

**UNDERSTANDING THE FACTORS INFLUENCING JOB SATISFACTION
OF CRIME SCENE INVESTIGATORS IN TURKEY**

By

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ABSTRACT

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Job satisfaction is considered essential by researchers due to its influence on important organizational components, including job performance, productivity, and motivation of employees. Thus, considerable amount of research about the factors influencing job satisfaction of police officers working for several units has been conducted. Unlike many other police officers, including those working in police stations and public order units who work together in teams, the crime scene investigators work on their own along with a unique job definition, which is different from the definition of traditional policing; however, the subject of crime scene investigators' job satisfaction has received less academic attention so far.

Examining the factors that affect job satisfaction of Turkish crime scene investigators using both Herzberg's (1968) two-factor theory of motivation and Hackman and Oldham's (1975) job characteristics model, this study seeks to expand on the limited empirical knowledge of investigators' job satisfaction, influenced by their unique nature of the job. The motivators and job task variables were found to explain more variance in the job satisfaction level of crime scene investigators compared to their demographic characteristics. The findings of the study will help future scholars to analyze crime scene investigators' job satisfaction in a more scientific and precise manner and may assist police departments plan their recruitment, retention, and training of crime scene investigators accordingly.

Dedicated to my parents, to my wife, and to my children.

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CHAPTER I INTRODUCTION

Job satisfaction is considered essential by most organizations due to its influence on important organizational components, including employee absenteeism, turnover, job performance (Dantzker & Kubin, 1998), productivity, and motivation (Zhao et al., 1999). That is why there has been a lot of research on the job satisfaction of police officers and the factors affecting their job satisfaction, such as demographic characteristics of the officers (Lefkowitz, 1974; McGill, 1978; Fry & Greenfeld, 1980; Buzawa, 1984; Dantzker, 1994; Buzawa et al., 1994; Seltzer et al., 1996; Bennett, 1997; Hoath et al., 1998; Lim & Teo, 1998; Carlan, 1999; Zhao et al., 1999; Friday & Friday, 2003; Dowler, 2005; Redman & Snape, 2006; Ercikti, 2008, Boke & Nalla, 2009; and Johnson, 2012) and the work environment characteristics of the police organizations (Slovak, 1978; Dantzker & Surette, 1996; Seltzer et al., 1996; Dantzker, 1997; Hoath et al. 1998; Harris & Baldwin, 1999; Zhao et al., 1999; Brough and Frame, 2004; Howard et al., 2004; Winfree & Taylor, 2004; Jaramillo et al., 2005, Ercikti, 2008, Boke & Nalla, 2009; and Johnson, 2012) in the United States.

In addition to the considerable amount of these research conducted in the States, job satisfaction of police officers working outside the US has received much attention (Buker & Dolu, 2010), and numerous studies (Kirkcaldy et al., 1998; Brunetto & Farr-Wharton, 2002; Aremu & Adeyoju, 2003; Brough and Frame, 2004; Burke & Mikkelsen, 2004; Burke & Mikkelsen, 2006; Buker & Dolu, 2010; Yao Wu, 2010; Nalla et al., 2011; Nalla and Kang, 2012; and Jo & Hoover, 2012) inspecting police job satisfaction has been conducted outside the United States.

Likewise, there are several studies (Bastemur, 2006; Ozel et al., 2009; Aksu, 2012; Deniz, 2006; Balci, 2011; Yigit et al., 2011; Sanli, 2006; Buker & Dolu, 2010) on the job satisfaction of Turkish police officers working in many units in various cities of Turkey.

Even though there are substantial amount of research on the job satisfaction of police officers working for several divisions, there is not even a single study on the job satisfaction of the crime scene investigators either in Turkish or in the global literature.

Besides, crime scene investigators have received less attention even though their work, that is crime scene investigation, has been widely studied all over the world; There are many books (Lee & Bourke, 1994; Miller & Braswell, 2010; Adams & Kruttsinger, 2000; Goddard, 1977; Schultz, 1977; Harris et al., 1999; Fish et al., 2010; and Evans & French, 2009) and articles (Brodie et al., 2008; Trestrail, 2000; Trestrail, 2007; Chisum et al., 2011) about the crime scene investigation, most of which are based on explaining the principles of crime scene investigation and/or the responsibilities of crime scene investigators.

Likewise, crime scene investigation has been studied by several Turkish scholars (Yukseloglu et al., 2008; Acikgoz et al., 2002; Kaygusuz, 2005; Ceylan, 2008; Salmaner, 2002; Kaygisiz, 2010; and Durmus, 2010); however, there is only a limited number of research based on the Turkish crime scene investigators (Demircioglu, 2010; Tongur, 2011).

Crime scene investigators have a job definition which is specifically and clearly defined: They are basically responsible for collecting, processing, and transferring the evidence which they are supposed to collect from crime scenes. On the other hand, ordinary police officers are responsible for the duties which relate more to the definition of traditional policing.

Besides that, crime scene investigators work on their own in specific environments, even though other police officers, such as public order officers, must work together as members of

teams. Therefore, crime scene investigators have differences from other police officers shaped by their peculiar job definition, which is why they should be studied in terms of their job satisfaction in order to better understand the unique factors affecting their job satisfaction, which seem to be influenced by their specific job definition.

Inspecting the job satisfaction of the Turkish crime scene investigators, this study will allow us to build new knowledge about the factors affecting their job satisfaction and will inform both Turkish and global academia.

I. STATEMENT OF THE PROBLEM

Considerable amount of research related to police officers' job satisfaction has been conducted in the United States; however, job satisfaction of police officers working outside the States has received less attention. Likewise, there are fairly limited numbers of studies on job satisfaction of the Turkish police officers working for several units in different cities of Turkey, but job satisfaction is considered essential for organizations due to its influence on such important factors, including, motivation, employee absenteeism, turnover, job performance, and productivity. Therefore, the Turkish police officers' job satisfaction and the factors affecting their job satisfaction should be studied more in terms of essential organizational and individual parameters, such as better performance and productivity.

Examining the job satisfaction of Turkish police officers, understanding the components of their job satisfaction, and implying the policies accordingly are also needed for more democratic policing and protection of human rights during Turkey's accession process into the European Union (Buker & Dolu, 2010; Nalla & Boke 2011).

Despite the large body of study about the police officers working in several units, including the ones which are more related to traditional police role, there is a little empirical

research on the crime scene investigators both in Turkish and global literature; however, crime scene investigators have unique job definitions, tasks, duties, and responsibilities different from other police officers. Hence, there is a need for empirical research on crime scene investigators in order to better understand the characteristic priorities, missions, and purposes of crime scene investigators, shaped by their unique job definition.

In addition, the job satisfaction of police officers working for several divisions has received a great deal of academic attention; however, there is not even a single study on job satisfaction of crime scene investigators in the literature. Thus, crime scene investigators should be studied in terms of their job satisfaction in order to better understand the unique factors influencing their job satisfaction, affected by their particular job definition, which may be different from other police officers.

Crime scene investigators do not always work in the streets patrolling, unlike other police officers, like the officers working in the public order department. Crime scene investigators also work individually in their environments, even though the public order officers must work together in teams. In addition, crime scene investigators are responsible for certain technical tasks, like collecting evidence from crime scenes; however, the public order officers are responsible for the duties which are more relevant to traditional police job definition. Therefore, studying the factors influencing the job satisfaction of crime scene investigators, based on the comparison with the job satisfaction of officers working in the public order units is considered key issue for several reasons.

Due to the fact that Herzberg's (1968) two-factor theory of motivation sets a link between job satisfaction and work environment, it was considered as "a useful theoretical framework" for testing the officers' job satisfaction statistically by Zhao et al. (1999), and several scholars

including, Sheehan and Corner (1995), Fyfe et al. (1997), Zhao et al. (1999), Roberk et al. (2002), Whisenand (2004), and Ercikti (2008) have used this theory to inspect the influence of organizational factors, such as the work conditions, administrative policies, supervision, salary, and recognition of achievements on the job satisfaction of the police officers in the United States.

On the other hand, Herzberg's (1968) two-way theory of motivation has not been tested extensively in terms of the factors affecting the job satisfaction of officers outside the States (Buker & Dolu, 2010), and there exists no research testing the Herzberg's (1968) two-factor theory in terms of the job satisfaction of crime scene investigators in either Turkish or global literature.

Likewise, although the job characteristics model of work motivation (Hackman & Oldham, 1975) has also been used along with Herzberg's theory by several scholars (see Zhao et al., 1999; Ercikti, 2008; Buker & Dolu, 2010) in their police job satisfaction studies, there is no research using the model to inspect the job satisfaction levels of crime scene investigators (either in Turkey or in any other country). Consequently, there is obvious need for empirical research on crime scene investigators using both Herzberg's (1968) theory and Hackman and Oldham's (1975) model.

II. RELEVANCE OF THE STUDY

Using the present literature, this study seeks to expand on the limited empirical knowledge of crime scene investigators to better understand their unique priorities. The findings of the study are intended to help future scholars to analyze the functions of crime scene investigators in a more scientific and precise manner.

In addition, benefiting from the existing job satisfaction literature and theoretical frameworks, including Herzberg's (1968) two-factor theory of motivation and Hackman and

Oldham's (1975) job characteristics model of work motivation, and inspecting the job satisfaction of Turkish crime scene investigators and building new knowledge on the factors affecting their job satisfaction, this study will inform academia and may assist the Turkish National Police (TNP) Forensic Lab Division in recruitment, retention, training and building evidence based practice.

Herzberg's (1968) theory and Hackman and Oldham's (1975) model have been widely used in order to inspect the influence of environmental factors on police job satisfaction in the United States. Due to the similarities of the work environments, tasks, duties, and responsibilities of both the American and the Turkish police officers (Nalla & Boke, 2011), Herzberg's (1968) two-factor theory of motivation and Hackman and Oldham's (1975) job characteristics model of work motivation were considered relevant and applicable for inspecting the effects of work-related factors on the job satisfaction of Turkish crime scene investigators.

Furthermore, after shedding light on to the unique priorities of crime scene investigators and the factors influencing their job satisfaction, existing study compares the job satisfaction of crime scene investigators and public order officers, using Herzberg's (1968) two-way theory, and thus, it will contribute to the comparative police literature, inform scholars about the characteristics of both crime scene investigators and public order police officers, and reveal different factors influencing their job satisfaction.

III. ORGANIZATION OF THE STUDY

This study is organized in the following sections: Following the introduction and overview of the study, Chapter II views the theoretical frameworks about the job satisfaction of crime scene investigators, Chapter III then expands the crime scene investigators and job satisfaction literature, Chapter IV explains the context of both Turkish National Police (TNP) and

Turkish crime scene investigators, and Chapter V describes the methodology of the study, formulates research questions guiding the study, and describes the conceptualization and operationalization of the variables. Chapter VI presents and discusses the quantitative analyses of the data collected from the members of the TNP in 2012. The univariate, bivariate, and multivariate analysis reveals the job satisfaction levels and the determinants of the Turkish police officers and the Turkish crime scene investigators. Chapter VII summarizes the findings of the study and compares them with the available literature in the discussion section, the theoretical and the policy implications are developed in the Implications section, while the limitations and the future studies are discussed in the Limitations and the Future Research section, and the study is briefly summarized in the last section.

CHAPTER II

THEORETICAL FRAMEWORK

I. TWO-WAY THEORY OF MOTIVATION

Being one of the most used theory in job satisfaction research (Zhao et al., 1999; Yao Wu, 2010), Herzberg's (1968) two-way theory of motivation extended Maslow's (1943) theory of motivation (well known as "theory of hierarchical needs") using the needs provided by Maslow in the way of building motivational and hygiene maintenance factors (Nalla & Kang, 2012).

Herzberg (1968) considered the basic needs defined by Maslow (1943), including physiological needs (need to stay alive), safety (need to feel safe and secure), and social needs (need for love or to be a member of a group) as hygiene factors in his own theory.

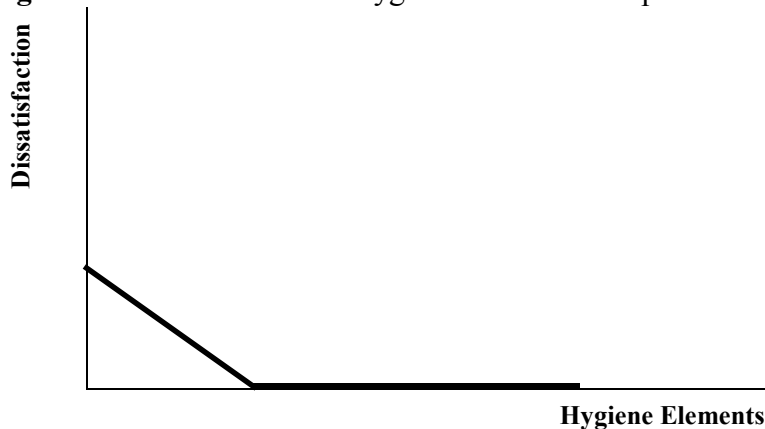
He, on the other hand, proposed top two levels of need hierarchy, such as self-esteem needs (need to feel worthy and respected) and self-actualization needs (the need to be doing the work one likes) as motivator factors in the theory.

Herzberg (1968) suggests that dissatisfaction is not the opposite of satisfaction and vice versa. The factors that do not satisfy someone do not necessarily dissatisfy them. Hence, the factors leading to job satisfaction are different from the elements producing job dissatisfaction.

He classifies the determinants of job satisfaction/dissatisfaction in to two categories: (1) motivator factors and (2) hygiene factors (dissatisfiers). Existence of motivators is proposed to satisfy employees, while employees are supposed to be dissatisfied by the absence of hygiene elements. Although the lack of hygiene factors is suggested to promote job dissatisfaction (and in turn lower levels of job performance, less productivity, more absenteeism, more employee turnover), the increased level of them does not necessarily lead to satisfaction at work; Existence of fair level of a hygiene element is enough to prevent dissatisfaction at work, surplus of the fair

level by that element, however, does not predict job satisfaction or dissatisfaction any longer as indicated in Figure 1 (Herzberg, 1968).

Figure 1: Dissatisfaction & Hygiene Elements Graph



Adapted from Herzberg's (1968) Two-factor Theory of Motivation

On the other hand, absence of motivators is not supposed to promote job dissatisfaction, but the existence of motivator factors lead to satisfaction at work; Employees are proposed to perform the required tasks, duties, and responsibilities at the basic level without the motivators (experiencing neither satisfaction nor dissatisfaction), however they will feel themselves better and more satisfied when they are subjected to any of the motivator factor(s).

Based on the data collected from 1685 employees, including housekeepers, teachers, nurses, scientists, engineers, technicians, accountants, military officers, etc. in 12 investigations, Herzberg found that the motivators (growth factors), including the achievement, recognition, work itself, responsibility, advancement, and growth were the main causes of job satisfaction: Of all the factors correlated with job satisfaction, 81% were reported to be motivators.

On the other hand, he reported that the hygiene (dissatisfaction-avoidance) elements, such as company policy/administration, supervision, relationship with supervisors, work conditions, salary, relationship with peers, personal life, relationship with subordinates, status, and security

were the primary sources of job dissatisfaction: Of all the factors associated with unhappiness on the job, 69% were found to be hygiene factors.

Therefore, Herzberg's (1968) two-way theory of motivation supposed that the predictors of employees' job satisfaction and dissatisfaction are directly correlated with the environmental factors. Setting a link between the work environment and the job satisfaction, it was considered as "a useful theoretical framework" for testing the officers' job satisfaction statistically by Zhao et al. (1999) and has been used by numerous research (Chiou, 2004; Boke & Nalla, 2009; Yao Wu, 2010; Nalla et al., 2011; Johnson, 2012; Nalla & Kang, 2012; Jo & Hoover, 2012; Higgins et al., 2013) in order to inspect the influence of work environmental factors on the job satisfaction of police officers compared to demographic characteristics.

Despite being one of the most tested motivation theories (Zhao et al., 1999; Yao Wu, 2010), Herzberg's (1968) two-factor theory of motivation has been criticized as it cannot be tested empirically. The lack of guidance about the measurement procedure of both the motivator and hygiene factors in the theory was mentioned; Clarification of operationalization (i.e., how motivators and hygiene element can be measured) was said to have been missing in the Herzberg's theory (Hackman & Oldham, 1976; Suggs, 2010). Therefore, Hackman and Oldham's (1975) job characteristics model of work motivation has also been used along with Herzberg's theory by several scholars (see Zhao et al., 1999; Ercikti, 2008; Buker & Dolu, 2010).

II. JOB CHARACTERISTICS MODEL

The job characteristics model was designed to operationalize the relationship between the job characteristics and individual responses to the work by Hackman and Oldham (1975). Task variety (breadth of different activities used at work), task identity (opportunity to complete an entire piece of work), task significance (impact of the work on the lives or work of others),

autonomy (freedom, independence, and discretion at work), and feedback (information about the effectiveness of job performance) were defined as the core job dimensions of the model.

The core job dimensions were proposed to produce personal and professional outcomes, including high job satisfaction through the critical psychological states; the core job dimensions were suggested to lead to critical psychological states, which then seem to influence personal and professional outcomes as indicated in the Figure 2.

Of the five core job dimensions, the task variety, task identity, and task significance were proposed to yield to experienced meaningfulness of the job, while autonomy leads to experienced responsibility for the outcomes of the job, and the feedback returns to knowledge of the actual results of the work activities as shown in the Figure 2.

“Individual’s need for growth” was proposed as needed in order to let the core job dimensions lead to critical psychological states and the critical psychological states return to personal and work outcomes; Employees with high growth need are more likely to experience the psychological states and the outcomes compared to those with low growth need as indicated in the Figure 2 (Hackman & Oldham, 1975).

Figure 2: The Job Characteristics Model of Work Motivation


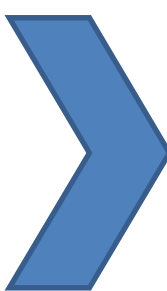

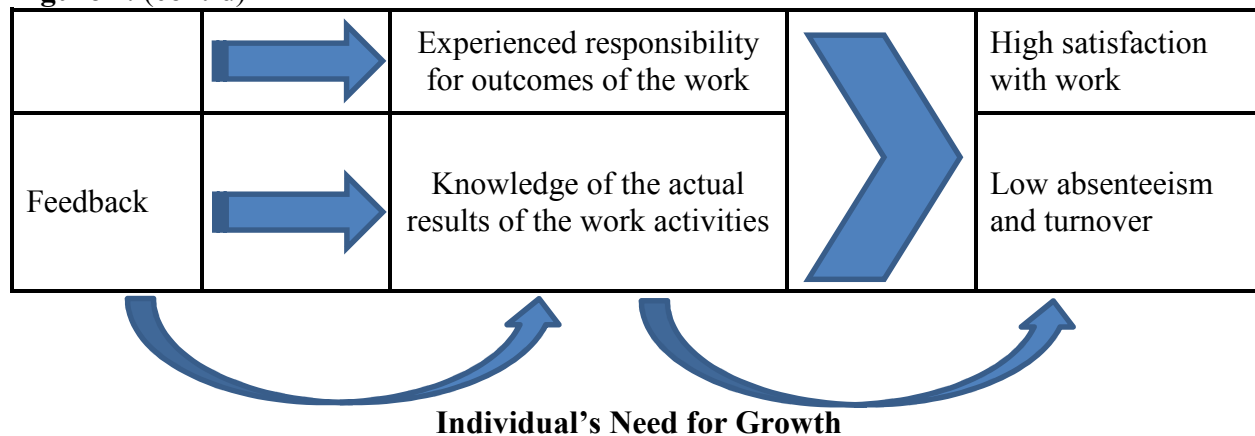
Core Job Dimensions		Critical Psychological States		Personal and Work Outcomes
Task variety		Experienced meaningfulness of the work		High internal work motivation
Task identity				
Task significance				
Autonomy		Experienced responsibility for outcomes of the work		High quality work performance

Figure 2: (cont'd)



Adapted from Hackman and Oldham's (1975) Job Characteristics Model

Most of the research has omitted the critical psychological states from the job characteristics model, and inspected the direct explanatory power of core job dimensions, such as, task variety, task identity, task significance, autonomy, and feedback on personal and work outcomes, including the job satisfaction.

Task variety, task significance, and autonomy was used in this study; however, these three core dimensions of the job were not taken as the alternatives to the motivators proposed by Herzberg (1968). Rather, these measures were included to expand the empirical specifications of the certain motivators, including the work itself, recognition, and responsibility instead.

Of the studies using both Herzberg's (1968) two-factor theory of motivation and Hackman and Oldham's (1975) job characteristics model, Zhao, Thurman, and He (1999), for instance, tested the Herzberg's (1968) two-factor theory in order to inspect the influence of both organizational and demographic variables on police job satisfaction based on the analyses of the survey data collected from 199 sworn police officers in the States. Their results were supporting the Herzberg's (1968) theory proposing that organizational factors are stronger in predicting police job satisfaction than socio-demographic variables; they reported work environmental

factors as explaining the job satisfaction better (R^2 was found .49, .30, and .17 for three different dependent variables of job satisfaction: “satisfaction with work”, “satisfaction with supervisor”, and “satisfaction with coworkers”) than the demographic factors do (R^2 was calculated .06, .02, and .02 for the same three dependent variables) and thus, they considered the work environment as an essential determinant of police job satisfaction, and they suggested that comprehensive inspection of determinant of job satisfaction should include both organizational (work environmental) and socio-demographic attributes.

Further, Ercikti (2008) searched the relationship between the job satisfaction of mid-level police managers and their demographic variables, such as “age”, “gender”, “education”, “rank”, & “years of service” and “organizational variables, including “task variety”, “task identity”, “task significance”, “autonomy”, & feedback based on the survey data collected from 136 mid-level police managers in the States.

According to Ercikti’s (2008) findings, which supports the Herzberg’s (1968) theory, organizational characteristics were found to be predicting the job satisfaction of police managers better than the demographic features of the managers: None of the demographic variables (“age”, “gender”, “education”, “rank”, or “years of service”) of police managers were significantly correlated with their job satisfaction.

These five variables were able to explain only 4% of the observed variance in the job satisfaction perceptions of the managers. On the other hand, job task characteristics (“skill variety”, “task identity”, “task significance”, “autonomy”, and “feedback”) were found to be explaining 19% of their job satisfaction variance (the variable “feedback” was statistically significantly correlated with job satisfaction perceptions of the mid-level police managers).

Moreover, Buker and Dolu (2010) tested the assumptions of Herzberg's (1968) two-factor theory analyzing the survey data collected from 812 Turkish Police officers in order to inspect the influence of both the work environmental features and demographic characteristics on police job satisfaction.

Assumption of the Herzberg's (1968) theory revealing that job satisfaction and dissatisfaction are directly correlated with work environmental factors and job content factors was supported by their results. Buker and Dolu (2010) also found organizational factors being better in predicting police job satisfaction than demographic factors do.

Using the Herzberg's (1968) theory, the literature about the determinants of police job satisfaction suggests that organizational factors are stronger in predicting police job satisfaction than socio-demographic variables. In other words, work environmental features explain police the job satisfaction better than the demographic characteristics do; Organizational attributes explain more variance in police job satisfaction compared to demographic variables.

Both theory and the relevant literature propose that a comprehensive examination of police job satisfaction should include both organizational (work environmental) and socio-demographic features.

CHAPTER III

LITERATURE REVIEW

I. POLICE JOB SATISFACTION

1. American Literature on Police Job Satisfaction

Job satisfaction has been studied widely in many disciplines, and numerous criminal justice scholars have scrutinized the job satisfaction levels of American police officers and the factors influencing their job satisfaction levels.

One of these studies, which are based on the survey data gathered from 170 patrol officers from two cities (Detroit, MI and Oakland, CA) of the United States and structured interviews, Buzawa (1984) reported that female and Black police officers were more satisfied with their jobs compared to their male and non-Black colleagues. The results also indicated that American police officers having higher levels of education were more likely to be satisfied with their jobs compared to the officers with lower levels of education.

Besides, Dantzker (1994) inspected the influence of several demographic characteristics (age, gender, race, rank, and educational level) on the job satisfaction levels of American police officers, using the data collected from 552 police officers from six states of the United States, and the results revealed that the police officers between the ages of 20 and 25 enjoyed more job satisfaction compared to other age groups. Male and black police officers were reported to have higher levels of job satisfaction compared to their female and white colleagues. The results also indicated that the officers called sergeants had the lowest job satisfaction levels compared to their colleagues. On the other hand, he reported no significant relationship between educational level and job satisfaction of American police officers.

In addition, analyzing the survey data of 324 Detroit patrol officers in the United States, Buzawa, Austin, and Bannon (1994) examined the effects of demographic attributes including, age, gender, race, educational level, tenure, and marital status on the job satisfaction level of American police officers, and reported that older (35 or above) police officers were less likely to be satisfied with their jobs than the younger (34 or below) police officers. The results also revealed that more tenured (experience of 10 years or more in policing) police officers had lower levels of job satisfaction compared to their less tenured (less than 10 year experience) colleagues, and the Black police officers were reported to be less satisfied with their jobs than their White colleagues. The variable, gender, on the other hand, was not correlating police job satisfaction significantly.

Further, Seltzer, Alone, and Howard (1996) interpreted the survey data gathered from 300 police officers of Washington, DC and reported that the police officers who had not attended any graduate school have higher levels of job satisfaction than their colleagues with graduate school background. They also found that police officers working undercover were more likely to be satisfied with their jobs compared to their colleagues who don't work undercover. Their results indicated a positive correlation between the confidence and the job satisfaction of police officers as well; the police officers who have confidence with their fellow officers and supervisors were more likely to be satisfied with their job.

Moreover, using the survey data collected from 199 sworn police officers in the United States, Zhao et al. (1999) inspected the effects of several demographic factors, including gender, educational level, and tenure on police job satisfaction. They found that the variables gender and educational level were not significantly correlating with the job satisfaction level of American police officers. The results, also indicated that less tenured (less policing experience) police

officers were more likely to be satisfied with their jobs compared to their more tenured (more policing experience) colleagues. Beside the demographic features, job characteristics were also used to understand the components of American police job satisfaction by Zhao et al. (1999). They reported that all job characteristics (skill variety, task identity, task significance, autonomy, and feedback) were significantly correlating job satisfaction of police officers; the officers with higher levels of perceptions of skill variety, task identity, task significance, autonomy, and feedback were found to be more satisfied with their work compared to their colleagues with lower levels of skill variety, task identity, task significance, autonomy, and feedback.

Ercikti (2008) also searched the relationship between job satisfaction of mid-level police managers, their demographic variables (age, gender, education, rank, and years of service) and job task characteristics (skill variety, task identity, task significance, autonomy, and feedback) analyzing the survey data collected from 136 mid-level police managers in the United States. Supporting the Herzberg's (1968) theory, the job task characteristics were found to be predicting the job satisfaction of police managers better than demographic attributes of the managers: None of the demographic variables of police managers were significantly correlating their job satisfaction, while there was a significant relationship between the variables feedback & implementation of COP/COMPSTAT programs and the job satisfaction levels of American police officers; the officers with higher levels of perceptions of feedback and implementation of COP/COMPSTAT programs were more likely to be satisfied with their jobs compared to their colleagues.

Furthermore, using the data gathered from 669 police officers of two Midwestern States of the United States (Michigan and Ohio), Boke and Nalla (2009) inspected the association between the organizational culture & police enforcement strategies and job satisfaction of

American police officers. Their findings supported the Herzberg's (1968) theory, suggesting that organizational factors are stronger in predicting police job satisfaction than socio-demographic variables: Organizational characteristics (i.e., management support, social cohesion, citizen cooperation and job challenges) were better on explaining police job satisfaction than the individual and demographic features (only "race" variable was found to be significantly correlated with job satisfaction); The American police officers who find their job challenging and the officers with high level of management support, citizen cooperation, and social cohesion were more likely to be satisfied compared to their co-workers.

Additionally, inspecting the influence of demographic attributes, job task characteristics, and organizational environment features on job satisfaction, based on the analyses of survey data gathered from 292 police officers from 11 different law enforcement agencies around Phoenix metro area in the States, Johnson (2012) found that among the demographic attributes, only the component of race was found to be significantly correlating with the job satisfaction levels of American police officers: Black officers were more likely to be satisfied with their work compared to their white colleagues. Three job task characteristics, on the other hand, were reported as significant determinants of police job satisfaction: Job variety was positively correlated, job autonomy was positively associated, and role conflict was negatively related with job satisfaction. Being an organizational environment feature, peer cohesion was also reported to be significantly correlated (positive correlation) with American police officer job satisfaction.

2. Global Literature on Police Job Satisfaction

Police job satisfaction has also been studied extensively outside the United States by criminal justice researchers in order to determine the factors influencing job satisfaction of police officers. Of these studies, Hoath, Schneider, and Starr (1998) analyzed the survey data collected

from 249 police officers from an Ontario Law Enforcement Agency and found that less tenured (with less policing experience) police officers were more likely to be satisfied with their jobs than their more tenured counterparts. They also reported that police officers working in the investigation and administrative divisions were more satisfied than their colleagues working in the patrol divisions.

Besides, using the survey data collected from 533 superintendents and chief superintendents from four countries (England, Wales, Scotland, and Northern Ireland), Kirkcaldy, Brown, and Cooper (1998) found a negative relationship between the participants' educational level and their police job satisfaction level. They also reported significant correlations between police officers' units and their job satisfaction level; Police officers working for crime investigation units were found to have the highest levels of job satisfaction, while those working for traffic departments and police headquarters were reported to have the lowest police job satisfaction levels.

The survey data collected from 467 police officers and group interviews with 28 police officers of Singapore Police Force, Lim, Teo, and See (2000) also reported that Singaporean police officers with experience from 3 to 6 years had the lowest job satisfaction compared to their colleagues with more tenure (policing experience). The results also indicated a positive correlation between the perceived job image and the job satisfaction of police officers; police officers who believed that public considers policing to be a prestigious job were more likely to be satisfied with their job.

Further, Aremu and Adeyoju (2003), based on the analyses of the survey data collected from 1297 police officers in Nigeria, reported that the mentored female Nigerian police officers had more job satisfaction than their male colleagues.

In addition, Chiou (2004) analyzed the survey the data collected from 680 Taiwanese police officers in order to examine the relationships between the demographic attributes and job satisfaction & dissatisfaction. The results indicated no relationship between demographic variables and the job satisfaction & dissatisfaction (except for the variable “age”). The variable “age” was found negatively correlated with the Taiwanese police officers’ job dissatisfaction; the police officers aged 41 through 65 were less likely to be dissatisfied compared to their colleagues aged 20 through 40. The results of Chiou (2004) also revealed that all motivators excluding the advancement (achievement, recognition, work itself, responsibility, and growth) significantly correlated with job satisfaction, and all hygiene elements excluding the interpersonal relations (company policy/administration, supervision, working conditions, status, job security, and salary) predicted the job dissatisfaction significantly.

Moreover, analyzing the survey data collected from 400 New Zealander police officers, Brough and Frame (2004) inspected the factors influencing job satisfaction levels of the New Zealander police officers, and reported a significant positive correlation between the supervisor support & colleague social support and the police job satisfaction; the New Zealander police officers with better perceptions of supervisory support and the relationship with colleagues were more likely to be satisfied with their jobs compared to their colleagues. The results, on the other hand, couldn’t indicate a significant correlation between the variable age and the job satisfaction level of New Zealander police officers.

Furthermore, based on the survey data collected from 766 police officers in Norway, Burke and Mikkelsen (2004) reported that the male police officers had more job satisfaction levels compared to their female colleagues. The results also indicated that the Norwegian police

officers working in continuous shifts were less likely to be satisfied with their jobs than their colleagues working in flexible work hours.

Additionally, analyzing the survey data collected from 389 Norwegian police officers, Burke and Mikkelsen (2006) reported a positive relationship between the ages and the tenure of Norwegian police officers and their job satisfaction level, while a negative correlation was found between the educational level and the job satisfaction of the Norwegian police officers; The older and more tenured (more experienced) police officers were more likely to be satisfied with their job compared to their younger and less tenured colleagues, whereas the officers with the higher educational levels were less likely to be satisfied at work.

Further, inspecting the determinant factors of Taiwanese police job satisfaction based on the analyses of survey data collected from 881 Taiwanese police officers, Yao Wu (2010) found that among demographic features, the tenure and the promotion were the only variables that were found to have significantly correlated (both having positive correlation) with their job satisfaction. The motivator factors, including task identity, skill variety, and autonomy were also reported to have positively correlated with the satisfaction levels of police officers; The Taiwanese police officers with better perceptions of task identity, skill variety, and autonomy were more likely to be satisfied with their jobs compared to their colleagues. The results also indicated that the “neuroticism” (personality trait), which is one of the “personality and work value” attributes, was negatively associated, while the “collective” (Chinese work value) was positively correlated with the job satisfaction of Taiwanese officers.

Besides, analyzing the data collected from 995 Slovenian police officers, Nalla, Rydberg, and Mesko (2011) examined the influence of organizational and environmental attributes on the job satisfaction of Slovenian police officers, and they found that the police job satisfaction was

explained mostly by organizational and environmental factors (i.e., innovative practices and job challenges) instead of demographic characteristics (with the exception of the positive correlation between the tenure and the job satisfaction); organizational and environmental features were found to be explaining more variance in the job satisfaction level of the Slovenian officers compared to their socio-demographic elements.

In addition, based on the data collected from 406 South Korean police officers, Nalla and Kang (2012) divided the dependent variable, the job satisfaction, into two (hygiene factors and motivators) using Herzberg's (1968) two factor theory in order to inspect the influence of demographic and organizational characteristics of the police officers on their level of job satisfaction. Supporting the assumptions of Herzberg's (1968) theory, they reported that demographic features were not explaining the much of the variation in the job satisfaction of the South Korean police officers. Among the demographic variables, they only found significant negative correlation between the officers' "age" & "tenure" and their job satisfaction.

The organizational features, on the other hand, were found to be explaining much of the observed job satisfaction variance. Nalla and Kang (2012) reported that "management support", "autonomy/discretion at work" and "perceived citizen support" were positively associated with the job satisfaction of the South Korean officers.

Likewise, Jo and Hoover (2012), based on their analyses of the data collected from 341 South Korean police officers, found similar results. The work-related variables were explaining the observed variance in the job satisfaction better than the demographic attributes, and none of the demographic variables significantly correlated with the job satisfaction. Of the work-related variables, the salary, commitment, autonomy, job security, and positive feedback were significantly associated with job satisfaction of the South Korean police officers.

The fact that the variables salary and job security significantly correlated with job satisfaction seem to reject the assumption of Herzberg's (1968) two-factor theory of motivation. Salary and job security were proposed to be the hygiene elements by Herzberg, and hygiene factors were suggested to prevent the job dissatisfaction only. The increased level of them does not necessarily lead to satisfaction at work as indicated in Figure 1. Jo and Hoover (2012) explained this issue stressing the economic status of South Korea. They concluded that the assumption of Herzberg (1968) related to salary and job security can be applicable to the developed countries only.

3. Turkish Literature on Police Job Satisfaction

There exists a fairly good number of studies on the job satisfaction of the Turkish police officers in some other units (Bastemur, 2006; Deniz, 2006; Sanli, 2006; Ozel et al., 2009; Balci, 2011; Yigit et al., 2011; and Aksu, 2012). Of these studies, Deniz (2006), for instance, compared the job satisfaction of line police officers and the job satisfaction of ranked police officers working in Istanbul, and reported that the ranked officers have more job satisfaction (as cited in Akdogan and Kose, 2012).

Besides, Buker and Dolu (2010) analyzed the survey data collected from 812 Turkish Police officers in order to research the influence of both the work environmental factors and the demographic characteristics on police job satisfaction. They found that the organizational factors were better in predicting police job satisfaction than demographic factors were. They also reported significant correlations between all five job characteristics (skill variety, task identity, task significance, autonomy, and feedback) and the job satisfaction levels of the Turkish police officers; the officers with more perceptions with skill variety, task identity, task significance,

autonomy, and feedback were more likely to be satisfied with their jobs compared to their colleagues.

In addition, studying the influence of various demographic variables, including age, gender, marital status, educational level, department, job experience, tenure, and received appreciation on job satisfaction of 114 police officers working in Bursa, Aksu (2012) reported significant positive relationships between the educational level & the rank of Bursa police officers and their job satisfaction.

Further, Yigit, Dilmac, and Deniz (2011) studied the job satisfaction of 680 police officers working in the Turkish city of Konya and the factors influencing their job satisfaction. They found significant positive relationships between the factors of the rank and the educational level of police officers and their job satisfaction.

Moreover, studying 355 police officers working in the Turkish city of Adana, Sanli (2006) examined the factors affecting the job satisfaction of police officers, and he reported the working shift, and the perception of economic status of officers influence their job satisfaction.

Furthermore, based on the survey data collected from 812 police officers working in seven cities of Turkey (one from each seven geographic districts), Balci (2011) found a significant negative relationship between the education level and police job satisfaction; the police officers with lower levels of education were reported to be more satisfied with their jobs compared to their colleagues with higher levels of education.

Additionally, in their study investigating the relationship between the educational level job satisfaction/dissatisfaction, Ozel, Bayindir, Inan, and Ozel (2009) analyzed the survey data collected from 942 police officers working in the Turkish City of Kutahya, and found no relationship between the education level and job satisfaction & dissatisfaction.

Further, based on the survey data collected from 361 police officers working in the Turkish city of Kayseri, Bastemur (2006) found a significant positive relationship between the police officers' tenure and their job satisfaction level; the officers with policing experience between 16 and 20 years were reported to have the highest job satisfaction level. He also reported a significant positive correlation between police officers' rank and their job satisfaction level; the officers with higher ranks were found to be more satisfied compared to their colleagues with lower ranks. Besides, Bastemur (2006) found significant differences in the job satisfaction levels of the police officers working for different units; the police officers working for the Anti-Smuggling and Organized Crime Departments, the Anti-Terror Departments, and the Public Order Department are reported to be among the officers with the highest job satisfaction levels. On the other hand, he couldn't find any statistically significant relationship between the variables, the age and education of police officers and their job satisfaction level.

Job satisfaction of police officers working for different divisions has received a great deal of attention from scholars all over the world¹ (Zhao et al., 1999; Brunetto and Wharton, 2002; Brough and Frame, 2004; and Nalla et al., 2011); however, there is not even a single study on the job satisfaction of crime scene investigators either in Turkish or in global literature.

II. CRIME SCENE INVESTIGATORS

Crime scene investigators have received less attention even though crime scene investigation has been widely studied all over the world; There are several studies (Goddard, 1977; Schultz, 1977; Lee & Bourke, 1994; Harris et al., 1999; Trestrail, 2000; Trestrail, 2007; Brodie et al., 2008; Evans & French, 2009; Miller & Braswell, 2010; Fish et al., 2010; Chisum et al., 2011; Fisher & Fisher, 2012) about the crime scene investigation most of which are based on

¹ See Appendix A, Table 5 for empirical studies related to police job satisfaction.

explaining the principles of crime scene investigation and/or the responsibilities of crime scene investigators. For example, Fisher and Fisher (2012) explained the basic principles for the crime scene investigation and the responsibilities of crime scene investigators. He then reported the famous cases from the crime scene investigation perspective.

Of the limited number of the studies on crime scene investigators, Kennedy et al. (1990) studied the AIDS concerns among the crime scene investigators and they investigated the influence of investigators' AIDS concerns on their quality of work using the data gathered from 132 crime scene investigators and the evidence technicians, who were actively working in Michigan.

In addition, based on the data collected from 51 crime scene investigators and practitioners affiliated with the National Forensic Academy at the University of Tennessee, Fish (2004) classified the important skills in terms of collecting and processing physical evidence from crime scene, and determined the course topics for graduate programs on forensic science.

Analyzing the survey data gathered from 64 male Slovene crime scene technicians, Mrevlje (2014) inspected the coping strategies with work-related traumatic situations, post-traumatic symptomatology, and somatic health of crime scene technicians, and he reported that they were mostly using avoidance as their coping strategy, while the approach strategies were also used when technicians were familiar with the nature of the job and when they were feeling self-confident about the cases they were dealing with.

Likewise, there are several studies (Acikgoz et al., 2002; Salmaner, 2002; Kaygusuz, 2005; Ceylan, 2008; Yukseloglu et al., 2008; Durmus, 2010; and Kaygısız, 2010) on crime scene investigation in the Turkish literature, and most of them are explanatory. Of these studies,

Yukseloglu et al. (2008) explained the steps of crime scene investigation, legal procedure about crime scene investigation, and the problems related to crime scene investigation.

Besides, Acikgoz et al. (2002) described the procedures about collecting biological evidence from the crime scene and sending them to forensic labs for DNA analyses, and Kaygusuz (2005) mentioned about the problems on crime scene investigation analyzing the resolutions of the European Court of Human Rights regarding the crime scene investigation applications in Turkey.

In addition, Ceylan (2008) explained the technical and legal issues of crime scene investigation, and Salmaner (2002) described the managerial issues related to crime scene investigation and crime scene investigation techniques in eight different crime types.

Moreover, Kaygısız (2010) explained the legal issues about the crime scene investigation after the change in the regulations as of June 2005, and Durmus (2010) described the documentation procedures of crime scene investigation studying the documentations of several American, European, and international police forces.

On the other hand, there is limited number of studies (Demircioglu, 2010; Tongur, 2011) on crime scene investigators in the Turkish literature. Of these studies, Demircioglu (2010) examined the primary information sources and the barriers to reach various information sources for Turkish crime scene investigators using the survey data regarding 216 crime scene investigators in 29 different cities of the Turkish Republic.

Besides, based on the data collected from 405 police investigators working in crime scene investigation units in 81 provinces, Tongur (2011) reported positive relationships between “perceived organizational support” & “organizational citizenship behavior”, and “perceived individual performance” of the Turkish crime scene investigators.

CHAPTER IV

CONTEXT

I. TURKISH NATIONAL POLICE

Turkish National Police (TNP) is headquartered in Ankara, the capital city of Turkey. It operates under the Ministry of Interior and it has 250.000 police officers with ranks² ranging from police constable to Police chief of 1st degree working in a total of 30 different units³, including the crime scene investigation unit.

The TNP is a national police organization serving in all 81 provinces - in seven geographic regions⁴ - in the form of provincial security (police) departments and in many sub-cities in the form of city security departments. It has full control over all provincial and city police departments by means of the central divisions within the Headquarters. The central divisions of the Directorate administer their sub-divisions located all around the country. The Central Forensic Lab, for example, regulates all crime scene investigation units located across the country.

Since the TNP has a centralized structure, police officer recruitment, training, and policing practices among different cities are supposed to be similar to each other to some extent; the police chiefs of cities do not have much discretion on implying their own policies, instead

² TNP ranks consist of Civilian, Police Constable, Head Police Constable, Deputy Sergeant, Sergeant, Inspector, Chief Inspector, Police chief of 4th degree, Police chief of 3rd degree, Police chief of 2nd degree, and Police chief of 1st degree.

³ Several units TNP include Police Stations, Public Order Departments, Units for Protection of Important Locations, Units for Prevention of Crimes, Juvenile Criminality Departments, Riot Police Units, Support Units (human resources, logistics, training, etc.), Anti-Smuggling and Organized Crime Departments, Anti-Terror Departments, Intelligence Departments, SWAT teams, Crime Scene Investigation Units, Traffic Departments, and Education Facilities Departments.

⁴ Seven geographic regions of Turkey are Aegean, Black Sea, Central Anatolia, East Anatolia, Marmara, Mediterranean, and Southeast Anatolia.

they are supposed to apply the policies determined and directed from the headquarters. The strategies related to better policing and protection of human rights taking into consideration the transition of Turkey into the European Union, are all decided by the TNP and are applied by the police departments in the provinces, cities and districts (Buker & Dolu, 2010; Nalla & Boke 2011).

Besides, a routine rotation of police officers from the west of the country to the east (or vice versa) and the standardized payment for certain ranks also work for homogeneity of social context among the Turkish police officers across the country (Buker & Dolu, 2010).

The TNP is a hierarchical law enforcement body which is organized similarly to the semi-military police organizations and it has certain characteristics, including rank and promotion can lead to better payment, status, and positions in such organizations. Thus, these characteristics (rank, promotion, etc.) can be considered more important in the TNP compared to local police departments (Akdogan & Kose, 2012).

II. CRIME SCENE INVESTIGATORS

Evidence collected from crime scene(s) by crime scene investigator(s) is defined as “silent witnesses” of crimes, and thus crime scene investigation is considered as the most important part of the criminal investigations by Tongur (2011) in the way of fighting crimes by establishing the link between suspects, victims, and crime scenes.

Crime scene investigators have unique job definitions, tasks, duties, and responsibilities: They are basically responsible for collecting evidence from the crime scene properly, processing the evidence suitably, and transferring them to forensic labs suitably. When police radio announces that a crime is committed, crime scene investigators should be among the first police officers responding to the crime scene because they need to preserve the crime scene from

inconvenient situations, including negative environmental conditions and isolating the crime scene from irrelevant people like journalists and other police officers since all these issues have the potential to destroy the evidence.

If crime scene investigators are not among the first police officers arriving the crime scene, the first responders expect them to arrive in order to collect, process, and transfer the evidence. The police officers not working in crime scene investigation units are allowed to collect the evidence from crime scene only if waiting for the crime scene investigator(s) to respond may lead to serious damage on the evidence or destroy the evidence since they are not particularly trained about the detailed techniques of collecting evidence. Waited by all their colleagues, including even those with higher ranks in the crime scene with no touch on evidence may motivate some of the crime scene investigators (especially unranked police officers) due to the extra status they seem to have got.

The Turkish Police officers who want to be crime scene investigators should apply to take several tests, and the volunteers who pass the tests are required to attend three-month basic level crime scene investigation training. They learn proper ways of collecting evidence depending on the nature of certain crimes, crime scenes, victims, and evidence, which are based on some scenarios during the training. For example, they are trained to decide which substance(s) should be considered as a piece of evidence according to the type of crime or the way it might have been committed.

The crime scene investigators also learn proper techniques of processing the evidence in this basic training. The procedures of packing questioned document-based evidence, for example, are different from those of biological evidence, and any evidence when improperly packed can be destroyed on the way to the forensic lab.

They also learn proper methods of documentation and transferal procedures depending on the type of evidence and where to submit the evidence. For example, biological evidence may need to be transported by means of the air conditioned vehicles in order to prevent any possible damage.

After the basic training, crime scene investigators are given the title as “crime scene investigation experts” and may be assigned to any crime scene investigation units of the Turkish National Police (TNP), and they are asked to attend several follow up in-service trainings during their professional life (Tongur, 2011). Being called as “experts” may also motivate some of the crime scene investigators (especially unranked police officers) due to the extra status they seem to have obtained.

Crime scene investigation service is provided by the crime scene investigation units of the TNP in the urban areas of the country, while it is delivered by the crime scene investigation teams of the Gendarmerie in the rural areas. The TNP crime scene investigation units work in all 81 provinces of Turkey, and 3580 crime scene investigators in these units report to the TNP Forensic Lab, which is headquartered in Ankara.

Beside their responsibilities related to evidence collection, processing, and transfer, the crime scene investigators are also assigned by the prosecutors to photograph suspects, archive their fingerprints, and record the demographic characteristics of the suspects. Thus, crime scene investigators, are also named as “technicians of the TNP” performing some technical tasks and duties which requires extra skills and care (Tongur, 2011).

Beside their technical responsibilities different from others, the crime scene investigators typically work individually in their working environments unlike most of their colleagues who may be assigned to the other units also having to work in teams.

CHAPTER V

METHODOLOGY

This study seeks to expand on the limited empirical knowledge on the job satisfaction of the Turkish police officers using Herzberg's (1968) theory and Hackman and Oldham's (1975) model. The goal is to build new knowledge about the job satisfaction and the job dissatisfaction levels of Turkish crime scene investigators, especially in terms of their unique job definition based on the comparison with the job satisfaction and the job dissatisfaction of the Turkish police officers working in police stations, the public order departments, and in the traffic departments. This chapter explains the methodology of the study and presents the research questions which guides the study. It then describes the conceptualization and operationalization used in the study.

I. RESEARCH QUESTIONS

1. What is the job dissatisfaction level of Turkish police officers?
2. What are the determinants of Turkish police officers' job dissatisfaction levels?
 - a. Do demographic variables influence job dissatisfaction levels of Turkish police officers?
 - b. Do hygiene elements affect Turkish police officers' job dissatisfaction levels?
3. What is the job satisfaction level of Turkish police officers?
4. What are the determinants of Turkish police officers' job satisfaction levels?
 - a. Do demographic variables influence Turkish police officers' job satisfaction levels?
 - b. Do motivators affect job satisfaction levels of Turkish police officers?
 - c. Do job characteristics contribute to Turkish police officers' job satisfaction levels?

5. What is the job dissatisfaction level of Turkish crime scene investigators?
6. What are the job dissatisfaction determinants of Turkish crime scene investigators?
 - a. Do demographic variables influence job dissatisfaction levels of Turkish crime scene investigators?
 - b. Do hygiene elements affect job dissatisfaction levels of Turkish police officers who work in the crime scene investigation units?
7. What is the job satisfaction level of Turkish crime scene investigators?
8. What are the job satisfaction determinants of Turkish crime scene investigators?
 - a. Do demographic variables affect job satisfaction levels of Turkish crime scene investigators?
 - b. Do motivators contribute to job satisfaction levels of Turkish police officers who work in the crime scene investigation units?
 - c. Do job characteristics influence job satisfaction levels of Turkish crime scene investigators?

II. DATA

The data collected by the Turkish National Police Academy (with the support of Scientific and Technological Research Council of Turkey) from a survey conducted through the members of the Turkish National Police (TNP) in 2012 was used in this study. The data has not been used for academic research so far. Since the TNP is a national based organization, the survey was conducted in 11 cities of the Turkish Republic (from all seven geographic regions), each with different populations, crime rates, number of police officers, and growth rates. From small city police departments to the metropolitan police departments, city departments from each different region of the country, were included in the survey in order to maintain a representative sample.

The data comprises information about socio-demographic attributes, such as age, gender, marital status, experience in the TNP, rank, actual income, perceived income, educational level, and police education background. The data, also contains information related to job characteristics, including autonomy, task significance, and task variety which are used in this study.

The data also covers information about 2619 Turkish police officers (out of 232.193 police officers working for TNP in 2012) working in one of 16 different units, including police stations, public order department, unit for protection of important locations, unit for prevention of crimes, juvenile criminality department, riot police unit, support units (human resources, logistics, training, etc.), anti-smuggling and organized crime, anti-terror department, intelligence department, swat teams, crime scene investigation unit, traffic department, education facilities unit.

This Turkish National Police Academy data was used as a secondary data after IRB approval process completed; College of Social Science assigned to the Social Science/Behavioral/Education Institutional Review Board (SIRB) through the Michigan state University Human Research Protection Program, and SIRB committee considered the research (Application ID#: i048146) as “non human research” approving that the research activity does not involve human subjects (IRB#x15-200e 2-17-15).

1. Sampling

In order to identify the sample, 5400 police officers from 11 cities (from all seven geographic regions), including Ankara, Istanbul, Izmir, Antalya, Isparta, Eskisehir, Konya, Yozgat, Samsun, Urfa, and Erzurum were randomly selected to participate in the survey, and of

these 5400 police officers requested to participate in the survey, 2619 (48.5%) volunteered to participate.

Of all 232.193 police officers working for the TNP in 2012, 3580 officers (1.54%) were working in crime scene investigation units, and the 134 of the 2619 police officers (5.12%) who participated in the research were crime scene investigators. Since the ratio of participant crime scene investigators (5.12%) in the data is bigger than their ratio in the population (1.54%), data about the crime scene investigators, having a small number of population (N=3580), represents their population well as indicated in the Table 1.

Table 1: Initial Descriptive Statistics of the Participant Police Officers

		Population				Sample			
Unit		CSI	PS	PO	TRF	CSI	PS	PO	TRF
	Frequency	3580	47366	36221	22522	134	566	442	279
	Percentage	1.54%	20.4%	15.6%	9.7%	5.1%	21.7%	16.9%	10.1%

Proportionate stratified random sampling was used, and according to the nature of this sampling, the police officers were selected in nearly the same ratio in the population, considering the geographic distribution and demographic representation (Walsh & Ollenburger, 2001, Bachman & Schutt, 2007).

The central limit theorem, one of the most important concepts of statistical theory, declares that, as sample sizes become larger, data will represent the population better by coming closer to the population values. The small sample size, on the other hand, may receive concerns about its representativeness; however, the theorem also states that small samples may represent the population well if they are randomly selected. Since the Turkish police officers were randomly selected in nearly the same ratio in the population, sample size would not cause serious

problems in terms of representing the TNP population well (Walsh & Ollenburger, 2001, Bachman & Schutt, 2007).

2. Measurement of the Variables

a. Dependent Variables

The first dependent variable, job satisfaction was measured by the question asking the satisfaction level of the participants regarding all aspects of the work: (1) “Considering all aspects of the job/work you are doing, to what extent are you satisfied with it?” (from 0 not satisfied at all to 10 quite satisfied).

The other dependent variable, job dissatisfaction was measured by reversing the item related to the happiness level at work in the survey taking into consideration the items of the dissatisfaction scale by Holden (1980): (1) “What number out of 10 would you give if you were to score your level of happiness at workplace?” (from 0 Not happy at all to 10 Quite happy)

b. Independent Variables

The independent variables of the questionnaire used in this study are determined as follows⁵:

i. Demographic Variables

The “age” variable was continuous, while the variable “gender” was dichotomized into: (1) male and (2) female. The Participants’ policing experience were asked, and the “tenure” variable was also continuous. Current ranks of the participants were classified into three categories based on the skewed nature of the distribution: (1), unranked police officers (police constables and head police constables), (2) mid-level police managers (deputy sergeants,

⁵ See Appendix A, Table 6 for the summary of the variables.

sergeants, and inspectors), and (3) top-level police managers (chief inspectors, police chiefs of 4th degree, police chiefs of 3rd degree, police chiefs of 2nd degree, and police chiefs of 1st degree. The respondents were also asked to indicate the highest level of education that they have completed, and the “educational level” variable was categorized into seven groups: (1) Primary school, (2) Secondary school, (3) High school, (4) Vocational school (two years college), (5) Bachelor’s degree (four years college), (6) Master’s degree, and (7) Doctoral degree. Given the skewed nature of the distribution, the variable “education level” was then placed into four categories: (1) High school or less, (2) 2 years college, (3) 4 years college, and (4) Master’s and/or doctoral degree.

ii. Variables Related to Motivators

There were five items available in the data which can be taken as motivators: (1) work itself, (2) responsibility, (3) advancement, (4) achievement, and (5) recognition. The work itself was defined as a motivating factor by Herzberg (1968), and it was measured by combining four different scales together in this study: (1) administrative fairness, (2) fairness in criminal proceedings, (3) cynicism towards citizens, and (4) cynicism towards organization.

“Administrative” fairness scale was conducted by combining three items related to the fairness of the positions appointed, fairness of the routine appointments, and fairness of the administrative disciplinary investigations: (1) “To what extent is it fair and justified who is appointed to which position (police station, division, team, bureau, district, etc)?”, (2) “To what extent is it fair and justified when they make routine appointments (appointments to and from 1st and 2nd region) proceedings?”, and (3) “How much fair and justified is it when it comes to the results from administrative disciplinary investigations?” (from 0 not fair at all to 10 completely fair and justified).

Besides, the scale “fairness in criminal proceedings” contains two items: (1) “How much fair and justified are prosecutors acting when investigations against policemen are started by the criminal authorities?” and (2) “How much fair and justified are judges acting when investigations against policemen are started by the criminal authorities?” (from 0 not fair at all to 10 completely fair and justified).

Further, the two items combined together for the “cynicism towards citizens” scale: (1) “A policeman is never appreciated by citizens however much he/she makes efforts.” and (2) “When sometimes the police is charged with some crimes (like using excessive power, bribery, etc), the problems actually are mostly caused by the citizens.” (from 0 absolutely not true to 10 absolutely true).

Finally, the scale “cynicism towards organization” involves three items: (1) “If an investigation starts about a policeman, he/she will definitely be punished although he/she makes a justified defense about what he/she had done”, (2) “It is mostly another policeman who harms a policeman”, and (3) “You can only feel happy in this organization only if you have good relations with an influential person” (from 0 absolutely not true to 10 absolutely true).

The variable “responsibility” was measured by reversing the question about the legal liability⁶: (1) “I do not have enough legal liability to carry out what I should do for my country as a policeman.” (from 0 absolutely not true to 10 absolutely true).

In addition, the question asking the possibilities of a possible promotion to a higher position was used to measure the variable “advancement”: (1) “Considering the possibilities you may be promoted to a higher rank or to a more prestigious position, to what extent are you satisfied with it?” (from 0 not satisfied at all to 10 quite satisfied).

⁶ The questionnaire was filled in Turkish and then translated into English for this study. The word liability in the questionnaire should be taken as referring to the concept of responsibility due to the nature of Turkish language.

Moreover, the “achievement” variable was measured with the question related to fairness and justifiableness of the rewards and appreciations: (1) “To what extent is it fair and justified when it comes to rewards and appreciations by the success and good performance?” (from 0 not fair at all to 10 completely fair and justified). Finally, the question about the pride of being a police officer was taken in order to measure the variable “recognition”: (1) “How much pride do you take in your environment and in the society since you are a policeman?” (from 0 no pride at all to 10 I am very much proud of it).

iii. Variables Related to Hygiene Elements:

There were four items available in the data which can be considered as hygiene elements: (1) status, (2) supervision, (3) relationship with peers, and (4) salary. Two questions related to social-cultural and economic status combined together for the scale “status”: (1) “Considering your profession and social/cultural status; where do you see yourself (as an individual) in terms of social status?” and “Considering your economic status, which economic layer do you see yourself in?” (from 0 in the lowest status to 10 in the highest status).

The scale “supervision” was also measured with the combination of three items of satisfaction with supervisors, satisfaction with top management, and superior care: (1) “Considering all aspects of it, to what extent are you satisfied with the superiors you work with?” (from 0 not satisfied at all to 10 quite satisfied), (2) “Considering all aspects of it, to what extent are you satisfied with the top management of your organization?” (from 0 not satisfied at all to 10 quite satisfied), and (3) “How much do you think are your superiors care about the personal situation and family problems of their subordinates including the related problems that they might be going through?” (from 0 not caring at all to 10 very much caring).

Further, the variable “relationship with peers” was measured with one question: (1) “If you were to score a number out of 10, which one would you give for your relations with your colleagues?” (from 0 no relationship at all to 10 quite strong relationship).

Finally, the two questions related to satisfaction with monthly income and spouse satisfaction with monthly income combined together for the scale “salary”: (1) “How satisfied are you about your monthly income, considering all income coming to your home?” and (2) “How satisfied is your spouse about your monthly income, considering all income coming to your home?” (from 0 not satisfied at all to 10 quite satisfied).

iv. Variables Related to Job Characteristics

Being one of the core job dimensions of the Job Characteristics Model (Hackman & Oldham, 1975), the “autonomy” variable was measured with the item adopted from Hall (1968) and Walsh et al. (1980): (1) “I can make decisions on my own about how to do my work or about how to act during my work (taking initiatives).” (from 0 absolutely not true to 10 absolutely true).

The variable “task significance” was also measured with the question adapted from Hackman and Oldham (1980). “What I am doing is better in terms of reputation, status and prestige compared to what my colleagues are doing.” (from 0 absolutely not true to 10 absolutely true), while the “boredom” item (“I often feel bored”) was reversed and taken as “task variety” variable based on the relevant literature. (from 1 definitely disagree to 4 definitely agree).

v. Variables Related to the Units

The units of the police officers who participated in the study were coded into dummy variables in order to inspect the significant differences between several units: The variable “crime scene investigation” was dummy coded: “1” for the crime scene investigators participated in the study and “0” for the others, whereas the “police station” variable was dummy coded: “1” for the

participant police officers who work in police stations and “0” for the others, while the variable “public order” was also dummy coded: “1” for police officers who work in public order units and “0” for the others. The “traffic” variable was dummy coded as well: “1” for the participant police officers who work in traffic departments and “0” for the others.

III. VALIDITY AND RELIABILITY

Three of the most important evaluation criteria for social research are (1) reliability, (2) replicability, and (3) validity (Bryman, 2004). The reliability is defined as the consistency of the measures and repetition of the results, while the replicability means the recurrence of the procedures constituting a measure by someone else and the validity indicates integrity of the conclusions derived from the research.

The types of validity can be grouped as (1) measurement validity, (2) internal validity, (3) external validity, and (4) ecological validity. The measurement validity (construct validity) is related to the question of whether measures really reflect the concepts which are supposed to be denoted, as the internal validity is about the question whether the independent variable(s) is responsible for the variation on the dependent variable (integrity of the causal relationship), the external validity is related to the question whether the findings can be generalized beyond the research context, and the ecological validity is about to the question whether the findings consistent with participants’ daily experiences in their natural social settings (Bachman & Schutt, 2007; Bryman, 2004).

To check the external validity, the sample for the questionnaire was controlled for geographic distribution (all seven geographic regions of Turkey) and demographic representation, such as age, gender, and years of service. The sampling of 2619 Turkish police officers was found to be favorable compared to the overall population (N=232.193). For example, the number

of sample females (133, 5.1%) was found to be pretty representative of the female population of 12680 (5.5%).

In addition, the findings of the study are not expected to have a serious problem(s) related to ecological validity because the police officers probably felt themselves in their natural social settings when filling out the questionnaire since they were asked to do so in arranged rooms in their own departments in scheduled day(s).

Also, the replicability is not expected to raise critical concerns since the each procedure is explained in great detail throughout the data collection process by researchers in terms of the recurrence of the procedure(s) constituting a measure(s) by anyone else.

On the other hand, the results of the study may have problems related to internal validity (credibility) since it is hard to ensure that the independent variable(s) is responsible for the variation on the dependent variable (integrity of the causal relationship) due to the nature of cross-sectional (survey) design. Multivariate logistic regression analyses with several control variables were used in order to limit the internal validity concerns as much as possible.

Internal consistency reliability analyses were also conducted for all scales through Cronbach's alpha test to determine whether or not combining the items into scales can be considered internally consistent and reliable (Miles and Huberman, 1994; Namey et al., 2007; Field 2009).

CHAPTER VI

QUANTITATIVE ANALYSES AND FINDINGS

This chapter presents and discusses quantitative analyses of the survey data collected from the Turkish National Police officers. The analyses consider the job satisfaction and job dissatisfaction levels of police officers according to the officers' perspectives, and then proceeds to consider the factors influencing their job satisfaction and dissatisfaction levels.

Given the large number of questions asked in the survey, it was important to use data reduction techniques prior to moving onto the analyses. Data reduction involves classifying large amounts of raw data into meaningful categories, and is based on researchers' decisions in order to make the data more manageable (Miles and Huberman, 1994; Namey et al., 2007). Consequently, the variables which can be used in this study were categorized into three groups based on the theoretical framework and the literature review: (1) demographic characteristics, (2) hygiene elements, (3) motivator factors, and (4) job task variables.

I. UNIVARIATE ANALYSES

1. Descriptive Statistics of Demographic Characteristics

The descriptive statistics of demographic characteristics provide information about the general characteristics of the police officers who participated in the study and the variables' coding procedure, as shown on Table 2; the ages of the Turkish national police officers who completed the questionnaire ranged from 22 to 60, and the average age of the officers was 39.77. The vast majority (86.7%) of the participants was male, and the average tenure for the officers was 16.67 with a minimum of 0 and a maximum of 39 years of service.

The education level of the police officers ranged from "high school or less" to "master's or doctoral degree"; 19.5% of the police officers participated in the study had a high school

diploma or less, while 44% had 2-years college education, 32.8% had a baccalaureate degree (4-years college), and 2.3% had a master's or a doctoral degree.

The vast majority (89.9%) of the study participants were unranked police officers (police constables and head police constables), as 4.3% were mid-level police managers (deputy sergeants, sergeants, and inspectors), and 2.3% were top-level police managers (chief inspectors, police chiefs of 4th degree, police chiefs of 3rd degree, police chiefs of 2nd degree, and police chiefs of 1st degree).

Of 2614 police officers participated in the study, 134 police officers (5.1%) were working in crime scene investigation units, 566 officers (21.7%) were working in police stations, 279 police officers (10.1%) were working in traffic department, and 442 officers (16.9%) were working in public order units as shown on Table 2, and the demographic characteristics of the participants were subject to variation among the units they were working in; police stations had the older and more experienced police officers compared to the other departments, while public order units had the younger and less tenured officers.

Besides, crime scene investigation units had the highest percentage of female police officers, while traffic department had the lowest percentage of female officers. Crime scene investigative units also had the highest percentage of the police officers with master's or doctoral degree or 4 years college degree, whereas police stations had the police officers with the lowest percentage of these two educational level categories.

Further, crime scene investigative units had the highest percentage of top-level and mid-level police managers, while police stations had the lowest percentage of top-level police managers and public order units had the lowest percentage of mid-level police managers as shown on Table 2.

Table 2: Descriptive Statistics of Demographic Characteristics

Demographic Characteristics	All Officers (N=2614)	CSI Unit (N=134)	Police Station (N=566)	Traffic (N=279)	Public Order (N=442)	Min	Max
	Mean or N(%)	Mean or N(%)	Mean or N(%)	Mean or N(%)	Mean or N(%)		
Age	39.77	38.06	41.60	39.20	37.67	22	60
Gender	1.06	1.07	1.04	1.04	1.03		
1=Male	2267 (86.7)	119 (88.8)	503 (88.9)	247 (88.5)	390 (88.2)	1	2
2=Female	133 (5.1)	9 (6.7)	23 (4.1)	9 (3.2)	12 (2.7)		
Educational Level	2.18	2.45	2.04	2.18	2.22		
1=High School or Less	509 (19.5)	13 (9.7)	146 (25.8)	54 (19.4)	73 (16.5)		
2=2 years college	1150 (44.0)	52 (38.8)	253 (44.7)	122 (43.7)	202 (45.7)	1	4
3=4 years college	858 (32.8)	65 (48.5)	151 (26.7)	89 (31.9)	151 (34.2)		
4=Master's or Doctoral Degree	59 (2.3)	4 (3.0)	8 (1.4)	7 (2.5)	8 (1.8)		
Tenure	16.67	15.04	18.3	16.40	14.76	0	39
Rank	1.09	1.20	1.05	1.04	1.04		
1=Unranked Police Officers	2350 (89.9)	110 (82.1)	524 (92.6)	258 (92.5)	416 (94.1)		
2=Mid-level Police Managers	112 (4.3)	12 (9.0)	26 (4.6)	8 (2.9)	9 (2.0)	1	3
3=Top-level Police Managers	60 (2.3)	7 (5.2)	1 (.2)	2 (.7)	4 (.9)		

2. Scale Constructions

Data reduction involves classifying large amounts of raw data into meaningful categories, including the scales in order to make the data more manageable. Data reduction techniques were used prior to moving onto the analyses; among the large number of questions answered by the participants in the survey, several items were grouped together into numerous scales; based on the theoretical frameworks and the literature review, similar questions whose answers define similar concepts were determined and these items were combined together as scales.

Then, the principal component analysis was performed for each scale using both Bartlett's Test of Sphericity in order to decide whether procedures of combining items can be justified statistically and Kaiser-Meyer-Olkin (KMO) measure to determine whether we can be confident that the sample size is adequate for analyses.

Internal consistency reliability analyses were also conducted for all scales through Cronbach's alpha test to determine whether or not combining the items into scales can be considered internally consistent and reliable (Miles and Huberman, 1994; Namey et al., 2007; Field 2009).

Excluding the items which do not meet the minimum criteria for the KMO measures, factor loadings, and Cronbach's alpha scores, the scales were determined as shown on Table 7 based on the principal component analyses and internal consistency reliability analyses results.⁷

3. Descriptive Statistics of the Variables Used in the Study

Descriptive statistics of the variables used in the study provide information about the perceptions of the participant police officers on the survey items based on the comparisons between the units they are working for as indicated in Table 8; the police officers working for the

⁷ See Appendix A, Table 7 for the results of principle component and internal consistency reliability analyses.

crime scene investigation units were reported to have the highest level of job satisfaction and the lowest level of job dissatisfaction, while the officers working in the police stations had the lowest level of job satisfaction and the highest level of job dissatisfaction.

The crime scene investigators also had the highest level of perceptions about the administrative fairness, as the police officers of police stations had the lowest level of administrative fairness perceptions.

Besides, the police officers working in police stations were reported to have the highest level of perceptions on the fairness in criminal proceedings, whereas the police officers of public order departments were reported to have the lowest level of fairness in criminal proceedings perceptions.

In addition, the police officers of police stations had the highest level of cynicism towards their organizations, while the crime scene investigators had the lowest level of cynicism towards their organizations.

Further, the police officers working for traffic departments were reported to have the highest level of responsibility in terms of the belief that having enough legal liability in order to carry out what should be done, as crime scene investigators were reported to have the lowest responsibility level.

Moreover, the crime scene investigators had the highest level of satisfaction of the possibilities of promotion to a higher rank or to a more prestigious position, whereas the police station officers had the lowest level of promotion satisfaction.

Likewise, the crime scene investigators were reported to have the highest level of perceptions about the fairness of rewards and appreciations by the success and good performance,

while the police officers working in police stations were reported to have the lowest level of reward and appreciation fairness perceptions.

Moreover, the police officers of traffic departments had the highest level of social status perceptions considering their professions and social-cultural status, as the police officers working for police stations had the lowest level of social-cultural status perceptions.

Additionally, the crime scene investigators were reported to have the highest level of supervision perceptions in terms of both superior and top management satisfaction and superior care, whereas the police officers who work in police stations were reported to have the lowest level of perceptions of their supervision.

Similarly, the crime scene investigators had the highest level of relationships with their colleagues, as the police officers of police stations had the lowest level of relationships with their coworkers.

Likewise, the crime scene investigators were reported to have the highest level of income satisfaction based on both officer and spouse satisfaction considering all income of their homes, while the police officers working in police stations were reported to have the lowest level of satisfaction with income.

Correspondingly, the crime scene investigators had the highest level of autonomy based on their abilities of making decisions on their own about how to perform their jobs, whereas the police officers who work in police stations had the lowest level of autonomy.

Finally, the police officers of traffic departments were reported to have the highest level of perceptions of task significance in terms of reputation, status, and prestige of their work compared with their colleagues' jobs, as the police officers working in police stations were reported to have the lowest level of task significance based on the comparisons between crime

scene investigators, the police officers who work in police stations, traffic departments, and public order units as shown on Table 8.

Although the mean differences of these items statistically significantly differed between the participant police officers who work for different units, the mean differences of some items did not differ significantly, meaning that police officers working in crime scene investigation units, police stations, traffic departments and public order units had similar perceptions for certain items, including recognition, economic status, task variety, and cynicism towards citizens as presented in Table 8; regardless of being a member of staff in different units, the Turkish police officers who participated in the study reported similar levels of pride that they receive from their environment and the society just because they were policemen. Besides, all police officers participated in the study saw themselves in the same economic status layer, which is just close to mid-level. Further, the police officers working in different units reported that they were often feeling bored. Moreover, all participant police officers were considering the citizens similarly especially in terms of the cynicism they feel towards citizens as shown on Table 8⁸.

II. BIVARIATE ANALYSES

1. Correlational Analyses

In order to inspect the bivariate relationships between the variables used in the study, correlation analyses were conducted.

Besides, there were significant correlations between the variable job satisfaction and all motivator factors: administrative fairness ($r = .42, p < .001$), fairness in criminal proceedings ($r = .23, p < .001$), cynicism towards citizens ($r = -.14, p < .001$), cynicism towards organization ($r = -$

⁸ See Appendix A, Table 8 for the mean differences of the survey items within police officers working at crime scene investigation units, police stations, public order units, and traffic departments.

.29, $p < .001$), responsibility ($r = .15$, $p < .001$), advancement ($r = .39$, $p < .001$), achievement ($r = .29$, $p < .001$), and recognition ($r = .51$, $p < .001$). These results indicate that the police officers who perceive more fairness, responsibility, achievement, and recognition are more likely to be satisfied with their jobs. The officers perceiving more cynicism, on the other hand, are less likely to be satisfied as shown in Table 9.

Further, there were statistically significant correlations between job satisfaction and job characteristics, including autonomy ($r = .32$, $p < .001$), task significance ($r = .27$, $p < .001$), and task variety ($r = .20$, $p < .001$). As indicated in Table 9, these results report that police officers perceiving more autonomy, task significance and task variety are more likely to be satisfied with their jobs.⁹

On the other hand, Table 10 shows the results of Pearson Correlation Coefficients through bivariate analyses between the variables related to job dissatisfaction which report statistically significant correlations between the job dissatisfaction, the other dependent variable, and all demographic characteristics, but the educational level: age ($r = -.11$, $p < .001$), gender ($r = -.06$, $p < .01$), tenure ($r = -.10$, $p < .001$), and rank ($r = -.14$, $p < .001$). These results indicate that the older, more experienced, and ranked police officers are less likely to be dissatisfied, while male officers are more likely to be dissatisfied with their jobs. No significant correlation between the variables educational level and job dissatisfaction was reported.

Also, there were significant correlations between the variable job dissatisfaction and all hygiene factors: status ($r = -.40$, $p < .001$), supervision ($r = -.60$, $p < .001$), relationship with peers ($r = -.43$, $p < .001$), and salary ($r = -.24$, $p < .001$). These results indicate that police officers who perceive their status and salary to be higher, the officers perceiving their supervision better, and

⁹ See Appendix A, Table 9 for the bivariate correlations among the variables of the job satisfaction model.

the ones with better relationships with their colleagues are less likely to be dissatisfied with their jobs as shown on Table 10.

In addition to inspecting the bivariate relationships between the variables used in the study, the correlation analyses also help to address possible multicollinearity problems, which occurs when two variables are over-correlated. If the Pearson Correlation Coefficient between two predictors is higher than .70, multicollinearity should be considered (Meyers et. al., 2005).

Although some of the Pearson Correlation Coefficients for the bivariate relationships between the variables achievement and administrative fairness ($r = .55$), job satisfaction and recognition ($r = .51$), and job dissatisfaction and supervision ($r = -.60$) in this study are high, all of the Pearson Correlation Coefficients, but the one between the variables age and tenure (policing experience) were below than .70; the only Pearson Correlation Coefficient of this study higher than .70 exists between the variables between age and tenure ($r = .94$), and it should be considered an indicator of a possible multicollinearity problem since these two variables are highly correlated.¹⁰

III. MULTIVARIATE ANALYSES

Herzberg (1968) proposed that motivators, including the work itself, responsibility, advancement, achievement, recognition, and growth were the main predictors of the job satisfaction, while the hygiene elements, such as status, supervision, relationship with peers, work conditions, and salary were the primary determinants of job dissatisfaction.

Besides, Hackman and Oldham's (1975) job characteristics model suggested that the core job dimensions, such as, task significance, autonomy, and feedback were leading to the personal and work outcomes, including the job satisfaction. Hence, the two different models, (a) job

¹⁰ See Appendix A, Table 10 for the bivariate correlations among the variables of the job dissatisfaction model.

satisfaction model and (b) job dissatisfaction model, were determined in order to inspect the factors influencing both the job satisfaction and dissatisfaction through the ordinary least square (OLS) regression analyses.

1. Job Dissatisfaction Model

Benefiting from the assumptions of Herzberg's (1968) theory and the several approaches of the literature on testing this theory, the job dissatisfaction model included both demographic characteristics and hygiene factors based on the comparisons between the participant Turkish police officers working in four different units: (1) Crime Scene Investigation Unit, (2) Police Stations, (3) Traffic Department, and (4) Public Order Unit.

The VIF scores and tolerance levels were inspected through the collinearity diagnostics; the VIF score of 3.96 for the variable age and the VIF score of 3.88 for the variable tenure (policing experience) were two highest scores. Likewise, the tolerance levels of the variables age (.25) and the tenure (.26) were the two lowest scores amongst the tolerance levels of all variables in the model. The VIF scores higher than "4" and tolerance levels lower than ".2" are considered as the indications of multicollinearity (Garcia and Cao, 2005; Weisburd and Britt, 2007).

Although the VIF scores of the variables age and tenure were not higher than "4", they were very close to "4" and there was a big difference between these two VIF scores and the VIF scores of other variables in the model.

Since the tolerance levels of the variables, age and tenure, were not less than ".2", they were very close to ".2" and were significantly lower than the tolerance levels of the models' other variables as well.

In addition, the variables, age and tenure, were reported to have over-correlated since the Pearson Correlation Coefficient between the variables, age and tenure (.94) was higher than ".7",

the acceptable limit of any possible multicollinearity problem (Meyers et. al., 2005). Thus, these three measures were considered the indicators of a possible multicollinearity problem since the variables age and tenure were highly correlated.

To control the possible effect of multicollinearity, the variable age was dropped from the model; the VIF score of tenure became 1.22, while all VIF scores were lower than 1.43 and the tolerance score of tenure turned into .82 whereas all tolerance scores were higher than .70 indicating that the possible multicollinearity problem was solved by removing the variable age from the job dissatisfaction model.

Beside, the collinearity diagnostics, Durbin-Watson measure was checked in order to determine whether or not the job dissatisfaction model violated the assumption of independent errors. The Durbin-Watson measures lower than “1” and higher than “3” are considered as the indicators of violation of the independent errors assumption (Field, 2009). Since the Durbin-Watson measure of the model was 1.93, there was no sign of possibility of any problem related to the violation of the assumption of the independent errors. The analyses of the plots of the job dissatisfaction model also indicated that normality, homoscedasticity, and linearity assumptions were not violated by the model.

The F value of the model for all of the police officers participated in the study was 145.45, which was significant at $p \leq .001$ level, and 40% of the variance in job dissatisfaction of police officers was explained by the model.

Besides, the F value of the model for crime scene investigators participated in the study was 9.97 ($p \leq .001$), and 39% of the variance in job dissatisfaction of crime scene investigators was explained by the model.

In addition, the F value of the model for the police officers working in police stations was 32.45, which was significant at $p \leq .001$ level, and 32% of the variance in the job dissatisfaction of police station officers was explained by the model.

Further, the F value of the model for the police officers working in traffic departments who participated in the study was 25.63 ($p \leq .001$), and 43% of the variance in the job dissatisfaction of officers of traffic departments was explained by the model.

Finally, the F value of the model for police officers working for public order units who participated in the study was 33.10, which was significant at $p \leq .001$ level, and 38% of the variance in the job dissatisfaction of police officers of public order units was explained by the model.

None of the demographic characteristics, but tenure (for all of the police officers and the police officers working for public order units), was correlating to the dependent variable, job dissatisfaction, taking into consideration the five groups of police officers participated in the study: (1) all police officers, (2) crime scene investigators, (3) police officers working for police stations, (4) police officers working in traffic departments, and (5) police officers working for public order units; the variable tenure ($b = -.10$) was significantly correlating the job dissatisfaction level of the police officers working for the public order units only at $p \leq .05$ level, while significant relationship between the tenure ($b = -.04$) of all of the police officers and their job dissatisfaction level at $p \leq .05$ level was reported contrary to the other three groups of the police officers participated in the study.

On the other hand, there were statistically significant negative correlations between all hygiene factors, but salary and the job dissatisfaction for the first group of participant police officers (all police officers): status ($b = -.13$, $p \leq .001$), supervision ($b = -.44$, $p \leq .001$), and the

relationship with peers ($b = -.19, p \leq .001$). Instead, there was no significant relationship between the variable salary and job dissatisfaction perceptions of all police officers participated in the research.

These results indicate that all of the police officers participated in the study who perceive their status to be higher, the officers perceiving their supervision better, and the ones with better relationships with their colleagues are less likely to be dissatisfied with their jobs as shown in Table 3.

The results also reveal that one unit increase in all police officers' perception on their status leads to .13 unit decrease in the job dissatisfaction. Besides a unit increase in the perception of the officers about the supervision they encountered causes a .44 unit decrease in their job dissatisfaction levels. Further, one unit increase in officers' perception on relationship with their colleagues leads to a .19 unit decrease in their job dissatisfaction holding other variables constant as Table 3 indicates.

Likewise, there were significant negative correlations between all hygiene factors, except for the salary, and the job dissatisfaction for the 3rd, 4th, and 5th groups of participant police officers: status (police station: $b = -.13, p \leq .001$; traffic: $b = -.21, p \leq .001$; public order: $b = -.19, p \leq .001$), supervision (police station: $b = -.35, p \leq .001$; traffic: $b = -.35, p \leq .001$; public order: $b = -.40, p \leq .001$), and relationship with peers (police station: $b = -.22, p \leq .001$; traffic: $b = -.22, p \leq .001$; public order: $b = -.14, p \leq .001$). Then again, there was no significant relationship between the variable salary and job dissatisfaction perceptions of participant police officers of 3rd, 4th, and 5th groups as indicated in Table 3.

On the other hand, significant relationships between the hygiene elements and job dissatisfaction of the crime scene investigators (2nd group) were somewhat different from the

correlations of other groups; supervision ($b = -.45$, $p \leq .001$) and relationship with peers ($b = -.27$, $p \leq .001$) were significantly correlating job dissatisfaction levels of crime scene investigators similar to other four groups; however, there was not a significant association between crime scene investigators' status perception and their job dissatisfaction level, and the variable salary was significantly correlating the dissatisfaction perceptions of crime scene investigators contrary to the participant police officers from the other four groups as shown in Table 3.

Finally, the units of the police officers who participated in the study were coded into dummy variables in order to inspect the significant differences between several units (the variable crime scene investigation: "1" for the crime scene investigators who participated in the study and "0" for the others; the police station variable "1" for the participant police officers who work in police stations and "0" for the others; the variable public order: "1" for police officers who work in the public order units and "0" for the others; and the traffic variable: "1" for the participant police officers who work in traffic departments and "0" for the others) and the results indicated that there was no statistically significant difference between the job dissatisfaction levels of police officers working in crime scene investigation units, police stations, public order units, and the traffic departments as presented in Table 3.

Table 3: Summary of Ordinary Least Squares (OLS) Regression Results on Police Job Dissatisfaction

	Job Dissatisfaction									
	All Police Officers		CSI		Police Station		Traffic		Public Order	
	b/SE	t	b/SE	t	b/SE	t	b/SE	t	b/SE	t
Demographics										
Gender	-.00/.21	-.11	.09/.78	1.28	.01/.54	.17	-.09/.82	-1.95	-.07/.70	-1.73
Tenure	-.04/.01	-2.43*	.04/.03	.46	-.06/.02	-1.57	-.02/.02	-.45	-.10/.02	-2.03*
Rank	-.01/.14	-.75	.05/.40	.67	-.00/.49	-.04	-.04/.63	-.73	-.02/.50	-.49
Educational Level	.01/.07	.76	.09/.31	1.09	-.03/.15	-.81	.04/.21	.71	-.01/.18	-.20
Hygiene Factors										
Status	-.13/.01	-7.06***	.03/.06	.41	-.13/.03	3.23***	-.21/.04	-3.66***	-.19/.03	-4.30***
Supervision	-.44/.01	-24.39***	-.45/.03	-5.62***	-.35/.02	-8.71***	-.35/.02	-6.30***	-.40/.02	-8.53***
Relationship with Peers	-.19/.02	-10.92***	-.27/.10	-3.56***	-.22/.05	-5.54***	-.22/.07	-3.92***	-.14/.05	-3.34***
Salary	-.03/.01	-1.70	-.17/.04	-2.21*	-.02/.02	-.44	-.02/.03	-.37	-.00/.03	-.04
Units										
Crime Scene Inv.	-.03/.22	-1.73								
Police Station	.03/.12	1.60								
Public Order	-.00/.13	-.25								
Traffic	.02/.16	1.35								
F	145.45***		9.97***		32.45***		25.63***		33.10***	
R ²	.40		.39		.32		.43		.38	

* p ≤ .05 ** p ≤ .01 *** p ≤ .001

2. Job Satisfaction Model

Using the assumptions of both Herzberg's (1968) theory and Hackman and Oldham's (1975) model along with the literature testing these assumptions, the job satisfaction model included demographic characteristics, motivators, and job characteristics based on the comparisons between the participant police officers working in four different units of the Turkish National Police: (1) Crime Scene Investigation Unit, (2) Police Stations, (3) Traffic Department, and (4) Public Order Unit.

The collinearity diagnostics were conducted and the VIF score of 4.01 for the variable age and the VIF score of 3.92 for the variable tenure were determined as the two highest VIF scores of the variables used in the model. Similarly, the tolerance levels of the variables age (.25) and the tenure (.26) were found to be the two lowest scores amongst the tolerance levels of all variables in the model. Since the VIF scores higher than "4" and the tolerance levels lower than ".2" are signs of multicollinearity, the VIF score of the variable age was considered as an indication of multicollinearity (Garcia and Cao, 2005; Weisburd and Britt, 2007).

Further, the tolerance levels of the variables age and tenure were not less than ".2"; however, they were so close to ".2" and were lower than the tolerance levels of the other variables in the model significantly.

In addition, the variables age and tenure were reported to have highly correlated since the Pearson Correlation Coefficient between the variables age and tenure (.94) was higher than the acceptable limit of any possible multicollinearity problem of ".7" (Meyers et. al., 2005). The VIF scores, tolerance levels, and Pearson Correlation Coefficient measures were considered together as the indicators of a possible multicollinearity problem since these two variables were over-correlated.

To eliminate the possible effect of the multicollinearity, the variable age was dropped from the model; the VIF score of tenure turned into 1.28, whereas all VIF scores were lower than 1.82 and the tolerance score of tenure became .78 while all tolerance scores were higher than .55 which indicates that removing the variable age from the job satisfaction model solved the possible multicollinearity problem.

The Durbin-Watson measure was also checked in order to determine a possible violation of the assumption of independent errors for the job satisfaction model. The Durbin-Watson measures lower than “1” and higher than “3” are considered as the signs of violation of the independent errors assumption (Field, 2009). The Durbin-Watson measure of the model was found 1.93, thus there was no indication of any problem about the violation of the assumption of the independent errors. The plots of the job satisfaction model also revealed no serious violation of normality, homoscedasticity, and linearity assumptions.

The F value of the model for the 1st group (all police officers) participated in the study was 94.67, which was significant at $p \leq .001$ level, and 41% of the variance in the job satisfaction levels of police officers was explained by the model. Among the demographic characteristics, the variables tenure ($b = .05$, $p \leq .01$) and rank ($b = -2.17$, $p \leq .05$) were significantly correlating job satisfaction indicating that more experienced police officers and the officers with lower ranks (including unranked officers) are more likely to be satisfied with their jobs.

Besides, the F value of the model for the 2nd group (crime scene investigators) participated in the study was 4.32 ($p \leq .001$), and 36% of the variance in the job dissatisfaction of crime scene investigators was explained by the model.

Further, the F value of the model for the 3rd group (the police officers working in the police stations) was 27.16, which was significant at $p \leq .001$ level, and 43% of the variance in the job dissatisfaction of the police station officers was explained by the model.

In addition, the F value of the model for the 4th group (police officers working in traffic departments) participated in the study was 22.73 ($p \leq .001$), and 56% of the variance in job dissatisfaction of officers of traffic departments was explained by the model.

Finally, the F value of the model for the 5th group (the police officers working for the public order units) participated in the study was 17.96, which was significant at $p \leq .001$ level, and 39% of the variance in job dissatisfaction of the police officers in the public order units was explained by the model as shown on Table 4.

Several common results revealed for all five groups through the regression analyses. For example, recognition was statistically significantly ($p \leq .001$) correlated with the job satisfaction levels of the police officers of all five groups. On the other hand, there were no significant relationships between the variables cynicism towards citizens & achievement and job satisfaction perception levels of all of the police officers in all groups as shown on Table 4.

There were also statistically significant correlations between some of the motivators and the job satisfaction of all police officers (1st group) who participated in the study: administrative fairness ($b = .15$, $p \leq .001$), fairness in criminal proceedings ($b = .04$, $p \leq .05$), cynicism towards organization ($b = -.06$, $p \leq .001$), advancement ($b = .16$, $p \leq .001$), and recognition ($r = .32$, $p \leq .001$). These results reveal that the police officers who perceive more fairness, advancement, and recognition are more likely to be satisfied with their jobs whereas the officers perceiving more cynicism towards their organizations are less likely to be satisfied as presented in Table 4.

The results also indicate that one unit increase in the police officers' perception regarding their administrative fairness leads to .15 unit increase in the job satisfaction. Besides, one unit increase in the officers' perception of fairness in criminal proceedings leads to a .04 unit increase in their job satisfaction levels. Further a unit increase in the perception of the officers about their advancement causes a .16 unit increase in their job satisfaction levels. Moreover, one unit increase in the officers' perception of recognition leads to a .32 unit increase in their job satisfaction levels as shown on Table 4. On the other hand, one unit increase in their perceptions of cynicism with their organizations causes .06 unit decrease in their job satisfaction levels holding other variables constant as shown on Table 4.

Furthermore, there were statistically significant correlations between the job satisfaction and job characteristics, including autonomy ($b = .13, p \leq .001$), task significance ($b = .08, p \leq .001$), and task variety ($b = .07, p \leq .001$) indicating that the police officers perceiving more autonomy, task significance and task variety are more likely to be satisfied with their jobs; one unit increase in their perception of autonomy leads to .13 unit increase in their job satisfaction. Besides, as the task significance perceptions of officers increase one unit, their job satisfaction level increase .08 unit. One unit increase in the officers' task variety perceptions leads to .07 unit increase in their job satisfaction level when other variables remains constant as indicated in Table 4.

In addition, the units of the participant police officers' were coded into dummy variables in order to examine the significant differences between four different units, and the job satisfaction level of crime scene investigators was found significantly different than that of their colleagues working in police stations, public order units, and traffic departments; the crime scene investigators were more likely to be satisfied with their jobs compared to their co-workers working in police stations, public order units, and traffic departments. The results also revealed

that there were negative correlations between the police officers' units (police stations and traffic departments) and their job satisfaction levels; the police officers working in police stations and traffic departments were less likely to be satisfied with their jobs compared to their colleagues working in crime scene departments and public order units. On the other hand, there was no statistically significant correlation between the police officers working in public order units and their job satisfaction levels, when compared to their coworkers working in crime scene investigation units, police stations, and traffic departments as presented in Table 4.

Table 4: Summary of Ordinary Least Squares (OLS) Regression Results on Police Job Satisfaction

	Job Satisfaction									
	All Police Officers		CSI		Police Station		Traffic		Public Order	
	b/SE	t	b/SE	t	b/SE	t	b/SE	t	b/SE	t
Demographics										
Gender	.01/.19	.45	-.01/.75	-.14	-.01/.47	-.31	.12/.65	2.85**	.03/.61	.78
Tenure	.06/.01	3.18***	.07/.03	.77	.02/.02	.45	.10/.02	2.26*	.09/.02	1.85
Rank	-.04/.12	-2.47*	-.13/.40	-1.52	-.01/.43	-.41	-.05/.51	-1.24	-.03/.45	-.72
Educational Level	-.02/.06	-.95	-.07/.29	-.84	-.05/.14	-1.43	-.10/.16	-2.19*	.07/.16	1.59
Motivators										
Work Itself										
<i>Administrative Fairness</i>	.15/.01	7.17***	.31/.04	2.94**	.15/.02	3.58***	-.05/.03	-.90	.17/.02	3.34***
<i>Fairness in Criminal Proceedings</i>	.04/.01	2.18*	-.02/.05	-.17	.07/.02	2.15*	.11/.02	2.41*	-.01/.02	-.29
<i>Cynicism towards Citizens</i>	-.00/.01	-.16	-.01/.05	-.12	-.04/.02	-.99	-.04/.03	-.91	.01/.03	.30
<i>Cynicism towards Organization</i>	-.06/.01	-3.22***	-.06/.03	-.67	.04/.02	1.16	-.09/.02	-1.89	-.11/.02	-2.43*
Responsibility	.03/.02	1.73	-.09/.07	-.95	.08/.04	2.04*	.00/.05	.09	-.01/.04	-.21
Advancement	.16/.02	9.07***	.02/.06	.28	.19/.03	5.08***	.13/.04	2.66**	.20/.04	4.74***
Achievement	.02/.03	1.02	-.06/.10	-.70	.00/.07	.09	.04/.06	.85	-.02/.06	-.39
Recognition	.32/.02	18.75***	.28/.08	3.41***	.37/.03	10.13***	.41/.05	8.42***	.33/.04	7.80***
Job Characteristics										
Autonomy	.13/.01	8.13***	.20/.06	2.28*	.11/.03	3.12**	.14/.04	2.87**	.10/.03	2.35*
Task Significance	.08/.01	5.07***	.01/.06	.13	.08/.03	2.32*	.10/.03	2.11*	.05/.03	1.15
Task Variety	.07/.05	4.65***	.11/.22	1.33	.02/.12	.47	.10/.14	2.37*	.07/.13	1.68

Table 4: (cont'd)

Units						
Crime Scene Invest.	.05/.19	3.34***				
Police Station	-.05/.11	-3.09**				
Public Order	.01/.12	.46				
Traffic	-.04/.14	-2.17*				
F	94.67***	4.32***	27.16***	22.73***	17.96***	
R ²	.41	.36	.43	.56	.39	

* p ≤ .05 ** p ≤ .01 *** p ≤ .001

CHAPTER VII

DISCUSSION AND CONCLUSION

I. DISCUSSION

The crime scene investigators have characteristic job definitions and their tasks, duties, and responsibilities are different from those of other police officers. They also work on their own and independently, unlike their colleagues who almost always have to work together in teams. Besides, they usually work in risk-free environments and encounter with limited number of criminal and administrative investigations contrary to their colleagues who mostly work in risky environments and may be confronted with several investigations. In addition, regardless of being unranked members of the police, they are called “experts” and they are respected and appreciated by their colleagues, superiors, and managers unlike most of other members of the police working in other units without getting much respect and appreciation from anyone. Hence, many of the results regarding the crime scene investigators were reported to be different from those of other police officers working in police stations, public order units, and traffic departments: Of the 2614 police officers who participated in the study, 133 (5.1%) were female and the crime scene investigation units had the highest percentage (6.7%) in terms of the number of the female police officers, compared to the other three units (police station: 4.1%; traffic: 3.2%; public order: 2.7%).

The results of descriptive analyses suggested that, in addition to the percentage of female police officers, several demographic characteristics of the crime scene investigators differed from the demographic variables of police officers working in police stations, traffic departments, and public order units. For example, crime scene investigators were reported to have constituted the

highest percentage (3.0%) of the police officers with a master's or doctoral degree compared to the other three units (police station: 1.4%; traffic: 2.5%; public order: 1.8%).

Besides, the crime scene investigation units also had the highest percentage (48.5%) of the police officers who graduated from 4 years college compared to the other three units (police station: 26.7%; traffic: 31.9%; public order: 34.2.7%), and they were reported to have the lowest percentage (9.7%) of the police officers graduated from high school or less (police station: 25.8%; traffic: 19.4%; public order: 16.5%) and the lowest percentage (38.8%) of the police officers graduated from 2 years college (police station: 44.7%; traffic: 43.7%; public order: 45.7%).

Furthermore, the crime scene investigative units also had the highest percentage (9%) of mid-level police managers (police station: 4.6%; traffic: 2.9%; public order: 2%) and the highest percentage (5.2%) of top-level police managers (police station: .2%; traffic: .7%; public order: .9%), whereas they were reported with the lowest percentage (82.1%) in terms of unranked police officers compared to other three units (police station: 92.6%; traffic: 92.5%; public order: 94.1%).

The total average score of job satisfaction for all police officers participated in the study was 5.75 (SD = 2.71), and the police officers working for crime scene investigation units were reported to have the highest level of job satisfaction (6.69, SD = 2.36) compared to the other three units (police station: 5.27, SD = 2.82; traffic: 5.69, SD = 2.77; public order: 5.76, SD = 2.62) meaning that the crime scene investigators were more satisfied with their jobs than the police officers working in police stations, traffic departments, and public order units.

On the other hand, the average score of job dissatisfaction for all participant police officers was 4.66 (SD = 3.06), and the crime scene investigators were reported to have the lowest

level of job dissatisfaction (3.60, SD = 2.74) in comparison with the other three units (police station: 5.25, SD = 3.02; traffic: 4.74, SD = 3.14; public order: 4.76, SD = 2.99) which means that the police officers working in crime scene investigation units were less dissatisfied with their jobs than their colleagues in police stations, traffic departments, and public order units.

The results of bivariate analyses indicated that there were statistically significant correlation ($r = -.54$, $p < .001$) between the two dependent variables, job satisfaction and job dissatisfaction; however, these cannot be defined as “over-correlated” and are not subject to any multicollinearity problem due to the fact that the Pearson Correlation Coefficient between these two variables ($r = -.54$) was not higher than .70, the acceptable limit of any possible multicollinearity problem by Meyers, Gamst, and Guarino (2005).

In addition to the job satisfaction and job dissatisfaction, the scores of crime scene investigators for certain survey items were different from the scores of police officers working for police stations, traffic departments, and public order units; for instance being a part of the work itself (one of the factors of the motivators) administrative fairness scale was conducted by combining three items related to fairness of the positions appointed, fairness of the routine appointments, and fairness of the administrative disciplinary investigations, and the crime scene investigators had the highest levels of perceptions about the administrative fairness (9.19, SD = 6.16) compared to other three units (police station: 6.82, SD = 5.69; traffic: 8.93, SD = 6.47; public order: 7.37, SD = 5.98). This result reveals that crime scene investigators had higher perceptions on the belief that the appointments to the positions, routine appointments, and administrative disciplinary investigations were fair and justified, compared to their co-workers working in police stations, traffic departments, and public order units.

Crime scene investigators also had the lowest levels of cynicism towards their organizations (19.06, SD = 6.97) compared to other three units (police station: 21.21, SD = 6.97; traffic: 20.20, SD = 7.04; public order: 19.91, SD = 6.92) meaning that police officers working for crime scene investigation units had lower scores for these three items when combined together for the scale cynicism towards organization: (1) “If an investigation starts about a policeman, he/she will definitely be punished although he/she makes a justified defense about what he/she had done”, (2) “It is mostly another policeman who harms a policeman”, and (3) “You can only feel happy in this organization only if you have good relations with an influential person”.

Besides, the police officers working for crime scene investigation units were reported to have the lowest responsibility levels (7.20, SD = 3.25) compared to other three units (police station: 7.33, SD = 3.19; traffic: 7.87, SD = 2.80; public order: 8.05, SD = 2.86) which means crime scene investigators had lower perceptions of having enough legal liability to carry out what they should do compared to their colleagues working for police stations, traffic departments, and public order units.

Further, crime scene investigators had the highest levels of satisfaction for the possibilities of promotion to a higher rank or to a more prestigious position (3.86, SD = 3.15) compared to their co-workers in the other three units (police station: 2.80, SD = 3.04; traffic: 3.21, SD = 3.27; public order: 2.90, SD = 3.11).

Moreover crime scene investigators were reported to have the highest levels of perceptions about the fairness of rewards and appreciations by success and good performance (1.46, SD = 2.14) compared to their colleagues in the other three units (police station: .71, SD = 1.62; traffic: 1.20, SD = 2.22; public order: 1.08, SD = 1.99).

Furthermore, the police officers working in crime scene investigation units were reported to have the highest levels of supervision perceptions in terms of both superior and top management satisfaction and superior care (15.03, SD = 7.89) compared to the other three units (police station: 9.39, SD = 7.85; traffic: 11.96, SD = 8.46; public order: 10.51, SD = 8.16) meaning that the crime scene investigators were more satisfied with their superiors and the top management of their organizations, also having higher perceptions that their supervisors care about their personal and family problems.

In addition, the crime scene investigators had the highest scores of relationships with their colleagues (7.01, SD = 1.99) compared to their co-workers in the other three units (police station: 6.23, SD = 2.67; traffic: 6.67, SD = 2.38; public order: 6.71, SD = 2.49).

Also, the police officers of crime scene investigation units were reported to have the highest levels of income satisfaction based on both officer and spouse satisfaction considering all of the income of their homes (9.24, SD = 5.29) compared to the other three units (police station: 7.82, SD = 5.08; traffic: 8.27, SD = 5.33; public order: 8.25, SD = 4.99) which means that both crime scene investigators and their spouses were more satisfied with their total income than the police officers working for police stations, traffic departments, and public order units and their spouses.

Finally, crime scene investigators had the highest levels of autonomy based on their abilities of making decisions on their own about how to perform their jobs (5.35, SD = 3.38) compared to their colleagues working for the other three units (police station: 4.59, SD = 3.62; traffic: 5.27, SD = 3.47; public order: 5.09, SD = 3.34).

Although the mean differences of certain items statistically significantly differed between the crime scene investigators participated in the study and their participant colleagues working

for other three units, the mean differences of some items did not differ significantly, meaning that the police officers working for crime scene investigation units, police stations, traffic departments and public order units had similar perceptions for such items, including recognition, economic status, task variety, and cynicism towards citizens; regardless of being a member of the staff in these four different units. The Turkish police officers who participated in the study reported similar levels of pride that they receive from their environment and the society just because they were policemen. Besides, all of the police officers of these four different units participated in the study saw themselves in the same economic status layer, which is close to mid-level. Further, the police officers working in these four different units reported that they were often feeling bored at work. Finally, all of the participant police officers working in crime scene investigation units, police stations, traffic departments and public order units were considering the citizens similarly especially in terms of the cynicism they feel towards citizens; most of them believe that “a policeman is never appreciated by citizens however much he/she makes efforts” and “when sometimes the police is charged with some crimes, the problems actually are mostly caused by the citizens”.

Following the Herzberg’s (1968) two-factor theory of motivation and replicating the past research, including Yao Wu (2010) and Chiou (2004), the OLS regression was also conducted between the demographic characteristics (age, gender, tenure, rank, and educational level) and the job dissatisfaction in the first model. The demographic characteristics were explaining only 3% of the variance in job dissatisfaction for all police officers participated in the study, while the model was explaining 5% of the variance in job dissatisfaction of participant crime scene investigators.

These results support the findings of Yao Wu (2010) that indicates that the demographic variables were able to explain 7% variance in job dissatisfaction of the Taiwanese police officers based on the analyses of survey data collected from 881 participants.

Then the hygiene factors (status, supervision, relationship with peers, and salary) were included along with the demographic characteristics in the second (full) model, and 40% of variance in the job dissatisfaction of all of the participant police officers was explained by the hygiene factors and the demographic characteristics in the model whereas the model was explaining 39% of variance in the job dissatisfaction levels of crime scene investigators participated in the research.

These findings also support the results of Chiou (2004) revealing that hygiene factors (work condition, status, policy and administration, security, supervision, and salary) and the demographics (age, level of education, and rank) were explaining 31% of variance in the job dissatisfaction of the Taiwanese police officers, based on the analysis of the data collected from 680 participants. Likewise, Yao Wu (2010) reports that the hygiene factors/motivators and the demographic variables were able to explain 18% of the variance in the job dissatisfaction levels of the Taiwanese police officers, while the demographic variables, hygiene factors/motivators, personality traits/Chinese work values were explaining 51% of the variance in the final model.

The results of OLS regression analysis of the job dissatisfaction model (full model) revealed that none of the demographic characteristics but tenure was statistically significantly correlating with the job dissatisfaction levels of all police officers participated in the study. On the other hand, there were significant negative correlations between all hygiene factors but the salary (status, supervision, and relationship with peers) and the job dissatisfaction for all participant police officers; all officers participated in the research with better perceptions about

their social, cultural and economic status to some extent were less likely to be dissatisfied with their jobs. Besides, all participant police officers with higher levels of superior satisfaction and supervisor care were less likely to be dissatisfied with their works. Also, the police officers having better perceptions about their relationships with their colleagues to some extent were less likely to be dissatisfied. These results support the findings of both Chiou (2004) and Yao Wu (2010) reporting significant relationships between the variables status, supervision, relationship with co-workers and the job dissatisfaction levels of police officers.

On the other hand, there was no significant relationship between the variable salary and the job dissatisfaction perceptions of all police officers participated in the research. The results of regression analysis of the job dissatisfaction model also reported no significant relationship between any demographic characteristics and the job dissatisfaction levels of crime scene investigators who participated in the study.

All hygiene factors, but status were negatively correlating to the job dissatisfaction perceptions of the participant police officers working for crime scene investigation units; the investigators participated in the research with higher perceptions of superior satisfaction and supervisor care to some extent were less likely to be dissatisfied with their jobs. Also, the crime scene investigators with better relationships with their colleagues to a degree were less likely to be dissatisfied. Besides, the police officers of crime scene investigation units with higher levels of income satisfaction, based on both officer and spouse satisfaction considering all income of their homes to some extent were less likely to be dissatisfied with their works. On the other hand, there was no significant relationship between the variable supervision and the job dissatisfaction perceptions of the crime scene investigators who participated in the research; the investigators'

perceptions about their social, cultural and economic status were not correlating to their job dissatisfaction level significantly.

The results indicated that there was no statistically significant difference between the job dissatisfaction levels of police officers working in crime scene investigation units, police stations, public order units, and traffic departments, and these results support the Herzberg's (1968) theory. Although the lack of hygiene factors is assumed to promote job dissatisfaction increased level of hygiene elements does not necessarily lead to satisfaction at work. Existence of fair level of hygiene elements is enough to prevent dissatisfaction at work, and surplus of the fair level by hygiene factors does not predict job satisfaction or dissatisfaction any longer as indicated in Figure 1. According to the results, we can conclude that the Turkish National Police provides a fair level of hygiene factors to its employees who work in crime scene investigation units, police stations, public order units, and traffic departments, and the surplus of the existing level would not lead to more job satisfaction or less dissatisfaction.

Following both the Herzberg's (1968) two-factor theory of motivation and the Hackman and Oldham's (1975) job characteristics model, and replicating the past research, the OLS regression was also conducted between the demographic characteristics (gender, tenure, rank, and educational level) and the job satisfaction in the first model, and the demographic characteristics were explaining only 4% of the variance in job satisfaction for all participant police officers (1st group), whereas the model was explaining 10% of the variance in the job satisfaction of crime scene investigators participated in the study (2nd group).

Several studies reported similar results; for example Yao Wu (2010) found that the demographic features, by themselves, were able to explain 8.6% of the variance in the job satisfaction of the Taiwanese police officers in the first model. Likewise, Johnson (2012) reported

that the demographic variables were explaining only 4% of the variance in the job satisfaction of the American police officers analyzing the survey data gathered from 292 police officers from 11 different law enforcement agencies around Phoenix metro area in the States. Similarly, Jo and Hoover's (2012) results indicated that the demographic attributes, by themselves were able to explain less than 1% of the variance ($R^2 = 0.013$) only in the job satisfaction of the South Korean police officers based on their analyses of the data collected from 341 South Korean police officers. Likewise, Ercikti's (2008) findings revealed that the demographic characteristics were explaining only 4% of the observed variance in the job satisfaction perceptions of the American police officers based on analyzing the survey data gathered from 136 mid-level police managers in the States.

Then, motivators (administrative fairness, fairness in criminal proceedings, cynicism towards citizens, cynicism towards organization, responsibility, advancement, achievement, and recognition) were included along with the demographic characteristics in the second model, and 37% of variance in the job satisfaction of all police officers participated (1st group) was explained by the motivators and the demographic variables in the model, while the model was explaining 33% of variance in the job satisfaction levels of participant crime scene investigators (2nd group).

Numerous studies indicated similar results; for instance, findings of Yao Wu (2010) indicated that motivators/hygiene factors were explaining 46% of the observed job satisfaction variance along with the demographic features in the second model. Also, Johnson (2012) revealed that demographic variables and job task characteristics were explaining 21% of the variance in job satisfaction of the American police officers. Likewise, Jo and Hoover (2012) reported that demographic characteristics and "work-related" variables were able to explain 58% variance in the job satisfaction perceptions of the Korean police officers in their second model.

Similarly, the results of Ercikti (2008) revealed that the demographic attributes and the job characteristics were explaining 19% of the variance in the job satisfaction of the American police officers.

Finally, the job task characteristics (task significance, autonomy, and task variety) were added along with demographic variables and motivators in the final (full) model, and the explanatory power of the full model increased further; 40% of variance in the job satisfaction of all of the participant police officers (1st group) was explained by the job characteristics, motivators and demographic variables in the final model, while the full model was explaining 36% of variance in the job satisfaction levels of crime scene investigators participated in the study (2nd group).

Some of the studies revealed similar results; for example Yao Wu (2010) found that the person, the final model (the personality traits/Chinese work values, demographic characteristics and motivators/hygiene factors) was able to explain 51% of the variance in Taiwanese police job satisfaction. Johnson (2012) also reported that adding organizational environment features into the model with demographics and job task characteristics, the third model was explaining 25% of the variance in the job satisfaction of the American police officers. Likewise, the findings of Ercikti (2008) indicated that inclusion of the organizational variables into the model with demographic variables and job characteristics, final model was able to explain 27% of the variance in American police officers' job satisfaction.

The results of OLS regression analysis of the job satisfaction model (full model) indicated that of the demographic characteristics, the variable tenure was positively correlating to the job satisfaction of all police officers participated (1st group) which indicates that more experienced police officers were more likely to be satisfied with their jobs.

Likewise, several studies reported positive correlation between police officers' length of service and their job satisfaction; for example Nalla, Rydberg, and Mesko (2011) reported a positive correlation between the variable tenure and the job satisfaction of Slovenian police officers; more experienced police officers were more likely to be satisfied at work. Bastemur (2006) also indicated a significant positive relationship between the policing experience and the job satisfaction levels of the Turkish police officers; the officers tenured between 16 and 20 came out to have higher job satisfaction levels compared to their less tenured colleagues. Besides, the findings of Burke and Mikkelsen (2006) revealed that the Norwegian police officers with less tenure were more likely to report lower levels of job satisfaction than their more experienced counterparts. Further, the results of Lim, Teo, and See (2000) exposed that Singaporean police officers having 3 to 6 year experience reported to have the lowest job satisfaction compared to their colleagues with more tenure.

Another demographic variable, the rank was found to negatively correlate to the job satisfaction of all participant Turkish police officers (1st group), meaning that the police officers with lower ranks, including unranked police officers were more likely to be satisfied with their jobs.

Although there exist several studies reporting positive associations between the rank and the job satisfaction of the Turkish police officers (Bastemur, 2006; Buker and Dolu, 2010; Yigit et al., 2011), there is no other study that indicate negative correlation between rank and police job satisfaction.

On the other hand, the findings of OLS regression analysis of the job satisfaction model (full model) reported no significant correlation between demographic variables and the job satisfaction of crime scene investigators participated (2nd group), also indicating that job

satisfaction levels of the Turkish police officers working in the crime scene investigation units cannot be explained by the demographic variables, including gender, tenure, rank, and educational level.

The work itself was defined as a motivator factor by Herzberg (1968), and consisted of four scales (administrative fairness, fairness in criminal proceedings, cynicism towards citizens, and cynicism towards organization) in this study, and statistically significant correlations between certain sub-factors of work itself, including administrative fairness and cynicism towards organization were also reported through the OLS regression analyses of the full model; the police officers who perceive more administrative fairness, based on combining the three items which are related to fairness of the positions appointed, fairness of the routine appointments, and fairness of the administrative disciplinary investigations, were more likely to be satisfied with their jobs. Also, the officers perceiving less cynicism towards organization, based on their combined perceptions about these three items (1) “If an investigation starts about a policeman, he/she will definitely be punished although he/she makes a justified defense about what he/she had done”, (2) “It is mostly another policeman who harms a policeman” and (3) “You can only feel happy in this organization only if you have good relations with an influential person” were more likely to be satisfied at work.

These findings also support the result of Chiou (2004) revealing that the variable work itself significantly correlated to the job satisfaction of the Taiwanese police officers based on the survey data collected from 680 participants.

The findings of OLS regression analysis of the full job satisfaction model reported significant positive correlations between the job satisfaction of all police officers (1st group) and certain factors of motivators, including advancement and recognition; the advancement was

measured with the item related to satisfaction with chances of being promoted to a higher rank or to a more prestigious position, and the police officers with higher perceptions of advancement were more likely to be satisfied with their jobs. Likewise, recognition was measured with the item about the levels of pride that they receive from their environment and the society since they were members of the police, and police officers with more perceptions of recognition were reported to have higher levels of job satisfaction. This findings support the result of Yao Wu (2010) who reports a significant positive association between promotion & recognition and the job satisfaction perceptions of the Taiwanese police officers.

The results of OLS regression analyses of the job satisfaction model also indicated significant positive correlations between the job satisfaction of all police officers (1st group) and all of the factors of job characteristics available, such as autonomy, task significance, and task variety; the police officers with higher perceptions of autonomy were more likely to be satisfied with their jobs. This finding support the result of Zhao et al. (1999), Buker and Dolu (2010), Johnson (2012), Nalla and Kang (2012), and Jo and Hoover (2012) all reporting a significant positive relationship between the variable autonomy and the job satisfaction levels of police officers. Likewise, task significance was measured by the item, considering the jobs of participants better in term of reputation, status, and prestige than the ones of their colleagues, and the police officers who have higher task significance perceptions were more likely to be satisfied at work. This result supports the findings of Zhao et al. (1999) and Buker and Dolu (2010), both indicating a positive correlation between the task significance and the job satisfaction perceptions of the police officers. Similarly, the police officers with higher perceptions of task variety were found more likely to be satisfied with their works, and this finding support the results of Zhao et

al. (1999), Buker and Dolu (2010), and Johnson (2012) all indicating a positive association between the variety at work and the job satisfaction levels of police officers.

Although significant positive relationships were reported between the job satisfaction of all police officers (1st group) and the all of the factors of job characteristics available, including autonomy, task significance, and task variety, the results of OLS regression analyses indicated that only one factor of job characteristics, autonomy, significantly correlated to the job satisfaction levels of crime scene investigators (2nd group).

Likewise, despite the significant relationships between four factors of motivators (administrative fairness, cynicism towards organization, advancement, and recognition) and job satisfaction levels of all participant police officers (1st group), only two motivator factor (administrative fairness and recognition) were significantly correlating with the job satisfaction perceptions of crime scene investigators (2nd group), indicating that the crime scene investigators with higher perceptions of administrative fairness and recognition were more likely to be satisfied at work.

Through the OLS regression analyses, the job satisfaction level of crime scene investigators (2nd group) was found significantly different than that of their colleagues working in the police stations (3rd group), public order units (4th group), and traffic departments (5th group); the crime scene investigators were more likely to be satisfied with their jobs compared to their co-workers working in the police stations, public order units, and traffic departments. The results also revealed that there were negative correlations between the police officers' units (police stations and traffic departments) and their job satisfaction levels; the police officers working in police stations and traffic departments were less likely to be satisfied with their jobs compared to their colleagues working in the crime scene departments and the public order units. These results

support the findings of Kirkcaldy, Brown, and Cooper (1998) that reported significant relationships between the units of officers' and their job satisfaction level; the crime investigators were found to have the highest levels of job satisfaction, while the police officers working in the traffic departments and the police headquarters were reported to have the lowest police job satisfaction levels. Besides, Hoath, Schneider, and Starr (1998) analyzed the survey data collected from 249 police officers from an Ontario Law Enforcement Agency and found that police officers working in the investigation and administrative divisions were more satisfied than their colleagues working in the patrol divisions.

On the other hand, there was no statistically significant correlation between the police officers working in public order units and their job satisfaction levels compared to their coworkers in the crime scene investigation units, police stations, and traffic departments.

The job satisfaction levels of police officers working in crime scene investigation units, police stations, and traffic departments were significantly different from each other and of the four units studied, there was insignificant relationship between the police officers working in public order units. This may be a result of the fact that the cynicism towards organization was found to negatively correlate with the job satisfaction levels of the police officers working in public order units only. There was also no significant relationship between public order police officers' perceptions of the two of the job characteristics (task significance and task variety) and their job satisfaction level compared to their colleagues working in crime scene investigation units, police stations, and traffic department.

II. IMPLICATIONS

This study reveals that numerous issues related to crime scene investigators are different compared to the ones of other three units (police station, traffic, and public order); for example,

crime scene investigators were the most satisfied and the least dissatisfied officers with their jobs compared to their colleagues working for police stations, traffic departments, and public order units.

Besides, the crime scene investigators had the highest level regarding the perceptions of administrative fairness (on the belief that the appointments to the positions, routine appointments, and administrative disciplinary investigations were fair and justified) compared to their co-workers in the three other units. This result can be explained by the fact that crime scene investigators may not encounter with frequent appointments to irrelevant positions. Instead, they are mostly appointed to the crime scene investigation units as they are considered experts (crime scene investigation experts), and that's why they might have highest level of perceptions regarding the administrative fairness in terms of the appointments to the positions and routine appointments. Likewise, crime scene investigators may not be subjected to so many administrative disciplinary investigations as their colleagues working for the other units because they are not involved in risky situations, including patrolling, settling disputes, and arrests. Thus, they might consider the administrative disciplinary investigations fair and they have the highest level of perceptions regarding the administrative fairness.

In addition, crime scene investigators reported the lowest level of cynicism towards their organizations (based on three items: "If an investigation starts about a policeman, he/she will definitely be punished although he/she makes a justified defense about what he/she had done", "It is mostly another policeman who harms a policeman", and "You can only feel happy in this organization only if you have good relations with an influential person"). Since they work in separate environments (mostly in crime scenes) on their own, crime scene investigators may not be vulnerable to be harmed by other police officers; also their job definition does not require

them to carry out risky tasks, such as settling disputes and making arrests unlike their colleagues working for other units. Hence, they may not encounter with administrative disciplinary investigations, and they may not even know how it feels like being subjected to an investigation and punished. These issues may explain the fact that they got the lowest level of cynicism towards their organizations.

Further, the police officers working for crime scene investigation units were reported to have the lowest responsibility. This issue can also be explained by their unique job descriptions; they mainly are responsible for collecting, processing, and transferring evidence, and thus they may not need much legal liability in their daily routine.

Moreover crime scene investigators had the highest levels of satisfaction for the possibilities of promotion to a higher rank or to a more prestigious position. Administrative disciplinary investigations and criminal investigations may last long, and police officers cannot be promoted during the process of investigations. Thus, working in risk-free environments and less likelihood of facing a criminal investigations or an administrative disciplinary investigations may explain this result as well.

Furthermore, crime scene investigators were reported to have the highest levels of perceptions about the fairness of rewards and appreciations on their success and good performance and the highest levels of supervision perceptions (based on superior satisfaction, top-management satisfaction and supervisor care). Since they are unranked police officers and these unranked crime scene investigators are considered experts which is definitely a title for them serving as a rank, they may receive much more respect and appreciation from their superiors compared to their colleagues working in other units. Also, their superiors, not working

in the crime scenes with them, may have to depend on their decisions and the performance on the crime scene.

Additionally, crime scene investigators received the highest scores in relationships with their colleagues. They mostly work alone in crime scenes independently and they do not have to share their responsibilities with their colleagues unlike the police officers working in other units who mostly work together in teams. Hence, it may not be likely that crime scene investigators do not confront with their co-workers in stressful conditions. Rather, they may meet their colleagues in relaxed circumstances, e.g. during lunching, and these issues may explain why crime scene investigators received the highest scores regarding the relationships with their colleagues.

Finally, crime scene investigators had the highest levels of autonomy based on their powers to make decisions on their own about how to perform their jobs. Being crime scene experts, they work in crime scenes independently, and they mostly make their own decisions especially in terms of what to do during the stages of evidence collection, processing and transfer.

Therefore, crime scene investigators have unique job definitions, tasks, duties, and responsibilities which are different from other police officers. They also work alone in separate, risk-free environments independently and encounter with less criminal and administrative investigations unlike their colleagues who mostly have to work in teams. Although they are unranked police officers, they are considered experts and receive respect and appreciation from their colleagues, superiors, and managers as well, unlike most of their colleagues working in other units.

1. Job Dissatisfaction Model:

Average score of job dissatisfaction for all participant police officers was 4.66 (SD = 3.06), and the crime scene investigators were reported to have the lowest level of job

dissatisfaction in comparisons with other three units which means that police officers working for crime scene investigation units were less dissatisfied with their jobs than their colleagues in police stations, traffic departments, and public order units.

The results of OLS regression conducted between the demographic characteristics (age, gender, tenure, rank, and educational level) and the job dissatisfaction explained only limited variance in job dissatisfaction for all police officers (1st group) and the crime scene investigators (2nd group) who participated in the study; however, the hygiene factors (status, supervision, relationship with peers, and salary), along with the demographic characteristics in the second (full) model, explained much variance in the job dissatisfaction levels of both groups indicating that hygiene factors are more important than demographic characteristics in explaining the job dissatisfaction of the Turkish police officers.

Besides, none of the demographic characteristics was statistically significantly correlating with the job dissatisfaction levels of police officers (both 1st and 2nd groups) participated in the study; however, there were significant negative correlations between all hygiene factors except for the salary (status, supervision, and relationship with peers) and the job dissatisfaction for all participant police officers (1st group); the police officers with better perceptions about their social-cultural and economic status to some extent were less likely to be dissatisfied with their jobs. Hence, letting police officers to have perceptions of social-cultural and economic status in a fair level will help them to be less dissatisfied with their jobs.

In addition, the police officers with higher levels of superior satisfaction and supervisor care were less likely to be dissatisfied with their works. Thus, the police officers with rational levels of superior satisfaction and care would probably feel less dissatisfied at work.

Further, the police officers having better perceptions on their relationships with their colleagues to some extent were less likely to be dissatisfied. Therefore, having reasonable level of satisfaction with their co-workers, these police officers will probably feel less dissatisfied.

On the other hand, all hygiene factors, but status were negatively correlating the job dissatisfaction perceptions of the participant police officers working for crime scene investigation units (2nd group); the crime scene investigators with higher levels of supervisor satisfaction and supervisor care were less likely to be dissatisfied with their works. Consequently, the crime scene investigators with fair levels of superior satisfaction and care would feel less dissatisfied with their jobs.

Besides, the crime scene investigators having better perceptions of the relationships with their co-workers to some extent were less likely to be dissatisfied at work. Hence, having reasonable level of satisfaction with their colleagues, the crime scene investigators will feel less dissatisfied at work.

Further, the crime scene investigators having higher levels of income satisfaction, based on both officer and spouse satisfaction considering all income of their homes to some extent were less likely to be dissatisfied at work. Thus, crime scene investigators with fair levels of income satisfaction would feel less dissatisfied with their works. The fact that the income satisfaction correlated job dissatisfaction levels of crime scene investigators only should be considered as an important result, which may reveal that other police officers have more serious problems making them feel dissatisfied more than the income; however crime scene investigators may not have more serious issues than the total income which may lead to job dissatisfaction.

2. Job Satisfaction Model:

Total average score of job satisfaction for all police officers who participated in the study was 5.75 (SD = 2.71), and the police officers working for crime scene investigation units were reported to have the highest level of job satisfaction compared to the other three units meaning that crime scene investigators were more satisfied with their jobs than the police officers working in police stations, traffic departments, and public order units.

The results of OLS regression which were conducted between the demographic characteristics (gender, tenure, rank, and educational level) and job satisfaction were able to explain only limited variance in the job satisfaction of all police officers (1st group) and the crime scene investigators (2nd group) who participated in the study; however, the motivators (administrative fairness, fairness in criminal proceedings, cynicism towards citizens, cynicism towards organization, responsibility, advancement, achievement, and recognition), along with the demographic characteristics in the second model, explained much variance in the job satisfaction levels of both groups indicating that motivators are more important than the demographic characteristics in explaining the job satisfaction of Turkish police officers.

When the job task characteristics (task significance, autonomy, and task variety) were added along with the demographic variables and the motivators in the final (full) model, the explanatory power of the full model increased further, revealing that the job task variables would help motivators and demographic characteristics in explaining the job satisfaction variance.

The results of OLS regression analysis of the full job satisfaction model reported that of all the demographic characteristics, the variable tenure was positively correlating the job satisfaction of all police officers participated in the study (1st group) which indicate that more experienced police officers were more likely to be satisfied with their jobs. Hence, the police

departments should take into consideration the less tenured police officers more when planning their job satisfaction improvement strategies.

Another demographic variable, the rank was found negatively correlating the job satisfaction of all participant Turkish police officers (1st group), indicating that the police officers with lower ranks (including unranked police officers) were more likely to be satisfied with their works.

Despite the several studies reporting positive associations between the rank and the job satisfaction of Turkish police officers (Bastemur, 2006; Buker and Dolu, 2010; Yigit et al., 2011), this is the only study revealing negative correlation between the rank and the job satisfaction of Turkish police officers.

The difference of the percentage of ranked police officers participated in the studies may explain this situation; 11.6% of the participant police officers was ranked in Bastemur (2006), 11.9% of the police officers participated was ranked police officers in Buker and Dolu (2010), 14.4% of the participant police officers was ranked in Yigit et al. (2011), however, in this study; only 6.6% of police officers participated in the study was ranked officers. The fact that the percentage of the ranked police officers is smaller than those in the other three studies can be one of the possible explanations for such a completely different result.

On the other hand, the results of OLS regression analysis of the full job satisfaction model reported no significant correlation between the demographic variables and the job satisfaction of crime scene investigators who participated in the study(2nd group), indicating that the job satisfaction levels of the Turkish crime scene investigators cannot be explained by the demographic variables, including gender, tenure, rank, and educational level.

The significant correlations between administrative fairness and cynicism towards organization were also reported through the OLS regression analyses of the full model; the police officers who perceive more administrative fairness, based on combining three items related to fairness of the positions appointed, fairness of the routine appointments, and fairness of the administrative disciplinary investigations, were more likely to be satisfied with their jobs.

Therefore, the appointments and the administrative disciplinary investigations should be fair and justified to let police officers regard the management more fair which then may lead to better job satisfaction for the Turkish police officers. These result seems similar with the findings of the procedural justice and police legitimacy research; when people encounter with fair procedures in the legal arena, they tend to consider those authorities legitimate (Sunshine & Tyler, 2003). More specifically, people regard the police as legitimate and they will to cooperate with police when they consider the police authority fair. In order to get public support through the belief of police legitimacy, police organizations should focus on fairness of policing (Tyler, 2006). Hence, police organizations should provide fair and justified procedures for both their employees and the citizens in terms of police legitimacy and public & employee support.

Also, the police officers who perceive less cynicism towards organization were more likely to be satisfied at work. Hence, the managers should consider cynicism perception of the Turkish police officers towards their organization carefully in the way of improving job satisfaction of police officers.

The results of OLS regression analysis of the full job satisfaction model reported significant positive correlations between the job satisfaction of all police officers (1st group) and the certain factors of motivators, such as the advancement and recognition; the advancement was measured with the satisfaction through the chances of promotion to a higher rank or to a more

prestigious position, and the police officers with higher perceptions of advancement were reported more likely to be satisfied with their jobs.

Thus, all police officers of the Turkish National Police should have some chances of promotion to a higher rank or to a more prestigious position in order to have more advancement perceptions which then would lead to better job satisfaction for them.

Likewise, the recognition was measured with the levels of pride that police officers feel in their environment and in the society because they are a member of the police, and the officers with more perceptions of recognition were reported to have higher levels of job satisfaction.

Regardless of the units they work for, all police officers who participated in the study reported to have higher levels of pride that they receive from their environment and the society since they were police officers, and the managers should make some effort to keep or improve the level of police officers' perceptions about the recognition which may influence their job satisfaction.

The results of OLS regression analyses of the job satisfaction model also reported significant positive correlations between the job satisfaction of all police officers (1st group) and all of the factors of the job characteristics available (autonomy, task significance, and task variety); the police officers with higher perceptions of autonomy was more likely to be satisfied with their jobs. So, the police officers should be encouraged to make their own decisions about how to perform the tasks and duties they are responsible for. They should feel self-confident enough to take initiatives during the performance of their job, remembering that the autonomy police officers perceive would probably improve their job satisfaction levels.

Likewise, police officers who have perceptions of higher task significance (better reputation, status, and prestige) were more likely to be satisfied at work. Subsequently, police

officers should consider their tasks and duties more significant. Several strategies, including explaining the importance of the tasks they perform, presenting the outcomes, and sharing the most influential cases can be planned remembering the significant relationship between the perceived task significance and police job satisfaction.

Similarly, the police officers with higher perceptions of task variety were reported more likely to be satisfied with their works. Thus, boring issues related to police job should be determined carefully and eliminated in order not to let police officers get bored at work. The tasks related to policing routines and interesting duties should be appointed fairly among the police officers to let them perform variable tasks and have higher perceptions of task variety which then leads to police job satisfaction.

Although significant positive relationships were indicated between the job satisfaction of all police officers (1st group) and all of the factors of the job characteristics available (autonomy, task significance, and task variety), the findings of OLS regression analyses reported that only one factor of job characteristics, autonomy was significantly correlating the job satisfaction levels of crime scene investigators (2nd group).

This result may be related to the unique job definitions of crime scene investigators; they mostly work on their own in separate, risk-free environments unlike their colleagues in other units who have to work in teams all the time, including their supervisors. The fact that they are able to make their own decisions about how to perform the tasks and the duties makes them feel self-confident enough to take initiatives and lets them privileged in high levels that may suppress the influence of both task significance and task variety effects on their job satisfaction.

Likewise, despite the significant associations between the four factors of motivators (administrative fairness, cynicism towards organization, advancement, and recognition) and the

job satisfaction levels of all participant police officers (1st group), only the two motivator factor (administrative fairness and recognition) were significantly correlating with the job satisfaction perceptions of crime scene investigators (2nd group).

The three items were combined for the scale cynicism towards organization: (1) “If an investigation starts about a policeman, he/she will definitely be punished although he/she makes a justified defense about what he/she had done”, (2) “It is mostly another policeman who harms a policeman”, and (3) “You can only feel happy in this organization only if you have good relations with an influential person”. Crime scene investigators mostly work in crime scenes (in separate environments) alone, and it may not be likely for them to be harmed by other police officers. Their job definition does not include risky tasks, such as patrolling, settling disputes, or making arrests unlike their co-workers who work for other units. Thus, they may not encounter with administrative disciplinary investigations, and they may not even know how it feels like being subjected to an investigation and punished. These issues may explain the result indicating that cynicism towards organization did not correlate job satisfaction levels of crime scene investigators significantly.

Besides, advancement was measured with the item related to satisfaction with the probabilities of promotion to a higher rank or to a more prestigious position. Crime scene investigators were reported to have the highest level of satisfaction regarding the advancement; although they believe that they have enough chances to be promoted to a higher rank or to a more prestigious position, they may not want to change their position even for a higher rank. This idea can explain why advancement did not correlate crime scene investigators’ job satisfaction levels significantly.

According to the OLS regression analyses results, we can conclude that the Turkish National Police provides a fair level of hygiene factors to its employees who work in crime scene investigation units, police stations, public order units, and traffic departments, and surplus of the existing level would not lead to more job satisfaction or less dissatisfaction.

On the other hand, the job satisfaction levels of the police officers working in crime scene investigation units, police stations, and traffic departments were significantly different from each other. Hence, the managers in the police stations and traffic departments of the Turkish National Police should implement certain policies which would fight against the lack of the job satisfaction of their employees.

Since the results supported the assumptions of both Herzberg's (1968) two-factor theory of motivation and Hackman and Oldham's (1975) job characteristics model, the Turkish National Police managers should consider the motivators and the job characteristics important and should implement certain policies accordingly for achieving better job satisfaction levels amongst the Turkish police officers.

III. LIMITATIONS AND THE FUTURE RESEARCH

This study helps better understand the job satisfaction levels and the factors influencing these levels for all police officers who participated in the study, especially focusing on participant crime scene investigators, analyzing the available data; however, it also has several limitations.

First of all, the existing data, which was collected by Turkish National Police Academy, was used as a secondary data. Using the existing data is not necessarily a limitation; however, had the data been collected primarily for understanding the job satisfaction of Turkish police officers and the factors influencing their job satisfaction, it would have been more fulfilling to encompass all the issues related to job satisfaction. Therefore, upcoming studies using the data

collected to explain the job satisfaction of police officers should be done in terms of revealing more precise job satisfaction determinants.

Although numerous variables (administrative fairness, fairness in criminal proceedings, cynicism towards citizens, cynicism towards organization, status, supervision, and salary) were measured using multiple items combined together as certain scales, several other variables, including responsibility, advancement, achievement, recognition, relationship with peers, autonomy, task significance, and task variety were measured using only one item due to using an existing data. Although the use of single items is allowed in certain circumstances in the literature, future studies which will build their own questionnaires, should include various questions. Then relevant items can be combined together based on the relevant literature in order to construct the scales in terms of more robust conceptualization of the measures that would reflect the concepts better.

Among the limited number of studies that used job dissatisfaction as a dependent variable, Holden (1980) combined five items for the job dissatisfaction scale. Then, Chiou (2004) used the same five items, and Yao Wu (2010) used the three of these five items in order to measure the job dissatisfaction. That the existing data does not include any of these items can be seen another limitation of the study. Had the data had some of these items, the operationalization process of job dissatisfaction would have been more justifiable; however, considering these five items together, happiness at work was decided as an alternative item to measure job dissatisfaction. Hence, item related to level of happiness at work was reversed and coded as job dissatisfaction. Future studies, on the other hand, should use both Holden's (1980) items and level of happiness together in order to measure job dissatisfaction, comparing the items in terms of their abilities in the way of measuring the job dissatisfaction.

Of the items of job characteristics, autonomy was measured used the item by Hall (1968) and Walsh et al. (1980). Besides, the item by Hackman and Oldham (1980) was used to measure task significance; however, the existing data does not have any item to measure other job characteristics, including task identity, feedback, and skill variety. This may be taken as another limitation, and future studies should use items measuring all five job characteristics of Hackman and Oldham (1975). On the other hand, based on the literature, the boredom scale, which asked whether or not police officers were feeling bored at work, was reversed and decided to use to measure the task variety. Future studies should also use the boredom scale in order to test whether it can measure the task variety by itself or along with other relevant variables.

Further, the variables status, supervision, relationship with peers, and salary were used as available hygiene element in this study. However, the existing data does not contain other hygiene factors, such as personal life, relationship with supervisors, relationship with subordinates, and job security which may be considered another limitation. Therefore, future studies which will construct their own questionnaires, may include more hygiene elements in order to better explain job dissatisfaction.

Although this study indicates that almost all issues related to crime scene investigators were different from the ones of other police officers, the study cannot explain the reasons for the huge differences since not being organized to do so. Hence, future studies on crime scene investigators should be conducted in order to better understand the factors influencing the mentioned differences about the police officers working for crime scene investigation units.

Despite the several studies reporting positive associations between rank and job satisfaction of Turkish police officers (Bastemur, 2006; Buker and Dolu, 2010; Yigit et al., 2011), this study reported negative correlation between rank and job satisfaction of Turkish police

officers. The difference of the percentage of ranked police officers participated in the studies was considered a possible explanation for this situation; 11.6% of the participant police officers was ranked in Bastemur (2006), 11.9% of the police officers participated was ranked police officers in Buker and Dolu (2010), 14.4% of the participant police officers was ranked in Yigit et al. (2011). In this study; however, only 6.6% of police officers who participated in the study was ranked officers, and that the percentage of the ranked police officers smaller than the other three studies, can be a limitation of this study, which may have led to report a completely different result. Future studies which will use the data with more percentage of ranked police officers should be done in order to determine the relationship between rank and job satisfaction of police officers more precisely.

IV. CONCLUSION

Using the present literature, this study expanded on the limited empirical knowledge of crime scene investigators to better understand their unique job definitions, tasks, duties, and responsibilities different from other police officers. The findings of the study would be beneficial by reporting several different issues related to crime scene investigators in order to help future scholars to analyze functions of crime scene investigators in a more scientific and precise manner.

In addition, benefiting from the existing job satisfaction literature and theoretical frameworks, including Herzberg's (1968) two-factor theory of motivation and Hackman and Oldham's (1975) job characteristics model, inspecting the job satisfaction of Turkish crime scene investigators based on the comparisons with the police officers working in other units, and building new knowledge on the factors affecting their job satisfaction, this study will inform

academia and may assist the Turkish National Police (TNP) Forensic Lab Division in recruitment, retention, training and building an evidence based practice.

APPENDIX

APPENDIX: TABLES

Table 5: Empirical Studies Related to Police Job Satisfaction

Study and Location	Sample and Design	Variables (DVs & IVs)	Findings
Herzberg (1968) USA	Surveyed 1685 employees in 12 investigations	Job satisfaction Job dissatisfaction & Motivators Hygiene factors	Job-related factors explain much of the variance in job satisfaction/dissatisfaction. Of all factors influencing job satisfaction, 81% were reported to be motivators. Of all factors contributing to job dissatisfaction, 69% were found to be hygiene factors.
Zhao et al. (1999) USA	Collected data from 199 American police officers	Police Job Satisfaction & Job characteristics Demographic attributes	Job characteristics ($R^2 = .49$) were found to be explaining more variance in police job satisfaction compared to officers' demographics ($R^2 = .06$). Skill variety, task identity, and autonomy were found to be explaining most of the variance in police job satisfaction.
Chiou (2004) Taiwan	Analyzed data on 680 Taiwanese police officers	Police job satisfaction Police job dissatisfaction & Motivators Hygiene factors Demographic characteristics	All motivators except for advancement (achievement, recognition, work itself, responsibility, and growth) found to significantly correlate with job satisfaction. All hygiene factors except for salary and interpersonal relations (policy and administration, supervision, working conditions, status, and security) found to be associated with job dissatisfaction significantly. None of the demographic variables found to significantly correlate with job satisfaction.

Table 5: (cont'd)

Ercikti (2008) USA	Collected data from 136 American mid-level police managers	Police job satisfaction & Job characteristics Demographic variables	Job characteristics were reported to predict police job satisfaction better than demographic features. Major determinants of job satisfaction were found to be feedback, years of service in the present department, and implementation of COP/COMPSTAT programs.
Boke and Nalla (2009) USA	Surveyed 669 American police officers	Police job satisfaction & Organizational characteristics Demographics factors	Organizational characteristics, including management support, social cohesion, and job challenges were found to be explaining police job satisfaction better than the demographic features.
Yao Wu (2010) Taiwan	Analyzed the data collected from 881 Taiwanese police officers	Police job satisfaction Police job dissatisfaction & Demographic attributes Motivators Hygiene factors Personality traits	Motivators/hygiene factors ($R^2 = .4$) and personality traits ($R^2 = .47$) were reported to be explaining more job satisfaction variance than the demographic features ($R^2 = .1$) Motivators (task identity, skill variety, and autonomy) and hygiene factors (work conditions, salary, relationship with co-workers, and job security) were both found to positively correlate with Taiwanese police officers' job satisfaction.
Buker and Dolu (2010) Turkey	Surveyed 812 Turkish police officers	Police job satisfaction & Job characteristics Demographics	Findings of this study support earlier research reporting that job characteristics (skill variety, task identity, task significance, autonomy, and feedback) were better than the demographic characteristics in predicting police job satisfaction.

Table 5: (cont'd)

Nalla et al. (2011) Slovenia	Collected the data from 995 Slovenian police officers	Police job satisfaction & Organizational / environmental factors Demographics	Organizational and environmental features, such as innovation, citizen cooperation and job challenges ($R^2 = .5$) were found to be explaining more variance in Slovenian police officers' job satisfaction level compared to their socio-demographic characteristics ($R^2 = .02$)
Johnson (2012) USA	Surveyed 292 American police officers	Police job satisfaction & Job characteristics Organizational variables Demographic features	Job characteristics ($R^2 = .21$) and organizational variables ($R^2 = .25$) were reported to be explaining more observed police job satisfaction variance than demographic attributes ($R^2 = .04$). None of the demographic variables, but the variables African American and experience was found to significantly correlate with police officers' job satisfaction. Two job characteristics (job autonomy and role conflict) were found to be associated with police job satisfaction significantly.
Nalla and Kang (2012) South Korea	Analyzed the data collected from 406 South Korean police officers	Police job satisfaction & Demographics Organizational characteristics	Organizational features (management support, autonomy, public support, and police operational philosophy-government focus) were found to be explaining more observed variance in South Korean police officers' job satisfaction compared to their demographics
Jo and Hoover (2012) South Korea	Collected the data from 341 South Korean police officers	Police job satisfaction & "Work-related" features Demographics	"Work-related" features ($R^2 = .58$) were found to be explaining more variance in South Korean police officers' job satisfaction than their demographic characteristics do ($R^2 = .01$)

Table 6: Summary of the Variables

Dependent Variables	Measurement
Job Satisfaction	Consists of a single item (score 0-10) ranging from 0 (Not satisfied at all) to 10 (Quite satisfied)
Job Dissatisfaction	Consists of a single item (score 0-10) ranging from 0 (Not happy at all) to 10 (Quite happy)
Independent Variables	Measurement
Age	Continuous
Gender	Binary: 1=male and 2=female
Tenure (years served)	Continuous
Rank	3-level ordinal scale: 1= unranked police officers, 2= mid-level police managers, and 3= top-level police managers
Educational Level	4-level ordinal scale: 1= High school or less, 2=2 years college, 3=4 years college, 4= Master's and/or doctoral degree.
Autonomy	Consists of a single item (score 0-10) ranging from 0 (Absolutely not true) to 10 (Absolutely true)
Task Significance	Consists of a single item (score 0-10) ranging from 0 (Absolutely not true) to 10 (Absolutely true)
Task Variety	Consists of a single item (score 1-4) ranging from 1 (Definitely disagree) to 4 (Definitely agree)
Administrative Fairness	Consists of three scales (score 0-30), each ranging from 0 (Not fair at all) to 10 (completely fair and justified)
Fairness in Criminal proceedings	Consists of two scales (score 0-20), each ranging from 0 (Not fair at all) to 10 (completely fair and justified)
Cynicism towards Citizens	Consists of two scales (score 0-20) ranging from 0 (Absolutely not true) to 10 (Absolutely true)
Cynicism towards Organization	Consists of three scales (score 0-30) ranging from 0 (Absolutely not true) to 10 (Absolutely true)
Responsibility	Consists of a single item (score 0-10) ranging from 0 (Absolutely not true) to 10 (Absolutely true)
Advancement	Consists of a single item (score 0-10) ranging from 0 (Not satisfied at all) to 10 (Quite satisfied)
Achievement	Consists of a single item (score 0-10) ranging from 0 (Not fair at all) to 10 (completely fair and justified)
Recognition	Consists of a single item (score 0-10) ranging from 0 (No pride at all) to 10 (I am very much proud of it)
Status	Consists of two scales (score 0-20), each ranging from 0 (In the lowest status) to 10 (In the highest Status)
Supervision	Consists of three scales (score 0-30), each ranging from 0 (Not satisfied at all) to 10 (Quite satisfied)
Relationship with Peers	Consists of a single item (score 0-10) ranging from 0 (No relationship at all) to 10 (Quite strong relationship)
Salary	Consists of two scales (score 0-20), each ranging from 0 (Not satisfied at all) to 10 (Quite satisfied)

Table 7: Results of Principal Component and Internal Consistency Reliability Analyses

Survey items	Factor Loadings
<i>Supervision</i> (Cronbach's α = .88; KMO = .72)	
Considering all aspects of it, to what extent are you satisfied with the superiors you work with?	.93
How much do you think are your superiors care about the personal situation and family problems of their subordinates including the related problems that they might be going through?	.87
Considering all aspects of it, to what extent are you satisfied with the top management of your organization?	.89
<i>Salary</i> (Cronbach's α = .94; KMO = .50)	
How satisfied are you about your monthly income, considering all income to your home (your salary, spouse's salary, financial support from family, income from one of your houses which was rented, etc.)	.97
How satisfied is your spouse about your monthly income, considering all income to your home (your salary, spouse's salary, financial support from family, income from one of your houses which was rented, etc.)	.97
<i>Status</i> (Cronbach's α = .66; KMO = .50)	
<i>Social Status</i>	
Considering your profession and social/cultural status; where do you see yourself (as an individual) in terms of social status?	.87
<i>Economic Status</i>	
Considering you economic status, which economic layer do you see yourself in?	.87
<i>Administrative Fairness</i> (Cronbach's α = .64 ; KMO = .64)	
To what extent is it fair and justified who is appointed to which position (police station, division, team, bureau, district, etc)?	.79
To what extent is it fair and justified when they make routine appointments (appointments to and from 1st and 2nd region) proceedings?	.80
How much fair and justified is it when it comes to the results from administrative disciplinary investigations?	.71

Table 7: (cont'd)

<i>Fairness in Criminal Proceedings (Cronbach's α = .91; KMO = .50)</i>	
How much fair and justified are prosecutors acting when investigations against policemen are started by the criminal authorities?	.96
How much fair and justified are judges acting when investigations against policemen are started by the criminal authorities?	.96
 <i>Cynicism towards Citizens (Cronbach's α = .57; KMO = .50)</i>	
A policeman is never appreciated by citizens however much he/she makes efforts.	.84
When sometimes the police is charged with some crimes (like using excessive power, bribery, etc), the problems actually are mostly caused by the citizens.	.84
 <i>Cynicism towards Organization (Cronbach's α = .62; KMO = .64)</i>	
If an investigation starts about a policeman, he/she will definitely be punished although he/she makes a justified defense about what he/she had done.	.78
It is mostly another policeman who harms a policeman.	.72
You can only feel happy in this organization only if you have good relations with an influential person.	.77

Table 8: Mean Differences of the Survey Items

Survey Items	CSI Unit Mean/SD (N)	Police Station Mean/SD(N)	Traffic Mean/SD(N)	Public Order Mean/SD (N)	F
Job Satisfaction					
Considering all aspects of the job/work you are doing, to what extent are you satisfied with it? ^a	6.69/2.36 (134)	5.27/2.82 (557)	5.69/2.77 (272)	5.76/2.62 (433)	10.48***
Job Dissatisfaction (R)					
What number out of 10 would you give if you were to score your level of happiness at workplace? (reversed)	3.60/2.74 (134)	5.25/3.02 (556)	4.74/3.14 (275)	4.76/2.99 (439)	3.59**
Motivators (Herzberg, 1968)					
<i>Work Itself</i>					
Administrative Fairness ^b					
To what extent is it fair and justified who is appointed to which position (police station, division, team, bureau, district, etc)?	1.88/2.28 (133)	1.05/2.11 (548)	1.99/2.72 (270)	1.48/2.45 (427)	11.29***
To what extent is it fair and justified when they make routine appointments (appointments to and from 1st and 2nd region) proceedings?	3.17/2.82 (134)	2.48/2.69 (548)	3.03/2.91 (270)	2.35/2.60 (432)	5.73**
How much fair and justified is it when it comes to the results from administrative disciplinary investigations?	4.20/2.55 (133)	3.26/2.84 (547)	3.91/3.01 (268)	3.46/2.81 (428)	5.82**
Fairness in Criminal proceedings ^b					
How much fair and justified are prosecutors acting when investigations against policemen are started by the criminal authorities?	3.87/2.52 (131)	4.27/2.91 (544)	4.15/2.93 (266)	3.75/2.83 (430)	2.90*
How much fair and justified are judges acting when investigations against policemen are started by the criminal authorities?	4.38/2.58 (131)	4.77/2.95 (547)	4.82/2.87 (270)	4.21/2.88 (430)	3.98**

Table 8: (cont'd)

Cynicism towards Citizens ^c					
A policeman is never appreciated by citizens however much he/she makes efforts.	6.87/2.72 (127)	6.49/2.89 (534)	6.95/2.81 (261)	6.85/2.96 (423)	2.10
When sometimes the police is charged with some crimes (like using excessive power, bribery, etc), the problems actually are mostly caused by the citizens.	7.29/2.45 (127)	7.45/2.84 (531)	7.85/2.37 (261)	7.56/2.71 (418)	1.75
Cynicism towards Organization ^c					
If an investigation starts about a policeman, he/she will definitely be punished although he/she makes a justified defense about what he/she had done.	6.44/3.24 (125)	7.20/3.32 (530)	6.43/3.49 (261)	6.96/3.33 (412)	3.94**
It is mostly another policeman who harms a policeman.	4.53/3.29 (129)	5.19/3.52 (533)	5.44/3.41 (261)	4.57/3.38 (415)	4.97**
You can only feel happy in this organization only if you have good relations with an influential person.	8.06/2.67 (129)	8.78/2.43 (535)	8.25/2.69 (264)	8.44/2.61 (412)	4.30**
Responsibility ^c (R)					
I do not have enough legal liability to carry out what I should do for my country as a policeman. (reversed)	7.20/3.25 (128)	7.33/3.19 (529)	7.87/2.80 (262)	8.05/2.86 (420)	5.81**
Advancement ^a					
Considering the possibilities you may be promoted to a higher rank or to a more prestigious position, to what extent are you satisfied with it?	3.86/3.15 (133)	2.80/3.04 (555)	3.21/3.27 (273)	2.90/3.11 (429)	4.73**
Achievement					
To what extent is it fair and justified when it comes to rewards and appreciations by the success and good performance?	1.46/2.14 (134)	.71/1.62 (551)	1.20/2.22 (270)	1.08/1.99 (433)	7.87***
Recognition					
How much pride do you take in your environment and in the society since you are a policeman? ^d	7.40/2.57 (134)	7.16/3.02 (558)	7.36/2.90 (278)	7.43/2.90 (436)	.80

Table 8: (cont'd)**Hygiene Elements** (Herzberg, 1968)

<i>Status^e</i>					
Considering your profession and social/cultural status; where do you see yourself (as an individual) in terms of social status?	5.31/2.28 (134)	4.92/2.80 (558)	5.49/2.74 (276)	5.22/2.62 (434)	3.01*
Considering your economic status, which economic layer do you see yourself in?	4.56/1.89 (134)	4.35/2.21 (555)	4.37/2.04 (276)	4.37/1.90 (435)	.38
<i>Supervision</i>					
Considering all aspects of it, to what extent are you satisfied with the superiors you work with? ^a	5.63/2.89 (133)	3.75/3.10 (557)	4.68/3.07 (274)	4.26/3.16 (431)	15.69***
Considering all aspects of it, to what extent are you satisfied with the top management of your organization? ^a	4.23/2.98 (133)	2.63/2.73 (556)	3.55/3.08 (274)	2.97/2.91 (434)	14.35***
How much do you think are your superiors care about the personal situation and family problems of their subordinates including the related problems that they might be going through? ^f	5.17/3.25 (134)	3.03/3.10 (558)	3.72/3.39 (274)	3.31/3.22 (432)	16.99***
<i>Relationship with Peers</i>					
If you were to score a number out of 10, which one would you give for your relations with your colleagues? ^g	7.01/1.99 (134)	6.23/2.67 (552)	6.67/2.38 (276)	6.71/2.49 (434)	5.37**
<i>Salary^a</i>					
How satisfied are you about your monthly income, considering all income coming to your home?	4.62/2.74 (133)	3.82/2.59 (544)	4.10/2.60 (262)	3.82/2.59 (544)	3.52*
How satisfied is your spouse about your monthly income, considering all income coming to your home?	4.59/2.69 (123)	3.90/2.69 (500)	4.19/2.82 (239)	4.24/2.62 (370)	2.63*

Table 8: (cont'd)**Job Characteristics** (Hackman and Oldham, 1975)***Autonomy***

I can make decisions on my own about how to do my work or about how to act during my work (taking initiatives). ^c	5.35/3.38 (132)	4.59/3.62 (522)	5.27/3.47 (267)	5.09/3.34 (411)	3.43*
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Task Significance

What I am doing is better in terms of reputation, status and prestige compared to what my colleagues are doing. ^c	4.97/3.33 (134)	4.07/3.89 (516)	5.60/3.91 (263)	4.09/3.82 (415)	11.84***
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Task Variety

I often feel bored (reversed). ^h	2.77/.85 (132)	2.63/.83 (533)	2.64/.90 (262)	2.58/.81 (418)	1.63
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* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

^a 0 = *Not satisfied at all* ~ 10 = *Quite satisfied*

^b 0 = *Not fair at all* ~ 10 = *Completely fair and justified*

^c 0 = *Absolutely not true* ~ 10 = *Absolutely true*

^d 0 = *No pride at all* ~ 10 = *I am very much proud of it*

^e 0 = *In the lowest status* ~ 10 = *In the highest status*

^f 0 = *Not caring at all* ~ 10 = *Very much caring*

^g 0 = *No relationship at all* ~ 10 = *Quite strong relationship*

^h 0 = *Definitely agree*; 2 = *Agree*; 3 = *Do not agree*; 4 = *Definitely disagree*

Table 9: Bivariate Correlations among the Variables of Job Satisfaction Model

	1	2	3	4	5	6	7	8	9	10	11	12
Job Satisfaction	1											
Administrative Fairness	.42***	1										
Fairness in Criminal Proceedings	.23***	.38***	1									
Cynicism towards Citizens	-.14***	-.21***	-.22***	1								
Cynicism towards Organization	-.29***	-.46***	-.21***	.33***	1							
Responsibility	.15***	.22***	.17***	-.47***	-.31***	1						
Advancement	.39***	.34***	.17***	-.15***	-.23***	.14***	1					
Achievement	.29***	.55***	.25***	-.18***	-.33***	.19***	.32***	1				
Recognition	.51***	.29***	.20***	-.07***	-.20***	.06**	.32***	.20***	1			
Autonomy	.32***	.22***	.12***	-.02	-.14***	.04	.22***	.13***	.25***	1		
Task Significance	.27***	.19***	.08***	-.03	-.07**	.02	.20***	.14***	.23***	.25***	1	
Task Variety	.20***	.13***	.08***	-.09***	-.13***	.08***	-.09***	-.13***	.07***	.12***	.11***	1

Entries are Pearson Correlation Coefficients; *p<.05, ** p<.01, *** p<.001

Table 10: Bivariate Correlations among the Variables of Job Dissatisfaction Model

	1	2	3	4	5	6	7	8	9	10
Job Dissatisfaction	1									
Age	-.11***	1								
Gender	-.06**	-.13***	1							
Educational Level	.02	-.42***	.04*	1						
Tenure	-.10***	.94***	-.09***	-.41***	1					
Rank	-.14***	.01	.03	.27***	.05*	1				
Status	-.40***	.08***	.07***	-.01**	.08***	.12***	1			
Supervision	-.60***	.08***	.11***	.01	.09***	.20***	.41***	1		
Relationship with Peers	-.43***	.03	.01	-.01	.04*	.08***	.38***	.41***	1	
Salary	-.24***	-.10***	.06*	.12***	-.07**	.14***	.42***	.26***	.20***	1

Entries are Pearson Correlation Coefficients; *p<.05, ** p<.01, *** p<.001

BIBLIOGRAPHY

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- Acikgoz, N., Hanci, I. H., & Cakir, A. H. (2002). Olay yerinden DNA analizi için biyolojik örnek toplama ve örneklerin laboratuara gönderilme usulleri. *AÜHFD*, 51(2), 199-206.
- Akdogan, H., & Kose, Y. (2012). Promotion systems, rank and job satisfaction of police officers: A meta analysis. *Turkish Journal of Police Studies*, 14(2), 51-74.
- Aksu, N. (2012). Examining the Job satisfaction Levels with Some Demographic factors. *Turkish Journal of Police Studies*, 14(1), 59-79.
- Aremu, A. O., & Adeyoju, C. A. (2003). Job commitment, job satisfaction and gender as predictors of mentoring the Nigeria Police. *Policing: An International Journal of Police Strategies & Management*, 26, 377-385.
- Bachman, R., & Schutt, R. K. (2007). *The practice of research in criminology and criminal justice* (3rd ed.). Thousand Oaks, CA: Sage.
- Balci, F. (2011). The effects of education on police officer job satisfaction: The case of Turkish National Police. *International journal of Human sciences*, 8(2), 265-285.
- Bastemur, Y. (2006). *Is tatmini ile yasam tatmini arasindaki iliskiler: Kayseri Emniyet Mudurlugu'nde bir arastirma* (Unpublished master's thesis). Erciyes University, Kayseri, Turkey.
- Bennett, R.R. (1997). Job satisfaction among police constables: A comparative study in three developing nations. *Justice Quarterly*, 14, 295-323.
- Boke, K. & Nalla, M. K., (2009) Police organizational culture and job satisfaction: A comparison of law enforcement officers' perceptions in two Midwestern states in the U.S. *Journal of Criminal Justice and Security*, 11(1), 55-73.
- Brough, P., & Frame, R. (2004). Predicting police job satisfaction and turnover intentions: The role of social support and police organizational variables. *New Zealand Journal of Psychology*, 33(1), 8-16.
- Brunetto, Y., & Farr-Wharton, R. (2002). Using social identity theory to explain the job satisfaction of public sector employees. *The International Journal of Public Sector Management*, 15, 534 -551.
- Bryman, A. (2004). *Social research methods*. New York: Oxford University Press.
- Buker, H., & Dolu, O. (2010). Police job satisfaction in Turkey: Effects of demographic, organizational and jurisdictional factors. *International Journal of Comparative and Applied Criminal Justice*, 34(1), 25-51.

- Burke, J. R. (1989). Career stages, satisfaction, and well-being, among police officers. *Psychological Reports*, 65, 3-12.
- Burke, R., & Mikkelsen, A. (2004). Gender issues in policing do they matter? *Women in Management Review*, 20, 133-143.
- Burke, R. J., & Mikkelsen, A. (2006). Examining the career plateau among police officers. *Policing: An International Journal of Police Strategies & Management*, 29, 691-703.
- Buzawa, S. E. (1984). Determining patrol officer job satisfaction: The role of selected demographic and job-specific attitudes. *Criminology*, 22, 61-81.
- Buzawa, A., Austin, T., & Bannon, J. (1994). The role of selected socio-demographic and job-specific variables in predicting patrol officer job satisfaction: A reexamination ten years later. *American Journal of Police*, 13(2), 51-75.
- Carlan, P. E. (1999). Occupational outcomes of criminal justice graduates: Is the master's degree a wise investment? *Journal of Criminal Justice Education*, 10(1), 39-55.
- Ceylan, B. (2008). *Ülkemizde olay yeri inceleme uygulamalarına genel bakış ve mevcut sistemin değerlendirilmesi* (Unpublished doctoral dissertation) Istanbul University, Istanbul, Turkey.
- Chiou, J. C. (2004). *A study of job satisfaction/dissatisfaction in Taiwan's police* (Unpublished doctoral dissertation) Sam Houston State University, Huntsville, TX.
- Dantzker, M. L. (1994). Measuring job satisfaction in police departments and policy implications: An examination of a mid-size, southern police department. *American Journal of Police*, 13, 77-101.
- Dantzker, M.L., & Surette, M. A. (1996). The perceived levels of job satisfaction among police officers : A descriptive review. *Journal of Police and Criminal Psychology*, 11(2), 7-12.
- Dantzker, M.L. (1997). Police officer job satisfaction: Does agency size make a difference? *Criminal Justice Policy Review*, 8, 309-322.
- Dantzker, M. L., & Kubin, B. (1998). Job satisfaction: The gender perspective among police officers. *American Journal of Criminal Justice*, 23(1), 19-31.
- Demircioglu, M. (2010). *Information-seeking behavior of Crime scene Investigators in the Turkish National Police* (Unpublished doctoral dissertation) University of North Texas, Denton, TX.
- Denzin, N. K. (1970). *The research act: A theoretical introduction to sociological methods*. Chicago, IL: Aldine.
- Dowler, K. (2005). Job satisfaction, burnout, and perception of unfair treatment: The relationship between race and police work. *Police Quarterly*, 8, 476-489.

- Durmus, K. (2010). *Olay yeri inceleme uygulamalarında dokiimantasyon standartlarının oluşturulması* (Unpublished doctoral dissertation) Istanbul University, Istanbul, Turkey.
- Ercikti, S. (2008). Major determinants of job satisfaction among mid-level police managers. (Order No. 3333808, University of Louisville). ProQuest Dissertations and Theses, 157-n/a. Retrieved from <http://ezproxy.msu.edu/login?url=http://search.proquest.com/docview/304555680?accountid=12598>. (304555680).
- Field, A. (2009). *Discovering Statistics using SPSS*. London: Sage.
- Fish, J. T. (2004). *The evidence does not lie: A forensic investigation program to bridge the gaps between crime scene investigation and forensic science*. (Unpublished doctoral dissertation). University of Tennessee, Knoxville, TN.
- Fisher, B. A., & Fisher, D. R. (2012). *Techniques of crime scene investigation*. Boca Raton, FL: CRC Press.
- Friday, S. S., & Friday, E. (2003). Racioethnic perceptions of job characteristics and job satisfaction. *Journal of Management Development*, 22, 426-442.
- Fry, L.W., & Greenfeld, S. (1980). An examination of attitudinal differences between policewomen and policemen. *Journal of Applied Psychology*, 1, 123-126.
- Garcia, V., & Cao, L. (2005). Race satisfaction with the police in a small city. *Journal of Criminal justice*, 33, 191-199.
- Griffin, R. G., Dunbar, R.L.M., & McGill, M.E. (1978). Factors associated with job satisfaction among police personnel. *Journal of Police Science and Administration*, 6, 77-85.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159-170.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 60, 159-170.
- Hackman, J., & Oldham, G. (1980). *Work Redesign*. Reading, MA: Addison-Wesley.
- Hall, R. (1968). Professionalism and Bureaucratization. *American Sociological Review*, 33, 92-104.
- Herzberg, F. (1968). One more time: How do you motivate employees? *Harvard Business Review*, 46, 53-62.
- Higgins, G. E., Ercikti, S., & Gennaro, F.V. (2013). Job satisfaction: validating Dantzker's four-factor model using structural equation modeling. *Criminal Justice Studies*, 26(1), 19-29.

- Hoath, D. R., Schneider, F. W., & Starr, M. W. (1998). Police job satisfaction as a function of career orientation and position tenure: Implications for selection and community policing. *Journal of Criminal Justice*, 26, 337-347.
- Holden, R. N. (1980). *A study of motivation and job satisfaction in the Houston Police Department* (Unpublished doctoral dissertation) Sam Houston State University, Huntsville, TX.
- Jo, Y., & Hoover, L. T. (2012). Source of job satisfaction among South Korean police officers. *International Journal of Police Science & Management*, 14(2), 136-153.
- Johnson, R. R. (2012). Police officer job satisfaction: A multidimensional analysis. *Policy Quarterly*, 15(2), 157-176.
- Kang, W., & Nalla, M. K. (2011). Perceived citizen cooperation, police operational philosophy, and job satisfaction on support for civilian oversight of the police in South Korea. *Asian Criminology*, 6, 177-189.
- Kaygisiz, U. F. (2010). *1 Haziran 2005 tarihinden sonra mevzuatımızda yapılan düzenlemelerin olay yeri inceleme çalışmalarına getirdiği değişiklikler* (Unpublished master's thesis). Cukurova University, Adana, Turkey.
- Kaygusuz, Z. (2005). *Avrupa İnsan Hakları Mahkemesi kararları çerçevesinde Kollukta olması gereken olay yeri incelemesi* (Unpublished master's thesis). Ataturk University, Erzurum, Turkey.
- Kennedy, D. B., Homant, R. J., & Emery, G. L. (1990). AIDS concerns among crime scene investigators. *Journal of Police Science and Administration*, 17(1), 12-19.
- Kirkcaldy, B., Brown, J., & Cooper, C. L. (1998). The demographics of occupational stress among police superintendents. *Journal of Managerial Psychology*, 13, 90-101.
- Lefkowitz, J. (1974). Job attitudes of police: Overall description and demographic correlates. *Journal of Vocational Behavior*, 5, 221- 230.
- Lim, K.G. V., & Teo, S.H. T. (1998). Effects of individual characteristics on police officers' work-related attitudes. *Journal of Managerial Psychology*, 13, 334-342.
- Lim G. K. V., Teo, H.S.T., & See, B.K.S. (2000). Perceived job image among police officers in Singapore: Factorial dimensions and differential effects. *The Journal of Social Psychology*, 140, 740-750.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, 370–396.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2005). *Applied multivariate research: Design and interpretation*. London: Sage.

- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
- Mrevlje, T. P. (2014). Coping with Work-related Traumatic Situations among Crime Scene Technicians. *Stress and Health*.
- Nalla, M. K., Rydberg, J., & Mesko, G. (2011). Organizational factors, environmental climate, and job satisfaction among police in Slovenia. *European Journal of Criminology*, 8(2), 144-156.
- Nalla, M. K., & Boke, K. (2011). What's in a name? Organizational, environmental, and cultural factors on support for community policing in Turkey and the U.S.. *European Journal on Criminal Policy and Research*, 17, 285-303.
- Nalla, M. K., & Kang, W. (2012). Organizational Climate, Perceived Citizen Support, and Job Satisfaction of Police Officers: Findings from the Post-Grand Reform Era in South Korea. Satisfaction among South Korean police officers. *Asian Criminology*, 7, 153-171.
- Namey, E., Guest, G., Thairu, L., & Johnson, L. (2007). Data reduction techniques for large qualitative data sets. *Handbook for team-based qualitative research*, 137-162.
- Ozel, A, Bayindir, N., Inan, H. Z., & Ozel, E. (2009). The effect of educational differences on the level of job satisfaction in police officers in Turkey. *International Journal of Police Science and Management*, 11(3), 358-365.
- Salmaner, H. (2002). *Emniyet teşkilatında suç yeri yönetimi ve yöneticiliği* (Unpublished master's thesis). Istanbul University, Istanbul, Turkey.
- Sanli, S. (2006). *Adana ilinde çalışan polislerin iş doyumu ve tükenmişlik düzeylerinin bazı değişkenler açısından incelenmesi* (Unpublished master's thesis). Cukurova University, Adana, Turkey.
- Seltzer, R., Alone, S., & Howard, G. (1996). Police satisfaction with their jobs: Arresting officers in the District of Columbia. *Police Studies*, 19(4), 25-37.
- Smith, P. C, Kendall, L. M., & Hulin, C. L. (1969). *The measurement of satisfaction in work and retirement*. Chicago, IL: Rand McNally.
- Suggs, D. (2010). A comparison of job satisfaction between patrol officers and those in specialized units within police departments. (Order No. 1476693, Tennessee State University). *ProQuest Dissertations and Theses*, 82. Retrieved from <http://ezproxy.msu.edu/login?url=http://search.proquest.com/docview/516301177?accountid=12598>. (516301177).
- Tongur, A. (2011). *Organizational Support, Organizational Citizenship Behavior, and Perceived Performance: Analysis of Crime Scene Investigation Units of Turkish National Police* (Unpublished doctoral dissertation) University of Central Florida Orlando, FL.

- Walsh, J., Taber, T., & Beehr, T. (1980). An Integrated Model of Job Characteristics. *Organizational Behavior and Human Performance*, 25, 252-67.
- Walsh, A., & Ollenburger, J. C. (2001). *Essential statistics for the social and behavioral sciences*. Upper Saddle River, NJ: Prentice Hall.
- Weisburd, D., & Britt, C. (2007). *Statistics in criminal justice*. New York: Springer Science+Business Media, LLC.
- Yao Wu, T. (2010). A study of personality, organizational factors, and job satisfaction among taiwanese police officers. (Order No. 3470085, Sam Houston State University). *ProQuest Dissertations and Theses*, 141-n/a. Retrieved from <http://ezproxy.msu.edu/login?url=http://search.proquest.com/docview/743819286?accountid=12598>. (743819286).
- Yigit, R., Dilmac, B., & Deniz, M. E. (2011). Job and life satisfaction: A survey of Konya Police Department. *Turkish Journal of Police Studies*, 13(3), 1-18.
- Yukseloglu, E. H., Ozcan, Ş. Ş., & Ceylan, B. (2008). Crime scene investigation: The case of Turkey. *Turkish Journal of Police Studies*, 10(1), 61-80.
- Zhao, J., Thurman, Q., & He, N. (1999). Sources of job satisfaction among police officers: A test of demographic and work environment models. *Justice Quarterly*, 16(1), 153-173.