsamı konusunda bilgi verilmiştir. Gönüllü katılım veri toplamada esas alınmıştır.

Yetkili kişiler tarafından yapılan planlama doğrultusunda katılımcılara araştırma kitapçığını doldurmak için sınırlı bir süre verilmiştir. Uygun çalışma koşulları bulunmayanlara (iş yükü nedeniyle) ek zaman verilmiştir. Ceza infaz kurumunun günlük işleyişini aksatmamak için bütün formlar dolduktan sonra posta yoluyla dolu formların alınması yoluna gidilmiştir.

3. Bulgular

Araştırmanın bulguları üç bölümde aktarılmaktadır. İlk olarak veri temizleme, tanımlayıcı istatistikler, değişkenler arasındaki korelasyonlar aktarılmıştır. İkinci olarak, çeşitli t-test ve hiyerarşik çok yönlü regresyon analizleri yapılmıştır. Üçüncü olarak, elde edilen sonuçlar ışığında geliştirilen modeller yoluyla işyeri stresi, stresin bilişsel değerlendirmesinin, duygu durumunun ve baş etme stratejilerinin stresin olumlu ve olumsuz sonuçları (psikolojik rahatsızlık ve psikolojik uyum) üzerindeki etkisi incelenmiştir.

3.1. Veri Temizleme, Tanımlayıcı İstatistikler ve Değişkenler Arasındaki Korelasyonlar

SPSS programları yoluyla analize geçmeden önce veriler, doğru veri girişi, kayıp değerler ve normal dağılıma uygunluk bakımından değerlendirilmiştir. Sonucunda; 21 katılımcı % 5'ten fazla kayıp değer verdiği için ve 6 katılımcı da normal dağılımı bozduğu için analiz dışı bırakılmıştır. Araştırmanın verileri 268 kişilik bir örneklem üzerinde gerçekleştirilmiştir.

Katılımcıların ölçeklere verdikleri yanıtların ortalamaları ve standart sapmaları Tablo-4'de verilmiştir. Değişkenler arası korelasyonlar Tablo-5'te verilmiş, bu boyut tartışma bölümünde daha detaylı bir şekilde ele alınmıştır.

3.2 Grup Farklılıkları ve Hiyerarşik Çoklu Regresyon Analizleri

3.2.1 Grup Farklılıkları

Cezaevi türü ve vardiyalı çalışma değişkenlerinin işyeri stresi, bilişsel değerlendirme, duygu durumu, baş etme stratejileri ve stresin olumlu ve olumsuz

sonuçları (psikolojik rahatsızlık ve psikolojik uyum) üzerinde anlamlı bir farklılık yaratıp yaratmadığını değerlendirmek için çok sayıda bağımsız gruplar t-test analizi yapılmıştır. Ayrıntılı sonuçlar Tablo-6 ve Tablo-7'de yer almaktadır.

Cezaevi türüne göre yapılan t-test sonuçlarında tek anlamlı farklılığın yaşam doyumu üzerinde olduğu görülmüştür, $t(266) = -2.765, p < .01$. Yüksek güvenlikli cezaevinde çalışanların ($M = 1.77, SD = 1.53$) düşük ve orta güvenlikli cezaevlerinde çalışanlara göre ($M = 2.27, SD = 1.38$) daha fazla yaşam doyumuna sahip olduğu bulunmuştur.

Vardiyalı çalışma ya da vardiyasız çalışma durumuna göre aşağıdaki farklılıklar gözlenmiştir.

1. Vardiya durumunun işyeri stresi üzerinde anlamlı bir farklılık yarattığı görülmüştür, $t(266) = -2.784, p < .01$. Vardiyalı çalışanların ($M = 2.43, SD = 0.78$) vardiyasız çalışanlara göre ($M = 2.15, SD = 0.78$) daha fazla işyeri stresine sahip olduğu gözlenmiştir.
2. Vardiya durumu, ikincil bilişsel değerlendirmenin alt boyutlarından biri olan stres verici durumu diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılamaya üzerinde anlamlı bir farklılık yarattığı görülmüştür, $t(266) = 2.164, p < .05$. Vardiyalı çalışan cezaevi görevlilerinin ($M = 1.10, SD = 0.93$) vardiyasız çalışanlara göre ($M = 1.37, SD = 1.07$) stres verici durumları diğerleri tarafından sağlanacak katkı ile kontrol edebileceğine daha az inandıkları görülmüştür.

3. Vardiya durumunun olumlu duygu durum üzerinde anlamlı bir farklılık yarattığı görülmüştür, $t(266) = 2.591$, $p < .01$. Vardiyalı çalışanların ($M = 3.70$, $SD = 0.66$) vardiyasız çalışanlara göre ($M = 3.92$, $SD = 0.67$) olumlu duyguya daha az sahip olduğu gözlenmiştir.
4. Vardiya durumunun sürekli kaygı üzerinde anlamlı bir farklılık yarattığı görülmüştür, $t(266) = -2.323$, $p < .05$. Vardiyalı çalışanların ($M = 1.40$, $SD = 0.54$) vardiyasız çalışanlara göre ($M = 1.24$, $SD = 0.57$) daha fazla miktarda kaygıya sahip olduğu gözlenmiştir.
5. Vardiya durumunun yaşam doyumu üzerinde anlamlı bir farklılık yarattığı görülmüştür, $t(266) = 2.363$, $p < .05$. Vardiyalı çalışanların ($M = 1.92$, $SD = 1.50$) vardiyasız çalışanlara göre ($M = 2.35$, $SD = 1.35$) daha az yaşam doyumu belirttikleri görülmüştür.
6. Vardiya durumunun iş doyumu üzerinde anlamlı bir farklılık yarattığı görülmüştür, $t(266) = 2.157$, $p < .05$. Vardiyalı çalışanların ($M = 1.70$, $SD = 0.63$) vardiyasız çalışanlara göre ($M = 1.88$, $SD = 0.63$) daha az iş doyumuna sahip oldukları gözlenmiştir.

3.2.2 Hiyerarşik Çoklu Regresyon Analizleri

Değişkenler arasındaki ilişkileri değerlendirebilmek için Hiyerarşik Çoklu Regresyon Analizleri yapılmıştır. Stresin birincil değerlendirmesiyle ilişkili olan değişkenleri belirleyebilmek için; sosyo-demografik değişkenlerin (cinsiyet, yaş, eğitim durumu, medeni durumu, aylık geliri, kurumdaki toplam çalışma yılı,

vardiyalı çalışma durumu, cezaevindeki hükümlü ve tutuklularla iletişimi) etkisi çıkarıldıktan sonra işyeri stresi faktörlerinin (iş yükü fazlalığı, rollerdeki çatışma, rollerdeki belirsizlik, tehdit algısı, fiziksel yetersizlikler ve genel problemler) stresi kişilik gelişimi için fırsat olarak görme (challenge), strese önem verme (centrality) ve stresi tehdit edici bir olgu olarak algılama (threat) boyutları üzerindeki etkisi üç ayrı regresyon analizi ile incelenmiştir. Ayrıntılı sonuçlar Tablo-8'de bulunmaktadır.

Cinsiyet (kadın olma) ($\beta = -.18$, $t(266) = -2.90$, $p < .005$) ve düşük seviyede hükümlü ve tutuklularla iletişimin süresi ($\beta = -.13$, $t(265) = -1.97$, $p < .05$) stresi kişilik gelişimi için fırsat olarak görme değişkeni ile ilişkili bulunmuştur.

Strese verilen önem algısında ise hem sosyo-demografik hem de işyeri stresi ile ilgili değişkenlerle ilişki bulunmamıştır.

Yüksek düzeyde hükümlü ve tutuklularla iletişimin süresi ($\beta = .14$, $t(266) = 2.31$, $p < .05$) ve işyeri stresi faktörlerinden birisi olan tehdit algısı ($\beta = .21$, $t(261) = 2.10$, $p < .05$) stresi tehdit edici bir olgu olarak algılama ile ilişkili bulunmuştur.

Stresin ikincil değerlendirmesiyle ilişkili olan değişkenleri belirleyebilmek için; sosyo-demografik değişkenlerin ve işyeri stresinin etkisi çıkarıldıktan sonra stres üzerinde kendilik kontrolü (self-control), stresi diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama (other-control) ve stresi kontrol dışı bir olgu olarak algılama (uncontrollability) boyutları üzerinde stresin birincil değerlendirmesinin etkisi (stresi gelişim için fırsat olarak görme, strese verilen önem ve stresi tehdit edici bir olgu olarak algılama) üç ayrı regresyon analizi ile incelenmiştir. Ayrıntılı sonuçlar Tablo-9'da bulunmaktadır.

Yüksek düzeyde stresi kişilik gelişimi için fırsat olarak görme ($\beta = .42$, $t(259) = 7.01$, $p < .001$) ve düşük düzeyde stresi tehdit edici bir olgu olarak algılama ($\beta = -.16$, $t(259) = -2.29$, $p < .05$) stres üzerinde kendilik kontrolü ile ilişkili bulunmuştur.

Düşük düzeyde hükümlü ve tutuklularla iletişimin süresi ($\beta = -.18$, $t(266) = -2.91$, $p < .005$) ve stresi tehdit edici bir olgu olarak algılama ($\beta = -.16$, $t(258) = -2.02$, $p < .05$) ve yüksek düzeyde stresi kişilik gelişimi için fırsat olarak görme algısı ($\beta = .17$, $t(258) = 2.64$, $p < .01$) stresi başkaları tarafından kontrol edilebilir algılama ile ilişkili bulunmuştur.

Yüksek düzeyde strese verilen önem ($\beta = .16$, $t(259) = 2.53$, $p < .01$) ve stresi tehdit edici bir olgu olarak algılama ($\beta = .51$, $t(259) = 8.15$, $p < .001$) stresi kontrol dışı bir olgu olarak algılama ile ilişkili bulunmuştur.

Duygu durumuyla ilgili değişkenlerle ilişkili olan değişkenleri belirleyebilmek için; sosyo-demografik değişkenlerin, işyeri stresinin, stresin birincil değerlendirmesinin etkisi çıkarıldıktan sonra stresin ikincil değerlendirmesinin etkisinin olumlu duygu durum (positive affect), olumsuz duygu durum (negative affect), duyguyu dışa vurma (emotional expression) ve duyguyu işleme (emotional processing) boyutları üzerindeki etkisini inceleyebilmek için dört ayrı regresyon analizi yapılmıştır. Ayrıntılı sonuçlar Tablo-10'da bulunmaktadır.

Vardiyalı çalışma durumu (vardiyasız çalışma) ($\beta = -.16$, $t(266) = -2.59$, $p < .01$) ve yüksek düzeyde stresi diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama ($\beta = .16$, $t(259) = 2.26$, $p < .05$) olumlu duygu durum ile ilişkili bulunmuştur.

Yüksek düzeyde hükümlü ve tutuklularla iletişimin süresi ($\beta = .13$, $t(266) = 2.12$, $p < .05$), işyeri stresi ($\beta = .46$, $t(265) = 8.43$, $p < .001$), stresi tehdit edici bir olgu olarak algılama ($\beta = .25$, $t(262) = 3.78$, $p < .001$) ve düşük düzeyde stresi kişilik gelişimi için fırsat olarak görme ($\beta = -.18$, $t(262) = -3.24$, $p < .001$), stresi kontrol dışı bir olgu olarak algılama ($\beta = -.20$, $t(259) = -3.04$, $p < .01$) olumsuz duygu durum ile ilişkili bulunmuştur.

Yüksek düzeyde aylık gelir ($\beta = .16$, $t(266) = 2.58$, $p < .01$), stresi kişilik gelişimi için fırsat olarak görme ($\beta = .20$, $t(262) = 3.04$, $p < .005$), stresi kendisinin kontrol edebileceği algısı ($\beta = .20$, $t(259) = 2.96$, $p < .005$) ve düşük düzeyde stresi kontrol dışı bir olgu olarak algılama ($\beta = -.17$, $t(259) = -2.21$, $p < .05$) duyguyu dışavurma ile ilişkili bulunmuştur.

Yüksek düzeyde stresi kişilik gelişimi için fırsat olarak görme ($\beta = .19$, $t(263) = 3.03$, $p < .005$), strese verilen önem ($\beta = .18$, $t(263) = 2.23$, $p < .05$), stresi kendisinin kontrol edebileceği algısı ($\beta = .14$, $t(260) = 2.08$, $p < .05$) ve düşük düzeyde stresi kontrol dışı bir olgu olarak algılama ($\beta = -.20$, $t(260) = -2.68$, $p < .01$) duyguyu işleme ile ilişkili bulunmuştur.

Baş etme stratejileri ile ilişkili olan değişkenleri belirleyebilmek için; sosyo-demografik değişkenlerin, işyeri stresinin, stresin birincil değerlendirmesinin, stresin ikincil değerlendirmesinin etkisi çıkarıldıktan sonra duygu durumuyla ilgili değişkenlerin problem odaklı baş etme, duygu odaklı baş etme ve sosyal destek arayışı üzerindeki etkisi üç ayrı regresyon analizi ile incelenmiştir. Ayrıntılı sonuçlar Tablo-11'de bulunmaktadır.

Yüksek düzeyde stresi kişilik gelişimi için fırsat olarak görme ($\beta = .32$, $t(263) = 5.02$, $p < .001$), stres üzerinde kendilik kontrolü ($\beta = .22$, $t(260) = 2.29$, $p < .001$), olumlu duygu durum ($\beta = .32$, $t(256) = 5.91$, $p < .001$), duyguyu işleme ($\beta = .28$, $t(256) = 3.97$, $p < .001$) ve düşük düzeyde olumsuz duygu durum ($\beta = -.28$, $t(256) = -4.35$, $p < .001$) ve duyguyu dışa vurma ($\beta = -.18$, $t(256) = -2.59$, $p < .01$) problem odaklı baş etme ile ilişkili bulunmuştur.

Yüksek düzeyde işyeri stresi ($\beta = .18$, $t(266) = 2.91$, $p < .005$), stresi kişilik gelişimi için fırsat olarak görme ($\beta = .15$, $t(263) = 2.28$, $p < .05$) ve stresi kontrol dışı bir olgu olarak algılama ($\beta = .17$, $t(260) = 2.23$, $p < .05$) duygu odaklı baş etme ile ilişkili bulunmuştur.

Düşük düzeyde hükümlü ve tutuklularla iletişim süresi ($\beta = -.12$, $t(266) = -2.01$, $p < .05$), aylık gelir ($\beta = -.12$, $t(265) = -1.99$, $p < .05$), işyeri stresi ($\beta = -.13$, $t(264) = -2.20$, $p < .05$), olumsuz duygu durum ($\beta = -.25$, $t(254) = -3.50$, $p < .001$) ve yüksek düzeyde stresi kişilik gelişimi için fırsat olarak görme ($\beta = .13$, $t(261) = 1.98$, $p < .05$), olumlu duygu durum ($\beta = .19$, $t(254) = 3.23$, $p < .001$), duyguyu dışa vurma ($\beta = .21$, $t(254) = 2.75$, $p < .01$) sosyal destek arayışı ile ilişkili bulunmuştur.

Stresin sonuçları ile ilişkili olan değişkenleri belirleyebilmek için; sosyo-demografik değişkenlerin, işyeri stresinin, stresin birincil değerlendirmesinin, ikincil değerlendirmesinin, duygu durumunun etkisi çıkarıldıktan sonra baş etme stratejilerinin stresin olumsuz (depresyon ve kaygı) ve olumlu (yaşam doyumu, iş doyumu) sonuçları üzerindeki etkisi dört ayrı regresyon analizi ile incelenmiştir (bkz. Tablo-12 ve Tablo-13).

Yüksek düzeyde iş yerindeki toplam çalışma süresi ($\beta = .22$, $t(266) = 3.66$, $p < .001$), işyeri stresi ($\beta = .47$, $t(265) = 8.70$, $p < .001$), olumsuz duygu durum ($\beta = .47$, $t(255) = 8.45$, $p < .001$), duygu odaklı baş etme ($\beta = .14$, $t(252) = 2.91$, $p < .005$) ve düşük düzeyde stresi kontrol dışı bir olgu olarak algılama ($\beta = -.20$, $t(259) = -3.04$, $p < .005$), olumlu duygu durum ($\beta = -.25$, $t(255) = -5.36$, $p < .001$) depresyon ile ilişkili bulunmuştur.

İleri yaş ($\beta = .23$, $t(266) = 3.87$, $p < .001$), yüksek düzeyde hükümlü ve tutuklularla iletişimin süresi ($\beta = .14$, $t(265) = 2.26$, $p < .05$), işyeri stresi ($\beta = .17$, $t(264) = 2.88$, $p < .005$), stresi tehdit edici bir olgu olarak algılama ($\beta = .41$, $t(261) = 6.17$, $p < .001$), olumsuz duygu durum ($\beta = .32$, $t(254) = 5.65$, $p < .001$) ve düşük düzeyde stresi kişilik gelişimi için fırsat olarak görme ($\beta = -.29$, $t(261) = -5.27$, $p < .001$), stres üzerinde kendilik kontrolü ($\beta = -.18$, $t(258) = -3.11$, $p < .005$), stresi diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama ($\beta = -.11$, $t(258) = -1.97$, $p < .05$) ve duyguyu dışa vurma ($\beta = -.12$, $t(254) = -1.95$, $p < .05$), problem odaklı baş etme ($\beta = -.18$, $t(251) = -3.04$, $p < .005$) kaygı ile ilişkili bulunmuştur.

Yaş (genç olma) ($\beta = -.25$, $t(266) = -4.20$, $p < .001$), cinsiyet (bayan olma) ($\beta = -.17$, $t(265) = -2.81$, $p < .005$), düşük düzeyde işyeri stresi ($\beta = -.33$, $t(264) = -5.96$, $p < .001$) ve yüksek düzeyde stresi diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama ($\beta = .14$, $t(258) = 2.49$, $p < .05$) ve olumlu duygu durum ($\beta = .19$, $t(254) = 3.27$, $p < .001$) yaşam doyumu ile ilişkili bulunmuştur.

Vardiyalı çalışma durumu (vardiyasız çalışma) ($\beta = -.13$, $t(266) = -2.16$, $p < .05$), düşük düzeyde eğitim ($\beta = -.15$, $t(265) = -2.37$, $p < .05$), işyeri stresi ($\beta = -.35$, $t(264) = -6.13$, $p < .001$), yüksek düzeyde stresi tehdit edici bir olgu olarak algılama

($\beta = .17$, $t(261) = 2.36$, $p < .05$), stresi kişilik gelişimi için fırsat olarak görme ($\beta = .25$, $t(261) = 4.18$, $p < .001$), olumlu duygu durum ($\beta = .29$, $t(254) = 5.14$, $p < .001$) iş doyumu ile ilişkili bulunmuştur.

3.3 Modellerin Test Edilmesi

İşyeri stresi ile stresin olumlu ve olumsuz sonuçları (psikolojik rahatsızlık ve psikolojik uyum) arasındaki ilişkide stresin birincil ve ikincil bilişsel değerlendirmesi, duygu durumu ve baş etme stratejilerinin etkisini inceleyebilmek için analizler sonrası oluşturulan Yapısal Eşitlik Modeli, AMOS programı aracılığı ile dört ayrı değişken (depresyon, kaygı, yaşam doyumu ve iş doyumu) için analiz edilmiştir. Modellerde doğrudan ve dolaylı ilişkiler gösterilmiştir.

Yapısal Eşitlik Modeli, ceza infaz kurumu personelindeki depresyonu belirlemek için iki kez test edilmiştir. Önerilen ilk model χ^2 / df oranına ($\chi^2 / df = 5.905$) ve İyi Uyum Endeksi sonuçlarına göre uygun bulunmamıştır; $\chi^2 (25, n = 268) = 147.629$, $p < .001$, RMSEA (Browne & Cudeck, 1993) = .136, CFI (Bentler, 1990) = .759, RFI (Bollen, 1986) = .609, IFI (Bollen, 1989) = .764. Modelin Tablo-13'te belirtilen öneriler yoluyla tekrar gözden geçirilmesi sonucunda ise uygun sonuçlar elde edilmiştir; $\chi^2 (17, n = 268) = 38.397$, $p < .01$, ($\chi^2 / df = 2.259$). Bu model, İyi Uyum Endekslerine göre de uygun sonuçlar vermiştir; RMSEA = .069, CFI = .942, IFI = .944, RFI = .840. Değişkenler arasında en güçlü ilişki olumsuz duygu durum ve depresyon arasındayken (.47) en zayıf ilişki işyeri stresi ve stresi kişilik gelişimi için fırsat olarak görme değişkenleri arasındadır (.08) (bkz. Şekil-2 ve Şekil-3).

Yapısal Eşitlik Modeli, ceza infaz kurumu personelindeki kaygıyı belirlemek için test edildiğinde anlamlı sonuç elde edilmiştir; $\chi^2 (27, n = 268) = 69.265, p < .001$. Modelin χ^2 ile serbestlik derecesi oranı 3'te 1'den azdır ($\chi^2 / df = 2.56$). Ayrıca, bu model İyilik Uyum Endekslerine göre de uygun sonuçlar vermiştir; RMSEA = .077, CFI = .912, IFI = .915, RFI = .780. Değişkenler arasında en güçlü ilişki stresi tehdit edici bir olgu olarak algılama ve d stresi kontrol dışı bir olgu olarak algılama arasındayken (.61), en zayıf ilişki işyeri stresi ve stresi kişilik gelişimi için fırsat olarak görme değişkenleri arasındadır (.08) (bkz Şekil 4).

Yapısal Eşitlik Modeli, ceza infaz kurumu personelindeki yaşam doyumunu belirlemek için test edildiğinde anlamlı sonuç elde edilmiştir; $\chi^2 (12, n = 268) = 25.721, p < .05$. Modelin χ^2 ile serbestlik derecesi oranı 3'te 1'den azdır ($\chi^2 / df = 2.14$). Ayrıca, bu model İyilik Uyum Endekslerine göre de uygun sonuçlar vermiştir; RMSEA = .065, CFI = .921, IFI = .925, RFI = .769. Değişkenler arası en güçlü ilişki stresi kişilik gelişimi için fırsat olarak görme ve stres üzerinde kendilik kontrolü arasındayken (.45), en zayıf ilişki işyeri stresi ve stresi kişilik gelişimi için fırsat olarak görme değişkenleri arasındadır (.08) (bkz Şekil 5).

Yapısal Eşitlik Modeli, ceza infaz kurumu personelindeki iş doyumunu belirlemek için test edildiğinde anlamlı sonuç elde edilmiştir; $\chi^2 (7, n = 268) = 8.996, p = n.s.$ Modelin χ^2 ile serbestlik derecesi oranı 2'de 1'den azdır ($\chi^2 / df = 1.29$). Ayrıca, bu model iyilik uyum endekslerine göre de uygun sonuçlar vermiştir; RMSEA = .033, CFI = .988, IFI = .989, RFI = .897. Değişkenler arası en güçlü ilişki stresi kişilik gelişimi için fırsat olarak görme ve kendisinin stresi kontrol edebileceğini düşünme arasındayken (.45), en zayıf ilişki işyeri stresi ve stresi kişilik gelişimi için fırsat olarak görme değişkenleri arasındadır (.08) (bkz Şekil 6).

4. Tartışma

Bu çalışmanın amacını, cezaevi çalışanlarında işyeri stresinin, bilişsel değerlendirilmenin, duygu durumunun, baş etme stratejilerinin psikolojik rahatsızlığa ve psikolojik uyuma etkisini içeren bir model geliştirilmesi oluşturmaktadır.

Stresle ilgili faktörler sağlık üzerindeki etkileri nedeni ile bir çok araştırmacının ilgisini çekmiştir. Stresle ilgili faktörleri açıklarken bireysel farklılıkların önemi sıklıkla vurgulanmıştır. Bazı insanlar, stres sonucu psikolojik ve fiziksel problemler yaşarken, diğerleri her hangi bir rahatsızlık geliştirmemektedir. Bunun nedenine bakıldığında, bireyin çevre ile etkileşimi sonucu stresle baş edebilmenin etkisi ön plana çıkmaktadır. Bu açıdan, stresin bilişsel değerlendirilmesinin bireylerin baş edebilmesini açıklamada önemli bir rol üstlendiği bilinmektedir.

Lazarus ve Folkman'ın (1984) Bilişsel Transaksiyonel Model'i hem stresin bilişsel değerlendirilmesini etkileyen süreçleri, hem de stresin sonuçlarını ele alan kapsamlı bir modeldir. Model, stresin olumsuz (depresyon ve kaygı) ve olumlu (yaşam doyumu ve iş doyumu) sonuçlarını açıklamada kullanılmaktadır.

Bu bölümde araştırma sonuçları tartışılacaktır. Araştırmanın güçlü yanları ve sınırlılıkları, bulguların uygulamaya aktarılması ve ilerideki çalışmalara önerileri tartışılacaktır.

4.1 Bulguların Tartışılması

İşyeri stresi, bilişsel değerlendirme, duygusal etkenler, baş etme stratejileri ve stresin sonuçlarını bir arada değerlendirmede etkileşimsel bir model geliştirebilmek için çeşitli analizler yapılmıştır. Değişkenler arasındaki korelasyonlar, grup

farklılıkları ve deęişkenlerin yordayıcı gücünü ortaya koyan çeşitli regresyon analizleri sonucunda elde edilen model Yapısal Eşitlik Modeli (YEM) ile test edilmiştir.

4.1.1 Korelasyon

Deęişkenler arasında ilişkileri deęerlendirebilmek için öncelikle korelasyon analizi yapılmıştır. Sonuçlar, literatürdeki bulgularla tutarlı şekilde çıkmıştır (Örn., Anshel & Kaissidis, 1997; Compasve arkadaşları 1988; Lazarus, 1981; Lazarus & Folkman, 1984; Roecker ve arkadaşları 1996).

Depresyon; işyeri stresi, strese önem verme, stresi tehdit edici bir olgu olarak algılama, olumsuz duygu durum ve duygu odaklı baş etme ile pozitif ilişkili iken dięerleri tarafından stresin kontrol edileceęi algısı, olumlu duygu durum, problemle baş etme becerisi ve sosyal destek arayışı ile negatif bir ilişkisi sergilemektedir.

Sürekli kaygı; işyeri stresi, strese önem verme, stresi tehdit edici bir olgu olarak algılama, stresi kontrol dışı bir olgu olarak algılama ve olumsuz duygu durum ile pozitif ilişkili iken stresi kişilik gelişimi için fırsat olarak görme, stres üzerinde kendilik kontrolü, stresi dięerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama, olumlu duygu durum, duyguyu dışa vurma, duyguyu işleme, problem odaklı baş etme ve sosyal destek arayışı ile negatif yönlü bir ilişki sergilemektedir.

Yaşam doyumu; stresi dięerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama, olumlu duygu durum ve sosyal destek arayışı ile pozitif yönlü bir ilişki gösterirken, işyeri stresi, stresi tehdit edici bir olgu olarak algılama ve olumsuz duygu durum ile negatif ilişki sergilemektedir.

İş doyumunun ise, stresi kişilik gelişimi için fırsat olarak görme, stres üzerinde kendilik kontrolü, olumlu duygu durum, problem odaklı baş etme ve sosyal destek arayışı ile pozitif, işyeri stresi ve olumsuz duygu durum ile negatif yönlü bir ilişki sergilemektedir.

4.1.2 Grup Farklılıklarını Ortaya Koyan Analizler

Hiyerarşik çoklu regresyon analizlerinden önce, cezaevi türünün ve vardiyalı çalışma durumunun stresin birincil ve ikincil değerlendirmelerine, duygulanıma, baş etme stratejilerine, psikolojik rahatsızlığa ve uyuma göre farklılaşıp farklılaşmadığına bakılmıştır. Bunun için çok sayıda bağımsız gruplar t-testi analizi yapılmıştır.

Sonuçlara göre, yüksek güvenliki cezaevlerinde çalışanların; düşük ya da orta güvenliki cezaevlerinde çalışanlara göre daha fazla yaşam doyumuna sahip olduğu ortaya çıkmıştır. Yüksek güvenliki cezaevlerinde çalışan bireyler diğer cezaevlerinde çalışan meslektaşlarına göre daha ağır suçları işlemiş kişilere hizmet sunmalarına rağmen, iş doyumlarının daha fazla olması dikkat çekicidir. Bu sonuçta, Adalet Bakanlığının yüksek güvenliki cezaevlerinde çalışanların iş tanımlarında yaptığı düzenlemeler sonrasında bu tür cezaevlerinde çalışanların iş tanımlarının net oluşunun bir etkisi olabilir (Şenol, 2003). Orta ve düşük güvenliki cezaevlerinde çalışanların yöneticilerin yönlendirmesi yoluyla sorumlulukları dışında işler yapmak zorunda kalabildikleri bilinmektedir. Yöneticiler cezaevi işleyişi dışında çalışanlarına görevler verebilmektedir. Bu bilgi, iş yerinde sık değişimin çalışanlarda kaygı yarattığını ortaya koyan Rafferty ve Griffin'in (2006) sonuçları destekler niteliktedir. Ayrıca, yüksek güvenliki cezaevlerinde fiziksel koşullar diğer

cezaevlerine oranla daha iyidir. Bu durum, tehdit içerikli davranışlarla karşılaşma riskinin azaltabilir. Bunlara ek olarak yüksek güvenlikli cezaevlerinde personel sayısının diğer cezaevlerine göre daha fazla oluşu iş yükünün oluşmasını engelleyebilir. Bütün boyutlar bir arada değerlendirildiğinde yüksek güvenlikli cezaevlerinde çalışanların iş doyumlarının yüksek olduğu düşünülebilir.

Vardiyalı sistemde çalışan personel vardiyasız çalışan personele göre işyeri stresi ve sürekli kaygı ortalamaları daha yüksek, stresi diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama, olumlu duygu durum, yaşam doyumu ve iş doyumu ortalamaları ise daha düşüktür. Vardiyalı çalışma, iş yükünü artırdığı için rol çatışmalarını arttırabilir ve roller arasında belirsizliği yol açabilir. Öte yandan, vardiyasız çalışan personelin işle ilgili problemlerle (örn., kriz dönemleri) daha az karşılaştıkları düşünülebilir. Literatürle tutarlı şekilde (Botha, & Pienaar, 2006; Şenol-Durak ve arkadaşları, 2006; Triplett, Mullings, & Scarborough, 1996), vardiyalı çalışmanın işyeri stresi ile ilişkili olduğu görülmüştür. Ayrıca, veri toplama süreci boyunca, vardiyalı çalışanların iş sonrasında günlük yaşama uyum sağlamakta zorlandıkları, eşleri ve çocukları ile yeteri kadar vakit geçiremediklerini, evde oldukları zaman da bir sonraki iş gününe hazırlanmak için uyuduklarını belirtir ifadeleri, iş doyumları ve yaşam doyumlarındaki azlığı açıklamaktadır.

Bilişsel değerlendirme boyutlarına ve ortaya çıkan duygulara bakıldığında; Smith ve arkadaşları (1993) tarafından altı temel duygu önerilmiştir. Onlara göre, altı temel duygu arasında yer alan korku ve kaygı, tehdit ya da tehlike algısı ile ilişkilidir. Bu bilgi, vardiyalı çalışanlarda tehdit ya da tehlike temasını içeren sürekli kaygı skorlarının yüksekliği ile tutarlıdır. Bu çalışma sisteminde çalışan bireyler çeşitli kriz dönemlerine maruz kalma (örn., cezaevindeki hükümlü ve tutukluların

intihar girişimleri, tartışmaları ve firarı gibi konularda çalışanların sürekli tetikte olma zorunluluğu vb.) bakımından risk altındadır. Ayrıca vardiyada çalışanların personel sayısı açısından vardiyasız çalışanlara göre daha az oluşu herhangi bir kriz durum gerçekleştiğinde krizin gerçekte var olduğundan daha ciddi algılanabilmesine neden olabilir. Bu yüzden, vardiyalı çalışanlarda diğerleri tarafından sağlanan kontrol algısı vardiyasız çalışanlara göre daha az olmaktadır.

4.1.3 Hiyerarşik Çoklu Regresyon Analizi

Değişkenler arasındaki ilişkiyi değerlendirebilmek için çok sayıda hiyerarşik çoklu regresyon analizi yapılmıştır. Birincil değerlendirme, ikincil değerlendirme, duygu durumu ile ilgili değerlendirme, baş etme stratejileri ve stresin sonuçlarının (psikolojik rahatsızlıklar ve psikolojik uyum) değişkenleri ile ilgili boyutları belirleyebilmek için ayrı regresyon analizleri yapılmıştır.

Birincil değerlendirmenin üç boyutu olan; stresi kişilik gelişimi için fırsat olarak görme, strese atfedilen önem ve stresi tehdit edici bir olgu olarak algılama için ayrı ayrı regresyon analizi gerçekleştirilmiştir. Cinsiyet değişkeni (bayan olma), kişilik gelişimi için stresi fırsat olarak görme algısını yordamaktadır. Bayanlar erkeklere göre daha fazla miktarda stresi kişilik gelişimi için fırsat olarak algılamaktadır. Benzer şekilde, Devonport ve Lane (2006) de bayan üniversite öğrencilerinin, erkeklerden daha fazla şekilde bitirme tezini kişisel gelişimleri için bir fırsat olarak gördüklerini ortaya koymuştur. Cinsiyetin yanı sıra düşük düzeyde tutuklu ve hükümlülerle iletişim süresi stresi gelişim için fırsat olarak görme algısı ile ilişkili bulunmuştur. İletişim süresi arttıkça bireyler daha az stresi gelişim için bir

fırsat olarak görme eğilimindedir. Süre arttıkça sözel ve sözel olmayan tehdit içerikli olaylara cezaevi çalışanları daha fazla oranda maruz kalabilir. Bu yüzden stresi gelişim için tekrar değerlendirme eğilimi (Devonport, & Lane, 2006) ve olası olumlu sonuçları görme (Karademas, & Kalantzi-Azizi, 2004; Peacock, & Wong) azalmaktadır. İkinci boyut olan strese önem verme değişkeni, sosyo-demografik değişkenlerle ve işyeri stresinin alt boyutları ile ilişkili bulunamamıştır. Bu boyut, zayıflığı nedeniyle bazı araştırmalardan çıkarıldığı bilinmektedir (örn., Roesch, & Rowley, 2005). Cezaevi örneğinde de bu boyutun çalışmadığı görülmüştür. Stresi tehdit edici bir olgu olarak algılama boyutuna bakıldığında ise; hem hükümlü ve tutuklularla iletişim süresi, hem de Cezaevi Çalışanları İçin İş Stresi ölçeğinin tehdit alt boyutu ilişkili çıkmıştır. Belirtildiği gibi, cezaevinde kalan hükümlü ve tutuklularla geçirilen zaman arttıkça, tehdit içerikli olaylarla karşılaşma riski artmaktadır. Ölçekte bulunan ‘hükümlü ve tutukluların kaygı etmesine maruz kalmak’, ‘Sürekli temkinli olma zorunluluğu’ gibi maddeler ise tehdit algısı ile yakından ilgilidir (Şenol-Durak ve arkadaşları 2006).

İkincil değerlendirmenin alt boyutları olan stres üzerinde kendilik kontrolü, stresi diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama ve stresi kontrol dışı bir olgu olarak algılama boyutları için ayrı ayrı regresyon analizleri gerçekleştirilmiştir. Personelin stresi gelişim için fırsat olarak görme algısı arttıkça stres üzerinde kendilik kontrol algısı da artmaktadır. Diğer taraftan stresi tehdit edici bir olgu olarak algılama stres üzerinde kendilik kontrol algısını azaltmaktadır. Ayrıca, işyeri stresi ile stres üzerinde kendilik kontrolü arasında ilişki bulunamaması önceki çalışmalarla benzerlik göstermektedir (Dopke ve Milner, 2000). Stresi diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama boyutu ise, düşük

düzye h k ml  ve tutuklularla iletiŐim, stresi tehdit edici bir olgu olarak algılama ve y ksek d zye stresi geliŐim i in fırsat olarak g rme ile iliŐkilidir. H k ml  ve tutuklularla iletiŐim sırasında onların davranıŐlarını kontrol etmek zorunda kalan cezaevi  alıŐanları  eŐitli zorluklar yaŐayabilir (Armstrong, & Griffin, 2004; Őenol-Durak ve arkadaŐları 2006; Farkas, 1999; Wright, 1993). Veri toplama s recinde,  alıŐanların diŐer  lkelerdeki meslektaŐlarına g re, sayıca daha az sayıda personelle  alıŐmaları stresi tehdit edici bir olgu olarak algılamasını arttırmıŐ ve kontrol algısını azaltmıŐ olabilir. Stresi kontrol dıŐı bir olgu olarak algılama boyutu ise, strese verilen  nem ve stresi tehdit edici bir olgu olarak algılama ile iliŐkili bulunmuŐtur. Tehdit ve stresi kontrol dıŐı bir olgu olarak algılama arasındaki pozitif iliŐki daha  nceki  alıŐmaları doŐrulamaktadır ( rn., Dopke, & Milner, 2000).  te yandan strese verilen  nem ve stresi kontrol dıŐı bir olgu olarak algılama daha  nce ortaya konmamıŐ bir bulgudur. Personel s z konusu stres verici durumu ne kadar  nemli bir olay olarak g rse o olayı kontrol dıŐı hissetme eŐilimi artmaktadır.

Duygulanımla ilgili deŐiŐkenler, olumlu duygu durum, olumsuz duygu durum, duyguyu dıŐa vurma ve duyguyu iŐleme boyutlarında incelenmiŐtir. Vardiyalı  alıŐma olumlu duygu durumu azaltmaktadır. Vardiyalı  alıŐanlar, veri toplama s recinde vardiyalı  alıŐmanın yaŐamlarını olumsuz etkilediĐine y nelik  eŐitli yakınmalarını dile getirmiŐlerdir. Vardiyalı  alıŐanlar boŐ zamanlarını deŐerlendirmede, sevdiklerine yeterli zaman ayırmada ve aile bireyleri ile birlikte  eŐitli aktivitelere bulunmada sıkıntılar yaŐadıklarını ifade etmiŐlerdir. Bu t r yakınmalar, bu  alıŐanların olumsuz duyguları daha fazla yaŐamalarını a ıklayabilir. Vardiyalı  alıŐmanın yanı sıra, kontrol algısının artması olumlu duygu durumuyla iliŐkili  ıkmıŐtır. Stres  zerinde kendilik kontrol  olumlu duygulanımı arttırmaktadır.

Bu nedenle bu kişiler, kontrol edebileceklerini düşündükleri bir stresli durumla karşılaştıklarında rahatlama anlamında bir “*psikolojik ara*” (psychological break) hissetmektedirler (Folkman, & Moskowitz, 2000).

Olumsuz duygu durum ise, hükümlü ve tutuklularla iletişim süresi, işyeri stresi, stresi gelişim için fırsat olarak görme, stresi tehdit edici bir olgu olarak algılama ve stresi kontrol dışı bir olgu olarak algılama ile ilişkilidir. Hükümlü ve tutuklularla iletişim süresi arttıkça; isyan, kavga, firar gibi negatif olaylarla karşılaşma olasılığının artması olumsuz duygu durumundaki artışı açıklamaktadır. Stresle olumsuz duygu durum arasındaki ilişki önceki çalışmaları doğrular niteliktedir (Watson & Clark, 1984). Stres arttıkça olumsuz duygular da artmaktadır. Ek olarak olumsuz duygu durum, stresi tehdit edici bir olgu olarak algılama ve stresi kontrol dışı bir olgu olarak algılama ile ilişkili iken, olumlu duygu durum daha çok stresi gelişim için fırsat olarak görme algısı ile ilişkilidir (Folkman, & Moskowitz, 2000). Benzer şekilde, Dopke ve Milner (2000) de stres, stresi tehdit edici bir olgu olarak algılama, stresi kontrol dışı bir olgu olarak algılama ile olumsuz duygu durum ilişkili bulunmuştur. Bu araştırmada, olumsuz duygu durumundaki ilişkiler literatürü destekler niteliktedir.

Duyguyu dışı vurma; yüksek aylık gelir, stresi kişilik gelişimi için fırsat olarak görme, stres üzerinde kendilik kontrolü ve düşük düzeyde stresi kontrol dışı bir olgu olarak algılama ile ilişkilidir. Aylık geliri yüksek olan cezaevi çalışanlarının daha çok yönetimsel görevlerde olduğu bilinmektedir. Bu nedenle, aylık gelirin duyguyu dışı vurma ile ilişkisinin daha çok otoritenin etkisi ile açıklanabileceği düşünülebilir. Stresi gelişim için fırsat olarak görme algısı ve stres üzerinde kendilik kontrolü “*yaklaşma*” içeriğini yansıtmaktadır. Diğer taraftan, stresi kontrol dışı bir

olgu olarak algılama “kaçınma” içeriği taşımaktadır (Fergusson ve arkadaşları, 1999). Dolayısıyla, bu değişkenler duyguyu dışa vurma ile ilişkili çıkmış olabilir. Benzer şekilde, cezaevi çalışanlarında işyeri stresinin kontrol edilebileceğini düşünenlerde duyguyu dışa vurma artarken işyeri stresinin kontrol edilemeyeceğini düşünenlerde duyguyu dışa vurmada azalma gözlenmiştir.

Duyguyu işleme ise, yüksek düzeyde stresi gelişim için fırsat olarak görme, strese önem verme, stres üzerinde kendilik kontrolü ve düşük düzeyde stresi kontrol dışı bir olgu olarak algılama ile ilişkilidir. Stresin kişi için önemi arttıkça duyguyu işleme artmaktadır. Yaklaşma ve kaçınma içeriği taşıdığı için (Fergusson ve arkadaşları, 1999) duyguyu işleme, stresi gelişim için fırsat olarak görme ve stresi kontrol dışı bir olgu olarak algılama ile duyguyu işleme ilişkilidir. Benzer şekilde, cezaevi çalışanlarında işyeri stresini gelişim için bir fırsat olarak görenlerde duyguyu işleme artarken ve stresi kontrol dışı bir olgu olarak algılayanlarda duyguyu işleme azalmaktadır.

Baş etme stratejileri, problem odaklı baş etme, duygu odaklı baş etme ve sosyal destek arayışı şeklinde üç boyutta değerlendirilmiştir. Problem odaklı baş etme, literatürdekine benzer şekilde, yüksek düzeyde stresi gelişim için fırsat olarak görme (Fergusson ve arkadaşları, 1999), stres üzerinde kendilik kontrolü (Folkman, & Lazarus, 1980; Peacock ve arkadaşları 1992), olumlu duygu durum ve duyguyu işleme ve düşük düzeyde olumsuz duygu durum, duyguyu dışa vurma ile ilişkilidir (Folkman, & Lazarus, 1988). Duygu odaklı baş etmede ise sadece işyeri stresi anlamlı bulunmuştur. Stres arttıkça cezaevi çalışanlarının duygu odaklı baş etme stratejilerini kullanma eğilimleri artmaktadır. Sosyal destek arayışına

bakıldığında, düşük düzeyde hükümlü ve tutuklularla iletişim süresi, aylık gelir, işyeri stresi, olumsuz duygu durum ve yüksek düzeyde stresi kişilik gelişimi için fırsat olarak görme, olumlu duygu durum, duyguyu dışa vurma ile ilişkilidir.

Psikolojik rahatsızlık, depresyon ve sürekli kaygı değişkenleri boyutlarında araştırılmıştır. Psikolojik uyumu değerlendirmek için yaşam doyumu ve iş doyumu değişkenleri seçilmiştir. Cezaevi çalışanlarındaki depresyon yüksek düzeyde işteki toplam çalışma yılı, işyeri stresi, olumsuz duygu durum, duygu odaklı baş etme ve düşük düzeyde stresi kontrol dışı bir olgu olarak algılama, olumlu duygu durum ile ilişkilidir. İş yerindeki çalışma yılı ile depresyon arasındaki ilişki çalışanların iş yerindeki olumsuzlukları zaman geçtikçe çözümsüz görmeleri ile açıklanabilir. İşyeri stresi ile depresyon arasındaki ilişki önceki literatürle tutarlıdır. Şenol-Durak ve arkadaşları (2006) işyeri stresi arttıkça cezaevi çalışanlarında depresyonun arttığını ortaya koymuşlardır. Olumsuz duygu durumundaki (Kahn ve arkadaşları, 2003) ve duygu odaklı baş etmedeki artış (Stanton ve arkadaşları, 1994) ve olumsuz duygu durumundaki azalış (Folkman, & Moskowitz, 2000) ile depresyonun ilişkisi var olan bulguları destekler niteliktedir. Literatürde stresi kontrol dışı bir olgu olarak algılamadaki artış depresyon ile ilişkili bulunmuştur (Honey ve arkadaşları, 2003). Ancak bu çalışmada, stresi kontrol dışı bir olgu olarak algılamadaki azalma ile depresyon ilişkili bulunmuştur. Bu durum, stresi kontrol dışı bir olgu olarak algılama cezaevi çalışanlarında bir rahatlama yaratmaktadır şeklinde yapılabilecek yorumun yanı sıra baskılayıcı değişken etkisi (suppressor effect) önerilebilir.

Cezaevi çalışanlarındaki sürekli kaygı ile ileri yaş, yüksek düzeyde hükümlü tutuklularla iletişim süresi, işyeri stresi, stresi tehdit edici bir olgu olarak algılama, olumsuz duygu durum ve düşük düzeyde stresi gelişim için fırsat olarak görme, stres

üzerinde kendilik kontrolü, stresi diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama, duyguyu dışa vurma ve problem odaklı baş etme ile anlamlı şekilde ilişkilidir. Yaş arttıkça tehdit içeriğini fark etme artmaktadır. Benzer şekilde, hükümlü tutuklularla iletişim süresinin artması çalışanları tehdit içerikli olaylara maruz kalma bakımından riskli kılmaktadır. Şenol-Durak ve arkadaşlarına (2006) benzer şekilde işyeri stresi arttıkça cezaevi çalışanlarında kaygı artmaktadır. Stresi tehdit edici bir olgu olarak algılamadaki (Flett ve ark., 1999; Spielberger, & Vagg, 1984) ve olumsuz duygu durumundaki artış (Andrade ve ark., 2001; Meeks ve ark., 2003), ile duyguyu dışa vurmadaki (Iwamatsu ve ark., 2007) ve problemle odaklı baş etmedeki azalış (Hemenover, & Dienstbier, 1998) konusundaki ilişkiler bu çalışmada da gözlenmiştir. Iwamatsu ve arkadaşları (2007) sürekli kaygı ve duyguyu dışa vurma arasındaki negatif ilişkiyi öğrenilmiş çaresizlik ve umutsuzluk kavramlarından kaynaklı görmektedir. Benzer şekilde, cezaevi çalışanlarında da problem odaklı baş etmeyi ve duyguyu dışa vurmaya tercih etmemeleri problemleri çözümsüz görmelerinden kaynaklı olabilir.

Cezaevi çalışanlarında yaşam doyumu, yaşın (genç olma), cinsiyet (bayan olma), düşük düzeyde işyeri stresi ve yüksek düzeyde stresi diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama ve olumlu duygu durum ile ilişkili bulunmuştur. Gençlerin (Ehrlich, & Isaacowitz, 2002) ve kadınların (Stanton ve ark., 1994) yaşam doyumlarının daha fazla olduğu bilinmektedir. Bu açıdan araştırma, var olan bilgileri destekler niteliktedir. Benzer şekilde, olumlu duygu durum ile yaşam doyumu arasındaki ilişki (Chang ve ark., 2003) bu çalışmada da gözlenmiştir. Öte yandan, İmamoğlu ve Kılıç (1999) stresi kendisinin kontrol edebileceği inancı ile

yaşam doyumu arasında ilişki bulurken bu çalışmada stresi başkalarının kontrol edebileceği inancı yaşam doyumunu açıklamıştır.

İş doyumu, vardiyalı çalışma, yüksek düzeyde eğitim, işyeri stresi ve düşük düzeyde stresi gelişim için fırsat olarak görme, stresi tehdit edici bir olgu olarak algılama, olumlu duygu durum değişkenleri ile anlamlı ilişkilidir. Vardiyalı çalışanlar dinlenme günlerinde yapmaları gereken işleri bitirdiklerini ve ailevi görevlerini yerine getirdiklerini, boş günler uğruna tüm sıkıntılarına rağmen vardiya sistemine dayandıklarını belirttiklerini veri toplama sürecinde dile getirmişlerdir. Bu durum, onlardaki iş doyumunun fazlalığını açıklamaktadır. Eğitime bakıldığında ise eğitimin iş doyumu ile ters ilişkisi olduğu görülmüştür. Düşük eğitim düzeyindeki kişiler bu işin onların son şansı olduğunu düşündükleri için bu kişilerde iş doyumu artabilir. Öte yandan, yüksek eğitim düzeyine sahip kişiler rol çatışmaları yaşamalarının olasılığı iş doyumlarını azaltabilir. Daha önce hem cezaevi çalışanlarında (Deitch ve arkadaşları, 2004) hem de diğer işlerde çalışanlarda gözlemlendiği gibi (Brough, 2005; Noelker ve arkadaşları, 2006; Piko, baskıda), bu araştırmada işyeri stresi ile iş doyumu arasındaki ters ilişkiyi ortaya koymuştur. Önceden de belirtildiği gibi (Andres, & Grayson, 2002), stresli olaylardan kazanç sağlanabileceğini algılayan kişilerin iş doyumu artmaktadır. Ek olarak tehdit ve iş doyumu arasında pozitif yönlü bir ilişki gözlenmiştir. Bu sonuç, çalışanların kuralları uyguladıkları için tehdit yaşadıkları bir ortamda bile iş doyumlarına sahip olduklarını düşündürmektedir. Bu durum, çalışanların yaptıkları işin önemine inandıkları ve bu önemi ortaya koymak istedikleri için tehdit ve iş doyumuna yüksek puanlar verdiklerini düşündürebilir.

4.1.4 Psikolojik Rahatsızlık ve Psikolojik Uyum Modelleri

Yapılan çoklu regresyon analizleri sonucunda anlamlı deęişkenlerin seçilmesi yoluyla birincil deęerlendirme, ikincil deęerlendirme, duygu durum ve baş etme stratejilerini içeren dört model geliştirilmiştir.

Depresyon için geliştirilen ilk model iyilik uyum modeli endekslerine uygun sonuçlar vermedięi için iki kez test edilmiştir. Modelin yeniden tanımlanması sürecinde daha önceki çalışmalarda ilişkisi vurgulanmasına rağmen (Dopke, & Milner, 2000) tehdit-kontrol edilemezlik ve kontrol edilemezlik-olumsuz duygu durum ilişkisi çıkarılmıştır. Ayrıca, modele işyeri stresi ile olumsuz duygu durum arasındaki ilişki eklenmiştir. Literatürdeki bulguları destekler şekilde (Patterson, 2003; Curbow ve ark., 2000; Tennant, 2001), işyeri stresi ile depresyon pozitif ilişkilidir.

Dolaylı etkilere bakıldığında; sadece olumsuz duygu durumunun işyeri stresi ve depresyon arasındaki ilişkide aracı bir etkisi olduğu görülmüş, stresi tehdit edici bir olgu olarak algılama, stresi gelişim için fırsat olarak görme, stres üzerinde kendilik kontrolü, olumlu duygu durum ve duygu odaklı baş etme deęişkenlerinin dolaylı etkisi bulunmamıştır. Öte yandan, bu maddelerin tümünün depresyon üzerindeki etkisi dikkati çekmektedir. Özetle, olumsuz duygu durum dışındaki diğer deęişkenlerin dolaylı etkisi bulunmamasına rağmen bu deęişkenlerin tümünün bir arada olması cezaevi çalışanlarındaki depresyonu yordamaktadır.

Cezaevi çalışanlarında kaygıyı belirleyen etmenlere bakıldığında; en güçlü ilişkinin stresi tehdit edici bir olgu olarak algılama ve stresi kontrol dışı bir olgu olarak algılama arasında görüldüğü, en zayıf ilişkinin ise önceki çalışmaların aksine (örn., Skinner, & Brewer, 2002) işyeri stresi ve stresi gelişim için fırsat olarak görme

değişkenleri arasında olduğu bilinmektedir. Kaygı modelinde depresyon modelinden daha fazla dolaylı etki göze çarpmaktadır. Bu etkiler arasında, stresi tehdit edici bir olgu olarak algılamamanın işyeri stresi ve kaygı arasında aracı olduğu görülmüştür. Tehdit tanımının tehditle ilgili bir tetikte olma yanlılığını içermesi bu ilişkiyi doğrulamaktadır (Calvo, & Cano-Vindel, 1997). Kaygılı bireylerin kaygısı düşük bireylere göre olayları daha tehdit edici algıladığı bilinmektedir (Spielberger, & Vagg, 1984). Tehdidin yanı sıra olumsuz duygu durum da işyeri stresi ve kaygı arasındaki ilişkiyi güçlendirmektedir. Öte yandan, olumlu duygu durumunun katkısı daha önceki çalışmalarda olduğu gibi bu çalışmada da görülememiştir (Gençöz, 2002; Clark & Watson, 1991; Watson ve arkadaşları, 1988). Diğerleri tarafından stresi kontrol edilebilir bulma, kendisi tarafından stresi kontrol edilebilir bulma, duygu odaklı ve problem odaklı baş etme stratejilerinin ise dolaylı etkisi görülememiş, bu değişkenlerinin tümünün kaygı modelini açıklamada önemli olduğu bulunmuştur.

Yaşam doyumuna bakıldığında, daha önceki çalışmalarda görüldüğü gibi (Watson & Clark, 1984), işyeri stresinin yaşam doyumuna ile negatif yönlü bir ilişkisi olduğu görülmüştür. Öte yandan stresi tehdit edici bir olgu olarak algılama, stresi gelişim için fırsat olarak görme, stresi kendisi ve diğerleri tarafından kontrol edilebilir bulma değişkenlerinin tümünün yaşam doyumunu açıkladığı ancak bu değişkenlerin dolaylı etkileri olmadığı dikkati çekmiştir.

Cezaevi çalışanlarında iş doyumuna bakıldığında, işyeri stresi ile iş doyumuna arasında negatif yönlü bir ilişki görülmüştür. Bu sonuç daha önceki bulguları destekler niteliktedir (Brough, 2005; Noelker ve arkadaşları, 2006; Piko, baskıda). Yaşam doyumunun test edildiği modelde olduğu gibi değişkenlerin dolaylı etkileri

bulunmamaktadır. Daha önceki çalışmalarda desteklenen stres üzerinde kendilik kontrolü (İmamoglu, & Kılıç, 1999) ve olumlu duygu durumunun (Duckworth ve arkadaşları, 2005) yanı sıra stresi tehdit edici bir olgu olarak algılamanın ve stresi gelişim için fırsat olarak görme değişkenlerinin rolü bu çalışmada sorgulanmıştır. Bu değişkenlerin tümünün cezaevi çalışanlarındaki iş doyumunu yordadığı görülmüştür.

4.2 Araştırmanın Güçlü ve Zayıf Yanları

Bu araştırma, stresli olduğu sıklıkla vurgulanan (örn., Şenol-Durak ve arkadaşları, 2006) cezaevi çalışanları ile yapılmıştır. Çalışanların gece vardiyaları, cezaevinin fiziksel koşulları, iş yükü fazlalığı ve rollerdeki belirsizlik gibi etmenlerden etkilendiklerini veri toplama sürecindeki görüşmelerde sıklıkla dile getirmeleri var olan bilgileri destekler niteliktedir. Ayrıca görüşmelerde öne çıkan bu özellikler Cezaevi Çalışanları İçin İş Stresi ölçeğinin maddeleri ile de örtüşmektedir. Öte yandan sadece cezaevi çalışanlarının araştırma örneklemini oluşturması araştırmanın sonuçlarının genellenebilirliği önünde bir engeldir.

Bu çalışmanın diğer bir sınırlılığı enlemesine kesitsel deseni (cross-sectional design) içermesidir. Stres, strese direnç ve stresin sağlık üzerindeki olumsuz etkilerinin geniş çapta irdelenmesi enlemesine kesitsel desen ile zor görünmektedir. Bu nedenle ilerideki çalışmalarda enlemesine ardışık desenli (cross-sequential) ya da boylamasına (longitudinal) bir model kullanılabilir.

4.3 Bulguların Uygulamaya Aktarılması

Polislerde olduğu gibi (Brough, 2005), cezaevi çalışanları da, iş süresini tamamladıkları halde işyerindeki sıkıntılarını bilişsel olarak sonlandırmakta güçlük

çekmektedirler. Dolayısıyla onlara, olumsuz değerlendirmelerini (tehdit içerikli) olumlu değerlendirmelerle (gelişim içerikli) yer değiştirme konusunda bir eğitimin verilmesi stres karşısında daha etkin olmalarına olanak sağlayacaktır. İş yerinin istekleri karşısında uygun baş etme stratejilerinin kullanılması son derece önemlidir (Devonport & Lane, 2006). Avustralya gibi bazı ülkelerde çalışanların psikolojik iyiliğini sağlamak işverenlerin görevleri arasındadır (Brough, 2005). Türkiye’de de bu amaçla geliştirilecek olan kurallar, cezaevi çalışanları gibi stresli çalışma ortamlarında çalışmak zorunda olan kişilerin psikolojik iyiliğini korumakta önemlidir.

4.4 İlerideki Araştırmalar İçin Öneriler

Bu çalışmada etkisi incelenemeyen bazı değişkenlerin stresin bilişsel değerlendirmesinin yapılmasında tamamlayıcı olacağına inanılmaktadır. Bu değişkenler, daha önceki çalışmalarda sıklıkla araştırılmıştır. Öz disiplin (Rafferty, & Griffin, 2006), nörotisizm (Hemenover, 2001; Rafferty, & Griffin, 2006), dışa dönüklük (Hemenover, 2001), psikolojik dayanıklılık (Chan, 2003; Hamilton, & James, 2006) ve atıfta bulunma (Dopke, & Milner, 2000) gibi kişisel özellikler stresin değerlendirilmesi sürecinde önemli olabilir. Bunun yanı sıra lider desteği (Rafferty, & Griffin, 2006) kuruma bağlılık (Griffin, & Hepburn, 2005) gibi organizasyonla ilgili değişkenler ve çevresel kaynaklar (örn. sosyal destek, Kahn ve arkadaşları, 2003) ileride bu alanda yapılacak çalışmalarda incelenebilir.

APPENDIX L: Curriculum Vitae

Personal Information

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Education

Ph.D.: Clinical Psychology, Middle East Technical University, Ankara, 2007
M.S. : Clinical Psychology, Middle East Technical University, Ankara, 2002
B.S : Psychology, Middle East Technical University, Ankara, 1999.

Work Experience

<i>Position</i>	<i>Department- Institution</i>	<i>Period</i>
Research Assistant	Department of Psychology, Abant İzzet Baysal University, Bolu-Turkey	Oct. 2004 - ...
Clinical Psychologist	Social Service Center for Elders, Ankara Metropolitan Municipality, Ankara-Turkey	July 2003 - Nov. 2004
Clinical Psychologist	The Laboratory of Clinical Psychology , Presidency of Forensic Medicine Institution, Istanbul-Turkey	Sept. 2000 - June 2003
Auxiliary Coordinator	TPA's Head Office, Turkish Psychological Association, Ankara-Turkey	Sept. 1995- Oct. 1998

Publications

- Durak, M. & Motan, İ. (2007). The new questionnaire of the psychological hardiness relevant to eastern cultures. A pilot study. *Unpublished Manuscript*.
- Durak, M., Şenol-Durak, E. & Gençöz, T. (2007). The reliability and validity of The Stress Appraisal Measure in the samples of Turkish adults and university students. *Manuscript under Preparation*.
- Durak, M., Şenol-Durak, E. & Gençöz, T. (2007). The adaptation of the Emotional Approach Coping Scale into Turkish. *Manuscript under Preparation*.
- Gençöz, T., Şenol-Durak, E., Durak, M. (2007). The psychometric properties of the Satisfaction with Life Scale in Turkish correctional officers. *Manuscript under Preparation*.
- Şenol-Durak, E., Durak, M., & Gençöz, T. (2006). Development of work stress scale for correctional officers. *Journal of Occupational Rehabilitation, 16*, 157-168.
- Şenol-Durak, E., Durak, M (2005). *Crime Analyses of the city of Bolu*. AİBU Publications. Bolu, Turkey.
- Durak, M. (2004). *The best appropriate environment for servicing to elders (Hang out)*. Social Service Center for Elders, Ankara Metropolitan Municipality Publications: Ankara, Turkey.
- Durak, M., Şenol-Durak, E., Gençöz, T. (2003). Work Stress Scale for correctional Officers: A pilot Study. *Journal of Psychiatry Psychology Psychopharmacology, 11(4)*, 296-302.
- Durak, M. (2002). *Predictive role of hardiness on psychological symptomatology of university students experienced earthquake*. Unpublished Master Thesis, METU, Ankara.
- Durak, M., Demir, G., Şenol, E. (2002) Ethical Standards for applications, researches and publications of psychology in Turkey, Discussion IX. Ethical standards for forensic psychologists. *Turkish Journal of Psychology, 50*, 17, 93-102.
- Durak, M. (2001). The applications of forensic psychology in Turkey and in the world. *Turkish Psychological Bulletin, 23 (7)*, 172-174.

Presentations

- Durak, M. (2007). The psychological assessment in clinical psychology: The role of clinician is different from the test administrator. 12th National Psychology Students Congress, Lefkoşa, North Cyprus of Turkish Republic.
- Durak, M. (2007). The cognitive-behavioral treatment of bulimia nervosa. 12th National Psychology Students Congress, Lefkoşa, North Cyprus of Turkish Republic.
- Durak, M. (2007). Psychology and Aging: General Politic Assumptions for Elders. The Panel of Productivity at Old Age, Bolu.
- Durak, M. (2006). Which is the most fearful: death or aging? 11th National Psychology Students Congress, İzmir.
- Durak, M. (2005). Psychological well-being of elders. 1st National Elder Assembly, Ankara.
- Durak, M. (2001). Applications in Forensic Psychology in Turkey and the World, 1st National Psychology Assembly, Ankara.
- Durak, M. (1998). Human Factor in the TQM, 4th National Psychology Students Congress, Samsun.
- Durak, M. (1998). The effect of professionalism-amateurism, education level and age on the locus of control of Turkish Football players, 4th National Psychology Students Congress, Samsun.

Membership

Turkish Psychologists Society

Hobbies

Football, Tennis, Reading, Walking in Nature, and Movies