

AN EXPLORATORY STUDY OF JUVENILE PROBATION OFFICER  
JOB STRESS AND STRESS-RELATED OUTCOMES

by

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## ABSTRACT

Job stress in criminal justice occupations has been the subject of research since the mid-1970s. Employees who perceive their jobs as stressful may experience potential negative outcomes related to job stress: higher rates of turnover intent, higher rates of burnout, lower levels of job satisfaction, and lower levels of organizational commitment. These potential negative outcomes can be costly to organizations in terms of budget (salaries and training), productivity, the morale of other employees, and a reduction in terms of the quality of services provided to criminal justice clientele. While all jobs have the potential to be stressful, at least at times, there may be individual characteristics that moderate the relationships between experiencing job stress and the potential negative outcomes that may result from job stress.

There is considerable job stress research conducted with police officer and institutional corrections officer populations. Few studies focus on community corrections, particularly juvenile probation officers. This research addresses the lack of job stress research on juvenile probation officers by surveying a population of juvenile probation officers in the state of Texas

In general, juvenile probation officers in this sample identified their organizations as being fair, reported high or very high levels of job satisfaction, have a balance between job demands and job control, and only 33.9% reported high levels of stress.

Organizational commitment levels were high and turnover intent was low for this sample.

Most of the hypothesized moderating relationships were not supported by the data in this study, with two exceptions: race and ethnicity. Non-white officers reported lower levels of turnover intent when experiencing job stress than white officers. Non-Hispanic officers reported higher levels of job satisfaction when experiencing job stress than Hispanic officers.

## I. INTRODUCTION

The common perception of the job of a probation officer is that it is a people-oriented, intense, and stressful job (Slate, Wells, & Johnson, 2003). Despite this common perception, few studies have focused on job stress experienced by probation officers (O'Donnell & Stephens, 2001; Pitts, 2007). Most studies of job stress in criminal justice occupations have focused on police officers and institutional corrections officers (O'Donnell & Stephens, 2001; Pitts, 2007; Wells, Colbert, & Slate, 2006).

The limited number of job stress studies focusing on probation and parole officers indicate that, although police officers and corrections officers may encounter the same offenders as probation and parole officers, their roles are different enough to make comparison between these occupations inappropriate (O'Donnell & Stephens, 2001; Patterson, 1992; Pitts, 2007; Simmons, Cochran, & Blount, 1997; Slate, Johnson, & Wells, 2000; Slate, Wells, & Johnson, 2003; Whisler, 1994). Juvenile probation officers work with very young offenders (in Texas, ages range from 10 to 16) and officers have specialized roles in both the justice system and the communities in which they work. Probation officers have more substantive, qualitative, and long-term contact with offenders than police officers (Slate et al., 2003). The goals of police officers, corrections officers, and probation officers (adult and juvenile) are also significantly different, which can add to the inappropriateness of making comparisons between these occupations. Probation officers must achieve competing goals (punishment, rehabilitation, deterrence, and public safety) with shrinking budgets (Pitts, 2007; Schwalbe & Maschi, 2009; Steiner, Purkiss, Kifer, Roberts, & Hemmens, 2004). They are exposed to physical danger, often without the reinforcements available to police

officers and corrections officers (Pitts, 2007). Given the differences between the different criminal justice occupations, the existing literature on work-related stress should not be generalized to the population of juvenile probation officers without first directly studying these officers.

This first chapter introduces the general topic of job stress, including a brief preview of existing measures. In Chapter 2, a more detailed literature review is offered, covering sections including: definitions of stress, theoretical frameworks used to understand job stress, work environment stressors, measurements of job stress, consequences of job stress, and moderating factors between job stress and stress-related outcomes. Chapter 3 offers research questions and hypotheses, the sampling plan, the research methodology, and the analytic strategy for this study. Chapter 4 includes details about the findings from the data analysis. Chapter 5 provides a discussion of significant findings, limitations of the study, implications of findings, and directions for future research.

The current study sought to accomplish three goals. The first goal was to identify the work environment stressors and the extent of job stress experienced by juvenile probation officers. The second goal was to identify the relationships between perceived levels of job stress and outcomes of experiencing job stress. Third, the role of moderating factors such as age, race, and social support were explored. This study adds to the extant literature regarding job stress for correctional and other criminal justice professionals by studying the previously ignored population of juvenile probation officers. The specific population of interest for this study was juvenile probation officers in the state of Texas.



## Juvenile Probation Officers

Juvenile probation officers in the state of Texas are employed by individual counties or judicial districts made up of multiple small counties. The state agency that provides oversight for juvenile probation in Texas is the Texas Juvenile Justice Department (TJJD) formerly the Texas Juvenile Probation Commission (TJPC). This agency also provides oversight for juvenile parole, juvenile detention centers, juvenile correctional facilities, and contract residential/treatment facilities. There are 254 counties in the state of Texas served by 165 juvenile probation departments<sup>1</sup> (Texas Juvenile Probation Commission, 2011). The Texas Juvenile Justice Department has divided the state into seven regions, primarily for the purpose of providing regional training, support, and oversight.

County juvenile probation departments are considered the “backbone” of the juvenile justice system (Texas Juvenile Justice Department, 2013). Most juvenile delinquents and status offenders are processed, supervised, and provided programs (either directly or indirectly) through local county juvenile probation departments. Most referrals to juvenile probation departments result in community-based supervision. In 2012, out of 51,400 cases referred to juvenile probation authorities, 25% resulted in court-ordered probation and 25% resulted in informal probation (deferred prosecution),

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<sup>1</sup> Sparsely populated counties in the state of Texas are often combined into judicial districts. Districts are formed for the purpose of equalizing caseloads of district courts (Texas Legislative Council, 2013), and resources within a judicial district are often shared between the counties in the district, including juvenile and adult probation services. This may result in a single juvenile probation department serving multiple counties.

21% of cases were diverted<sup>2</sup>, and 2% of cases were dismissed or otherwise removed from the juvenile justice system (Texas Juvenile Probation Commission, 2014). Less than 2% of cases were committed to the Texas Youth Commission or certified as adults (Texas Juvenile Probation Commission, 2014). Juveniles on both court-ordered and informal probation are supervised in the community by juvenile probation officers. In addition, many juveniles who are diverted from supervision participate in programs that are directly or indirectly provided by county juvenile probation departments.

### **Theoretical Background**

Job stress is defined as “the emotional, psychologically, behavioral, and physiological consequences that result from exposure (especially prolonged exposure) to stressors” (Lambert, Hogan, Paoline, & Clarke, 2005, p. 34). The Job Demands-Control (JDC) model, developed by Karasek (1979), indicates that job stress comes from the joint effects of the work situation demands and the range of discretion available to the worker. According to Karasek, when job demands are high and discretion is low, job stress is more likely to occur.

Johnson and Hall (1988) revised Karasek’s JDC model to include a support aspect, specifically, work-related social support. Johnson and Hall (1988) indicated that the amount of social support, especially work-related social support, could moderate the relationship between high demand and low discretion, which Karasek (1979) indicated was the most likely cause of job stress. This revised model is referred to as the Job Demands-Control-Support (JDCS) model and can be used to examine the interaction of

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<sup>2</sup> Diversion refers to minor juvenile offenders that are sent to community-based prevention or early intervention programs instead of being formally or informally supervised by a juvenile probation officer.

social support and job strain (Johnson & Hall, 1988).

### **Scope of the Issue**

Stressors are “the conditions which place excessive or unusual demands on a person and are capable of engendering psychological discomfort (that is, stress), psychological pathology, and/or social disability” (Cullen, Link, Wolfe, & Frank, 1985, p. 507). While stressors can come from many aspects of life, the stressors that will be the focus in this study will be those coming from the work environment. Job stress is the “psychological discomfort or tension, which results from exposure to stressors,” (Cullen, Link, Wolfe, & Frank, 1985, p. 507). There is a substantial amount of literature indicating that an individual perceiving their job as stressful may experience negative outcomes associated with job stress. This is especially true when the person lacks social supports or other types of coping mechanisms to help alleviate stress.

### **Importance of Research**

There are many possible negative consequences to job stress, both for the individual experiencing the stress and for the employing organization. The focus of the present study was on four consequences that can be costly to individuals and organizations: job dissatisfaction, lack of organizational commitment, turnover intent and burnout.

Job satisfaction “reflects employee judgments about how fulfilled and rewarded they feel in their current work situation” (Burke & Paton, 2006, p. 192). Put more simply, job satisfaction can be defined as “the extent to which people like their jobs (Spector, 1996, p. 214). Organizational commitment “refers to the bond formed between the worker and the employing organization” (Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2010, p. 243) and generally includes elements of “loyalty to the organization, identification with the organization...and involvement in the organization” (Lambert, 2006; Mowday, Porter, & Steers, 1982). Organizational commitment refers to the relationship between the employee and the organization, which goes beyond the employee’s relationship with his work.

Job stress is often linked to employee turnover. Turnover can be voluntary (e.g., quitting a job) or involuntary (e.g., getting fired). In this study, voluntary turnover will be measured in the form of turnover intent. Turnover is costly to organizations in terms of recruiting and training. Juvenile probation officers (JPOs) must go through training to become certified juvenile probation officers before they can independently supervise juvenile probationers. Once certified, JPOs must attend continued training to maintain their certifications. Initial and ongoing training involves money and time on the part of the employing agency. When a person leaves a position, this same process must be followed for anyone hired as a replacement. Matteson and Ivanovich (1987) refer to this as an investment expense that is lost; not only are time and money lost, but the skills, knowledge, experience, and abilities of the employee are also lost.

Community corrections officers work with offenders very differently than police or corrections officers. Community corrections officers, including juvenile probation

officers (JPOs), work with individual caseloads. A JPO is assigned specific offenders to work with, and the officer is responsible for the supervision of those offenders. They become very knowledgeable about the individuals on their caseloads, and develop relationships with these individuals and significant others in these individuals' lives (e.g., families, employers, teachers) in order to better supervise them. Many offenders have issues trusting others, especially authority figures, and it may take a significant amount of time for offenders to develop a relationship with their probation officer. In addition, many offenders have mental health issues that make supervision more challenging and individualized. When a probation officer leaves his or her position, the supervision of the offender is disrupted, and the replacement officer may have significant challenges in establishing a relationship with the offenders he or she inherits.

Burnout is “a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do ‘people work’ of some kind” (Maslach & Jackson, 1981, p. 99). Burnout can include elements of emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Jackson, 1981; Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2010). Some employees who experience burnout will leave their jobs (e.g., voluntary turnover). For other employees, however, especially those who have tenure in their job, who may be close to retirement, or who feel they do not have any other employment options, burnout may lead to employees “checking out” and disengaging from their clients and their fellow employees.

In the juvenile justice system, there is considerable discretion regarding informal or adjudicated outcomes. Rehabilitation is still the primary focus of the juvenile justice system. Juvenile probation officer recommendations for sentencing are most often

followed by juvenile court judges; the JPO is seen as the expert who has supervised the juveniles, has completed the presentence investigations, and knows the resources available. When a probation officer experiences burnout, individualized justice may be compromised. If a JPO does not do the investigation necessary to provide an adequate individualized sentencing recommendation to the judge, the juvenile is at risk of not receiving the appropriate sentence, especially if the juvenile has rehabilitation needs.

Individuals react to stressors in different ways. Individual differences (Matteson & Ivancevich, 1987) or personal characteristics (the term in the present study) may act as moderators between work environment stressors and the level of job stress experienced by officers. In the job stress literature, there are mixed results regarding whether aspects of the work environment or personal characteristics are more powerful influences on whether job stress leads to negative outcomes, such as job dissatisfaction. Five personal characteristics that are commonly examined in job stress studies are age, tenure, race, marital status, and gender.

In general, jurisdiction size is rarely factored into studies of criminal justice occupations. There are no studies regarding stress and juvenile probation officers that have considered jurisdiction size and the possible job experience differences between urban, suburban, and rural jurisdictions. In Texas, the geographic area of interest in this study, over half of the counties in the state are categorized as rural (population size less than 25,000).

## **Statement of the Problem**

There is a considerable literature on the potential negative impacts of job stress on both individuals and organizations in many different occupations. In the discipline of criminal justice, most of this literature has focused on police officers and institutional corrections officers. The present study adds a missing component to the existing literature and provides important insight into the phenomenon of job stress experienced by juvenile probation officers. Findings provide useful information for administrators and supervisors that seek to reduce the potential negative effects of job stress on their employees and their organizations.

## II. LITERATURE REVIEW

Due to the lack of research on juvenile probation officers, this chapter reviewing the job stress literature will primarily focus on other criminal justice occupations: police, institutional corrections (juvenile and adult), and adult community corrections (probation/parole).

### Defining Stress

A difficulty in any study regarding job stress is defining the concept of stress. The word *stress* has many different meanings. Matteson and Ivancevich (1987) stated that it is one of the most imprecise words in scientific studies. The concept of stress in the physical sciences and engineering is “the physical pressure, pull, or other force exerted on one thing by another; strain” (Dictionary.com). From a medical standpoint, “stress is essentially the rate of wear and tear in the body” (Selye, 1984, p. 1). The study of the potential negative consequences of stress in the social sciences comes from multiple disciplines, including biology, medicine, psychology, sociology, endocrinology, and anthropology (Matteson & Ivancevich, 1987).

Stress has been defined as both a stimulus and a response, depending on the study (Matteson & Ivancevich, 1987). Stress, from a scientific viewpoint, is defined as the “the nonspecific response of the body to any demand” (Selye, 1984, p. 55). Dowden and Tellier (2004, p. 32) define stress as a neutral concept, as “an interaction between an individual and his or her environment.” Stress is an adaptive response to a stressor that is neither inherently good nor bad (Matteson & Ivancevich, 1987). Pearlin and Schooler (1978) and Triplett, Mullings, and Scarborough (1996) also define stress neutrally, as the



individual response to strain. Triplett and colleagues measured this as a perception of stress on the job. Stress can result in positive outcomes as well as negative ones (Matteson & Ivancevich, 1987). Selye (1984) refers to stress that results in positive outcomes as *eustress*. For example, completing a challenging task at work involves stress, but the end result is satisfaction in a job well done.

In the social science literature, stress is most often viewed as a negative or problematic concept, what Matteson and Ivancevich (1987) term "dysfunctional" stress. Selye (1984) acknowledges that both positive and negative situations can create stress, but long-term and intense stress can have negative effects. Cohen, Kessler, and Gordon (1997) state that most approaches to defining stress have some commonalities: they "share an interest in a process in which environmental demands tax or exceed the adaptive capacity of an organism, resulting in psychological and biological changes that may place persons at risk for disease" (p. 3). Palmer, Cooper, and Thomas (2003) state that "stress occurs when the perceived pressure exceeds your perceived ability to cope" (p. 2). A number of studies on police officers and stress have defined stress as an external or personal factor that is experienced by a person resulting in physical or psychological discomfort to some degree (Brown & Campbell, 1994; Oliver & Meier, 2004; Zhao, He, & Lovrich, 2002).

Job stress studies in criminal justice generally focus on "how the work environment impacts attitudes of job stress, job satisfaction, and organizational commitment" (Lambert, 2006, p. 59). Matteson and Ivancevich (1987) define stress as "an adaptive response, moderated by individual differences, that is a consequence of any action, situation, or event that places special demands on a person" (p. 10). The key to this

definition is the phrase "special demands." There are many potential stressors that occur on a daily basis, but that do not necessarily result in job stress. For a potential stressor to cause a person to experience stress, it generally has one of three factors: importance, uncertainty, and duration (Beehr & Bhagat, 1985; Matteson & Ivancevich, 1987). The more significant an event is to an individual, the more uncertain the event outcome is, and the longer a special demand is placed on an individual, the more likely the event will cause an individual to experience stress.

### **Theoretical Framework**

A longstanding model used in the job stress literature is the Job Demands-Control (JDC) model developed by Karasek (1979). Karasek states, "psychological strain results not from a single aspect of the work environment, but from the joint effects of the demands of a work situation and the range of decision-making freedom (discretion) available to the worker facing those demands" (p. 287). Karasek (1979) predicted that when job demands are high and discretion is low, job strain would occur. The level of the job demand is perceptual. Workers perceiving that their job demands are high and that they have low levels of control over their work will likely experience negative job-related outcomes (Brough & Williams, 2007). Workers with perceptions of high demand and high levels of control will be less likely to experience negative job-related outcomes (Brough & Williams, 2007).

Criticism of Karasek's theory included arguments that it is too simplistic, and that social support is important in moderating the effects of the demands-strain relationship (Brough & Williams, 2007; Rodriguez, Bravo, Peiro, & Schaufeli, 2001). Some studies

regarding stress and health outcomes indicate that inadequate social support and social isolation increase the number and severity of negative health outcomes (Johnson & Hall, 1988). Johnson and Hall (1988) revised Karasek's JDC model to include a support aspect; specifically, work-related social support. This revised model is referred to as the Job Demands-Control-Support (JD-CS) model and can be used to examine the interaction of social support and job strain. This interaction variable can be used to see if a lack of social support further increases the likelihood of negative consequences that result from job strain (Johnson & Hall, 1988). According to this revised theory, perceived social support may moderate the relationship between job demands and control and job strain (Brough & Williams, 2007). While Johnson and Hall (1988) indicated that workplace social support was a key moderator between job stressors and job strain, others have included social support external to the workplace as a moderating variable.

Matteson and Ivancevich (1987) developed an organizational stress theory proposing that stressors within and external to the organization could lead to stress, which they defined as a cognitive appraisal perception by the individual. If an individual is exposed to work-related stressors, they may experience job stress (which can be measured by physiological, psychological, and behavioral markers). Experiencing job stress can, in turn, lead to negative consequences, including health/family or performance issues. In addition, Matteson and Ivancevich (1987) indicate that there may be individual differences and coping mechanisms that act as moderators between each of these elements in the theory (stressors, job stress, and outcomes). Individual differences and coping mechanisms may also affect whether or not a person initially perceives a potential stressor as being an actual stressor (Matteson & Ivancevich, 1987).

## **Work Environment Stressors**

Employees in a wide range of organizations, including policing and corrections, identify many of the same work environment stressors. These include safety concerns (such as the dangerousness of the job), role overload, role ambiguity, family-work conflict, and lack of career development (Triplett, Mullings, & Scarborough, 1996).

Wells, Colbert, and Slate (2006) identified sources of stress in criminal justice organizations as coming from characteristics within the organization (e.g., lack of participation in workplace decision-making, high caseloads, large amounts of paperwork) and sources external to the organization (e.g., decisions made by lenient judges, lack of appreciation by the general public). Cheek and Miller (1983) found that situational stress (stress that comes from daily job duties) for correctional officers was related to inmate violence, and occupational stress was related to organizational factors. Finn and Kuck (2005) found that for community corrections officers, the primary stressors were found to be high caseloads, excessive paperwork, and unexpected or uncontrolled deadlines. Other sources of stress for probation officers have been identified, including competing goals, small budgets, high-risk offenders, public scrutiny, lack of organizational support, disagreement with court decisions, and lack of programs (Pitts, 2007). Two primary sources of job stress were explored in the present study: job demands and control and perceived lack of organizational justice.

**Job demands and control.** A scale developed by Jackson, Wall, Martin, and Davids (1993) measures general dimensions of the workplace environment that may be stressors for employees. This scale includes five areas of job demands and control:

timing control, method control, monitoring demand, problem-solving demand, and production responsibility. This scale is commonly used in studies in a variety of occupations, including high-stress public service occupations (Brough & Williams, 2007). Timing control and method control refer to the individual's control over the scheduling and method by which work is completed (Jackson et al., 1993). Monitoring demand refers to passive monitoring of employees. Problem-solving demand refers to how much "active, cognitive processing" an employee needs to do to complete job tasks (Jackson et al., 1993, p. 754). The final dimension of the scale is production responsibility, which is "the cost of errors in terms of both lost output and damage to expensive equipment" (Jackson et al., 1993, p. 754).

**Organizational justice.** There are a number of studies in the job stress literature that overlap with research in organizational justice. Organizational justice, according to Lambert (2003), refers to the perceptions of justice and fairness that help shape employee attitudes and behaviors, including the impact on organizational commitment and job satisfaction of workers. Perceptions of unfairness in the workplace can lead to job dissatisfaction, low organizational commitment, and ultimately burnout and turnover intent, among other negative outcomes. These are also negative outcomes that are commonly measured in the job stress literature.

Organizational justice can be subdivided into two types of justice: procedural justice and distributive justice (Lambert, 2003). Distributive justice refers to employee outcomes, such as pay, promotion, benefits, and work schedules (Lambert, 2003). Procedural justice refers to the perceptions of fairness of the procedures used to determine employee outcomes (Lambert & Paoline, 2008).

Early research regarding organizational justice focused on the effects of perceptions of distributive and procedural fairness on satisfaction with citizen-police encounters (Tyler & Folger, 1980) on the endorsement of and satisfaction with formal and political leaders (Tyler & Caine, 1981; Tyler, Rasinski, & McGraw, 1985), on the perceptions of fairness of courtroom experiences (Tyler, 1984a), on citizen satisfaction with police (Tyler, 1984b), on citizens' compliance with the law (Tyler, 1990), and on citizens' assessment of fairness of legal procedures (Casper, Tyler, & Fisher, 1988; Tyler, 1988).

In his early work, Tyler (1990) discovered that individuals will be more likely to obey a law when they felt the law was just, and that individuals' satisfaction with case outcomes in felony and civil cases were strongly impacted by their perceptions of the fairness of the court process, regardless of whether the outcomes were in their favor (Casper, Tyler, & Fisher, 1988; Tyler, 1988). Stemming from his early works on formal and political leadership, Tyler and his colleagues applied the same concepts (e.g., procedural justice, legitimacy of authority) to organizational settings (Blader & Tyler, 2003; De Cremer & Tyler, 2007; Greenberg & Tyler, 1987; Tyler, 1986; Tyler, 1991; Tyler, 2001; Tyler, 2002; Tyler & Blader, 2000; Tyler & De Cremer, 2005; Tyler & DeGoey, 1995; Tyler & DeGoey, 1996; Tyler & Lind, 1992).

If employees perceive that they are being treated fairly by their organization, this will increase organizational commitment (Lambert, 2003). Rather than a bond to a job or a belief in the importance of work, organizational commitment is a bond to the organization as a whole (Lambert, 2003; Lambert, Barton, & Hogan, 1999).

Lambert (2003) found that perceptions of both distributive and procedural justice had positive effects on job satisfaction of correctional staff, and perceptions of procedural justice had the greatest effect on level of organizational commitment. Employee perceptions of performance evaluations as fair and accurate served as a measure for distributive justice. Employee perceptions of promotional procedures as being just and fair served as a measure for procedural justice. Perceptions of procedural justice had the greatest effect on levels of organizational commitment (Lambert, 2003). Employees who perceive their organization as fair are also more likely to trust their organization and perceive that they are supported by the organization (Reynolds, 2015).

In a study of turnover intention of jail employees and generational differences, Stinchcomb and Leip (2013) found that, regardless of age, fairness and respect were important to all employees in keeping them on the job. The questions in the study included “being treated fairly, seeing grievances resolved fairly, and being respected by those higher in the chain of command” (Stinchcomb & Leip, 2013, p. 77). Distributive justice, regarding opportunities and benefits, was also found to be important to jail employees, particularly job security, competitive salary and benefits, and being vested in the retirement system (Stinchcomb & Leip, 2013).

Perceptions of procedural and distributive justice can increase the perceived legitimacy of an organization. By increasing the legitimacy of an organization, desired compliance and obedience can be achieved more easily and cost-effectively than trying to gain influence over others based solely on power. Employees have been shown to be more willing to follow the rules and authorities of an organization when they believe they are legitimate (Tyler, 2006). In a study of police officers, Reynolds (2015) found that

positive perceptions of organizational fairness led to better job performance and reduced counterproductive work behaviors (those that harm the organization). Increased organizational fairness was also associated with increased trust and support of the organization by officers (Reynolds, 2015). Low levels of organizational commitment can be a negative outcome of job stress. Theoretically, by increasing the perceived legitimacy of an organization, levels of organizational commitment will increase.

Related to organizational legitimacy is the concept of participatory management. Research shows that participating in decision-making decreases stress and increases levels of morale and job satisfaction (Slate & Vogel, 1997). By increasing the amount of participatory management in an organization, employees' perceptions of procedural justice may also increase, thus increasing the legitimacy of the organization and organizational commitment of employees.

### **Measuring Stress**

The phrase *job stressors* refers to work-related conditions or exposures; *strains* refer to the responses, either psychological or physiological, to these conditions or exposures; and *health outcomes* refer to long-term negative health effects resulting from work-related conditions or exposures (Hurrell, Nelson, & Simmons, 1998).

Stress can be assessed objectively (the environmental approach) through self-reporting and computing the cumulative effects of objective stressful life events, such as being unemployed or having a recent death in the family (Andreou, Alexopoulos, Lionis, Varvogli, Gnardellis, Chrousos, & Varviri, 2011; Cohen, Kamark, & Mermelstein, 1983).

The second approach to measuring stress is subjective in nature (the psychological



approach) and uses self-reports to assess perceived stress (Andreou et al., 2011; Cohen et al., 1983). The third approach is a biological one. Biological markers (Andreou et al., 2011), such as self-reported physical symptoms and illnesses (Cheek & Miller, 1982), are used to measure the level of stress of individuals.

**Environmental approach.** With the objective environmental approach to measuring stress, it is assumed that the cumulative effect of stressful life events can have a negative impact on a person's physical or emotional health (Cohen, Kamark, & Mermelstein, 1983). "The environmental perspective holds that certain events and situational factors are inherently stressful and that exposure to these events or situational factors result in dysfunction" (De Bruin, 2006, p. 68). Cohen, Kessler, and Gordon (1997) refer to these events and situational factors as "environmental demands, stressors, or events" (p. 4). To measure stress, surveys are conducted asking individuals about stressful life-events experienced within a certain period of time, and these events are usually weighted to determine the magnitude of the amount of stress an individual is experiencing based on the clustering of these events (Holms & Rahe, 1967).

The Job Stress Index (JSI), developed by Sandman (1992), is a general stress measure and has been used in a number of occupational stress studies, including stress experienced by juvenile correctional officers (Auberbach, Quick & Pegg, 2003; Wells, Minor, Angel, Matz, & Amato, 2009). The JSI (Sandman, 1992) includes eleven scales in three areas:

- Job satisfaction
  - Lack of feedback
  - Lack of participation
  - Lack of achievement
  - Lack of competence of supervisor
  - Lack of interpersonal skills of supervisor
  - Lack of competence of others
  - Lack of interpersonal skills of others
- Stress
  - Red tape
  - Time pressure
  - Job insecurity
- Physical demands and danger

Because the JSI is a general stress measure and is not job or organization-specific, it provides a point of comparison with other stress studies in a variety of fields.

**Psychological approach.** The psychological approach to measuring stress uses self-report surveys to measure people's *perceptions* of the levels and sources of stress they may be experiencing. Cohen, Kamark, and Mermelstein (1983) state that objective measures of stress do not take into account that people interact differently with their environments and possess differing amounts of coping skills. Cohen, Kessler, and Gordon (1997) refer to subjective evaluations of stress as "*appraisals or perceptions of stress*" (p. 4) and state that individuals label themselves as stressed when "their environmental demands are perceived to exceed their abilities to cope" (p. 6). The point

at which this happens is different for everyone; an event only affects someone who perceives it as being stressful.

Cohen, Kamark, and Mermelstein (1983) developed the Perceived Stress Scale (PSS) to address what they considered was the lack of a global measure of perceived stress. This 14-point scale “measures the degree to which situations in one’s life are appraised as stressful” (p. 385). The instrument is used to assess correlations of stress measures with physical symptomology, health center utilization, depressive symptomology, and social anxiety. The PSS has achieved widespread use in psychology and other behavioral sciences in the United States and has been translated into a number of other languages. The PSS was found by Cohen et al. (1983) to better predict health and health-related outcomes than life-event scores and has been found to have adequate test-retest and internal reliability. Cohen et al. (1983) also developed a 4-point PSS scale for telephone interviews, which make large-scale surveys more feasible.

Another subjective self-report stress scale commonly used is the General Work Stress Scale (GWSS; De Bruin, 2006). This scale measures “an individual’s overall level of subjectively experienced or ‘felt’ work related stress” (De Bruin, 2006, p. 68), and is similar to the Perceived Stress Scale (Cohen, Karmack, & Mermelstein, 1983). The GWSS is a nine-item scale that considers the relationship between an individual and his or her perceived demands of his workplace, and the emotional, cognitive, motivational, and social outcomes of that relationship.

The Stress Appraisal Measure (SAM), developed by Peacock and Wong (1990), is a multidimensional approach to measuring perceived stress and has respondents answer

questions in six appraisal dimensions. Three primary appraisal dimensions focus on anticipatory stress: (1) threat: the potential for harm or loss; (2) challenge: potential for gain or growth; and (3) centrality: how an individual perceives an event relative to their well-being (Peacock and Wong, 1990). Perceptions of control are the focus of the three secondary appraisal dimensions: (1) controllable-by-self; (2) controllable-by-others; and (3) uncontrollable-by-anyone (Peacock and Wong, 1990). The perceptions of control are associated with coping patterns, which may be different based on perceived situational control. The SAM also measures overall perceived stressfulness, so that the relationship between the specific appraisal dimensions and overall stress perceptions can be investigated (Peacock & Wong, 1990).

**Biological approach.** Biological measures of stress generally measure responses to stressors – these responses could be affective, behavioral, or biological (Cohen, Kessler, & Gordon, 1997). Biological stress studies in the psychiatry literature focus on changes in the sympathetic-adrenal medullary system and the hypothalamic-pituitary-adrenocortical axis. These systems have been found to be involved in stress responses regarding the pituitary gland, endorphin release, and immune-mediated and psychiatric diseases (Cohen et al., 1997). Changes in the sympathetic-adrenal medullary system are measured by changes in norepinephrine and epinephrine secretions, and changes in the hypothalamic-pituitary-adrenocortical axis are measured by levels of corticosteroids (cortisol).

In the social science literature, approaches to biological stress measurement focus on identifying health issues experienced by respondents. The most common method of measuring these is through a self-report inventory of physical symptoms and illnesses.

Selye (1976) developed a 54-item scale (Selye Health Scale) to measure the severity of physical symptoms and illnesses experienced by respondents. This scale has been adopted for use in a number of physical stress studies in criminal justice occupations (Cheek & Miller, 1983; Slate & Vogel, 1997; Wells, Colbert, & Slate, 2006).

Respondents are asked to identify illnesses by frequency during the past six months, such as colds, hay fever, problems with seeing or hearing, diabetes, and asthma.

**Integrated measures.** It is important to note that these three approaches to measuring stress are not necessarily used in isolation. Cohen, Kessler, and Gordon (1997) provide a model of the stress process integrating these three perspectives, stating that each of these three perspectives may not be sufficient by themselves to accurately assess negative stress responses. For example, environmental approaches focus on life events and their influence on disease risk, but ignore any psychological or biological pathways that may affect this influence (Cohen et al., 1997). The psychological approach may miss the environmental causes of emotional responses or the biological pathways that link psychological states and disease (Cohen et al., 1997). Finally, the biological approach focuses on links between stressors and biological responses (e.g., cardiovascular and hormonal), but generally ignore the psychological pathways through which stressors might affect biological responses (Cohen et al., 1997).

One integrated scale used to measure the major dimensions of stress is the PMI (Pressure Management Indicator), developed by Williams and Cooper (1998). The PMI includes measures of organizational security, organizational commitment, job satisfaction, organizational satisfaction, state of mind, resilience, confidence level, physical symptoms, behavioral symptoms, workload, relationships, recognition,

organizational climate, personal responsibility, managerial role, home-work balance, daily hassles, drive, patience-impatience, personal influence, control, problem focus, life-work balance, and social support (Williams & Cooper, 1998). The scale has been used in studies to measure why people leave organizations, gender differences in the stress process, organizational stability, and differences in stress related to level of seniority (Williams & Cooper, 1998). The PMI scale is not used in the criminal justice occupational literature, but it has been used in a number of other studies. One study using the PMI investigated negative behaviors and bullying at work and their effects on the health and well-being of employees (Cooper, Hoel, & Faragher, 2004). Those who experienced bullying had worse health outcomes than those who were not bullied, but negative behaviors (other than bullying) had much stronger associated adverse health effects (Cooper et al., 2004).

### **Consequences of Job Stress**

The possible consequences of job stress included in this study were organizational commitment, job satisfaction, burnout, and turnover intent. Following is a review of these four concepts as they relate to criminal justice occupations.

**Organizational commitment.** Organizational commitment is an idea that goes beyond an individual's specific job or direct workgroup; "it is a commitment to the whole employing organization" (Hogan, Lambert, Jenkins, & Wambold, 2006, p. 46).

Organizational commitment "refers to the bond formed between the worker and the employing organization" (Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2010, p. 243).

Camp (1994) defined organizational commitment as "congruence between the goals of

the individual and the organization whereby the individual identifies with and extends effort on behalf of the general goals of the organization” (p. 284). Organizational commitment is often measured using the Organizational Commitment Questionnaire (OCQ: Mowday, Porter, and Steers, 1982), which measures an individual’s commitment to their employing organization.

Positive employee behaviors (e.g., higher levels of job performance) are associated with increased organizational commitment, and negative employee behaviors (e.g., turnover) are associated with decreased organizational commitment. Hogan, Lambert, Jenkins, and Wambold (2006) administered a survey to 272 employees at a high security correctional institution in the Midwest. Nine measures of organizational commitment were adapted from the OCQ. They found (in order of magnitude, from strongest to weakest effect on organizational commitment) that role conflict, role ambiguity, work-family conflict, and supervisory status affected a correctional employee’s level of organizational commitment.

In a study of correctional staff, Lambert and Paoline (2008) examined the impact of demographic, organizational, and job characteristics on job stress, job satisfaction, and organizational commitment. The authors found that there is a strong positive association between job satisfaction and organizational commitment, and that high levels of job stress are negatively associated with job satisfaction.

Another study of correctional officers and organizational commitment found that some of the same predictors of stress were also related to organizational commitment, including position within an agency, supervisory status, tenure, role ambiguity, and role

conflict. As tenure increased, organizational commitment decreased. Those who supervised others and non-custody staff reported higher levels of organizational commitment. Role ambiguity and role conflict were negatively associated with organizational commitment (Hogan, Lambert, Jenkins, & Wambold, 2006). In a study of correctional officers and turnover intent, officers with less organizational commitment indicated a greater desire and intent to leave (Griffin, Hogan, & Lambert, 2013).

**Job satisfaction.** Every job has its joys and hassles; job satisfaction is an overall judgment about how rewarded and fulfilled people feel in their current jobs (Burke & Paton, 2006). In other words, job satisfaction is “the extent to which people like their jobs” (Spector, 1996, p. 214). A common measure of job satisfaction is the Job Satisfaction Inventory (JSI; Brayfield & Rothe, 1984), which is an attitude scale. According to Brayfield and Rothe (1951), job satisfaction can “be inferred from the individual’s attitude toward his work” (p. 307).

Lambert, Hogan, Paoline, and Clarke (2005) studied job stress, job satisfaction, and organizational commitment among private prison staff. Job satisfaction was measured using the JSI developed by Brayfield and Rothe (1951). They found that age and job satisfaction were positively associated. As age increased among the sample population, so did job satisfaction. In addition, officers who had non-supervisory roles reported less job satisfaction than other staff. High levels of role stressors (e.g., role conflict, role ambiguity, role overload, and dangerousness) were also correlated with job dissatisfaction.



Burke and Paton (2006) conducted a study on the relationship between police officer job satisfaction and operational and organizational characteristics. The JSI was used to measure police officer job satisfaction. Organizational hassles, such as red tape, were found to have the strongest negative effect on job satisfaction when the other independent variables were controlled. The best model of job satisfaction included both organizational and operational experiences.

**Burnout.** Schaufeli and Peeters (2000) identified burnout as a “long-term stress reaction that occurs among professionals who...do people work” (p. 20). Holgate and Clegg (1991) defined burnout as “a response to job stress experienced as a consequence of the demands of human service work” (p. 326). Maslach and Jackson (1981) identified burnout as being multidimensional, including emotional exhaustion, depersonalization, and reduced personal accomplishment, and that it is “a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do ‘people work’ of some kind” (p. 99). Stress, especially chronic and intense stress, can lead to burnout (Whitehead, 1987). Negative outcomes of burnout include absenteeism and attrition (De Silva, Hewage, & Fonseka, 2009) and cynicism (Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2009).

Cherniss (1980) states that people who are most susceptible to burnout feel they have a calling for a particular line of work. Similarly, Freudenberger (1980) identifies people who are dedicated, either to a cause, a lifestyle, or a field of work, as being more likely to experience burnout.

Maslach and Jackson's (1981) instrument for measuring burnout, the Maslach Burnout Inventory (MBI), was developed to identify burnout among professionals working in human services (De Silva, Hewage, & Fonseka, 2009). It is the most widely used instrument to identify burnout, having been used in more than 90% of publications on burnout (De Silva, Hewage, & Fonseka, 2009). Other versions have followed, including one designed specifically for educators (MBI-ES) and one to assess burnout among workers in non-human services occupations (MBI-GS; De Silva, Hewage, & Fonseka, 2009).

Whitehead (1987) surveyed 387 line officers working in New York State probation offices, to test two leading theories of job burnout. One theory, established by Maslach (1982), identified the primary source of burnout as intense and frequent interpersonal contact. Cherniss (1980), however, offered a second theory of burnout, specifically that boredom, excessive job demands, and organizational factors result in excessive and prolonged levels of job stress, which creates strain, which results in individuals "burning out" by becoming apathetic, cynical, and rigid. Whitehead's (1987) findings did not support the first theory in that burnout was not related to working with offenders; in fact, more contact with offenders resulted in positive feelings of accomplishment. This suggests that burnout may result from something other than client contact.

Holgate and Clegg (1991) studied burnout in a sample of probation officers. Their study included three goals: (1) to develop causal path models for the process of burnout and identifying distinctions (if any) between older and younger probation officers; (2) to link the three dimensions of burnout (emotional exhaustion, cynicism, and professional efficacy) into one causal model (specifically, that emotional exhaustion contributes to

cynicism, and both of these contribute to lowered professional efficacy); and (3) to distinguish between the effects of personality and organizational variables on burnout. Holgate and Clegg (1991) surveyed probation officers using the Maslach Burnout Inventory (MBI) and found that role conflict (two competing duties), role ambiguity (not clear what a job entails), and lack of participation regarding decision-making were associated with probation officer burnout. They found that burnout in corrections is due to organizational stress. In addition, age (and related career stage) seem to also affect the process of burnout; older workers with more tenure tended to disengage from client contact as a result of burnout.

In a study on burnout of correctional staff, Griffin, Hogan, Lambert, Tucker-Gail, and Baker (2010) explored whether “organizational commitment may insulate those who form a strong bond with the organization from experiencing burnout, or it may create burnout among those employees who are highly committed to the organization who put forth greater effort” (p. 243). Griffin and colleagues defined organizational commitment as loyalty to, identification with, and desire for involvement in the organization. The authors did not specify a specific direction for the relationship between burnout and organizational commitment; they were more interested in examining the relationship between these two variables. The authors found that organizational commitment did not have a significant relationship in any direction with any of the three dimensions of burnout measured in the study (depersonalization, emotional exhaustion, and a reduced sense of personal accomplishment). A possible reason for this lack of a relationship could be that the facility in which the study was conducted had only been operating for five years at the time of the study. Organizational commitment and burnout may both be

influenced by tenure, so it is possible that employees had not been working at the facility long enough to experience organizational commitment and/or burnout.

One of the few studies conducted with a juvenile probation officer population was a qualitative study by Salyers, Hood, Schwartz, Alexander, and Aalsma (2015). The authors interviewed 26 juvenile probation officers as part of a larger study. An interesting aspect of this study was a question asking probation officers to define burnout. To the study participants, burnout ranged from officers feeling like they were “in a rut,” “feeling a sense of apathy,” “just going through the motions;” to more severe cases of, “feeling a sense of ‘dread’” and “feelings of avoidance, where they don’t want to come to work;” to the most extreme cases of, “being ‘done’ or ‘fed up’, and likely to look for a new job” (Salyers et al., 2015, p. 6). As indicated in other studies concerning burnout, participants in this study indicated that burnout can affect their relationships with clients and their families, can result in them taking out their frustrations on their clients or being less tolerant, and may result in them doing the bare minimum to get the job done, which can affect the quality of care provided to clients (Salyers et al., 2015).

A study by White, Holloway, Aalsma, Adams, and Salyers (2015) utilized the previously mentioned Maslach Burnout Inventory to study juvenile probation officer burnout. Their findings indicate that of the 245 participants in their study, 32% reported high levels of emotional exhaustion and 28% reported high levels of cynicism; both of these measures are subscales of burnout (White et al., 2015). Interestingly, more than half of the respondents reported feeling high levels of professional efficacy, despite feelings of burnout. Those officers with high-risk clients also reported higher levels of cynicism, and officers who reported being dissatisfied with their jobs reported higher

levels of burnout (White et al., 2015).

**Turnover intent.** People leave their jobs for a variety of reasons; turnover can be either voluntary or involuntary (Lambert, 2006; Price & Mueller, 1986). In the correctional literature, it is indicated that involuntary turnover occurs less often and may often be in the best interest of the organization and the terminated employee (McShane & Williams, 1993; Stohr, Self, & Lovrich, 1992). Voluntary turnover is usually defined as voluntary attrition from a position (Mitchell, MacKenzie, Styve, & Gover, 2000) or operationalized in terms of resignations (Minor, Wells, Angel, & Matz, 2011), and can be disruptive and harmful to criminal justice organizations (Lambert, 2006). Unlike many other professions, correctional facilities rely on staff members, rather than machines and technology (Mitchell et al., 2000). Thus, high rates of turnover are costly in terms of recruiting and training dollars (Lambert & Paoline, 2008). In addition, indirect costs of high turnover include “decreased productivity, reduced quality of service, and low staff morale” (Mitchell et al., 2000, p. 335), which may result in reduced safety for inmates and correctional staff.

A meta-analysis of the correlates of turnover intent, conducted by Matz, Woo, and Kim, (2014), analyzed 13 studies of three criminal justice populations: police, institutional corrections, and community corrections. The strongest correlate of turnover intent for all three populations was job satisfaction Matz et al., (2014). Emotional exhaustion (burnout) was a strong correlate for police officers and institutional corrections officers, and alternative job search behavior was a strong correlate for police officers and community corrections officers (Matz et al., 2014).

Mitchell, Mackenzie, Styve, & Gover (2000) examined how occupational issues, such as burnout, job dissatisfaction, lack of participation in decision-making, job stress, and lack of social support, contribute to voluntary turnover of juvenile correctional staff members. They hypothesized that working in a corrections environment leads to levels of stress and job dissatisfaction that are harmful which, in turn, led to many employees quitting their jobs. In their study of 49 juvenile correctional facilities in 20 states, data on correctional staff were collected using a self-report survey (1,362 respondents). A 14-item scale was used to measure the amount of stress, depression, anxiety, and anger the respondent experienced over the last six months. The authors found stress to be significantly associated with turnover, especially when respondents were asked about the stress levels of their co-workers. In other words, respondents were reluctant to report on their own stress levels, but were willing to report on their observations of their co-workers. An important point made by Mitchell et al. (2000) is that individual-level variables are most important “in how they mediate perceptions of the organization and the environment,” rather than their direct relationship to turnover (p. 351).

Slate and Vogel (1997) explored the relationships between the stress levels of correctional employees, their perceptions of employee involvement in decision-making within the work place, and their thoughts about quitting their jobs. Employees from seven correctional institutions were given anonymous surveys, resulting in 486 completed surveys. Stress was measured using a subscale of the Occupational Stress Inventory called the Occupational Environment Scale developed by Osipow & Spokane (1983). To measure attitudes about participation in decision-making in the workplace, The Attitudes on Participation Survey was developed by Slate and Vogel (1997).

Physical symptoms and illnesses were measured using the Selye Health Scale (Selye, 1976). Those employees who perceived the atmosphere for participating in decision making as negative were more likely to experience higher levels of physical stress, higher levels of occupational stress, and more frequently thought about quitting their jobs.

Lambert (2001, 2006) developed and tested a turnover-intent model that is based on three premises. The first premise is that personal characteristics, such as gender, age, position, tenure, educational level, and race, will help to "shape the turnover intent of correctional staff" (Lambert, 2006, p. 62). The second premise is that turnover intent is shaped by work attitudes, such as job satisfaction and organizational commitment. Job stress (treated as a work attitude) and job involvement were added to the original 2001 model (Lambert, 2006). The third premise is that work environment measures were less influential on turnover intention than job satisfaction and organizational commitment. Lambert's (2006) findings were that gender, tenure, and education were associated with turnover intent. Neither of the work environment variables (job involvement and job stress) had significant effects on turnover intent; however, job satisfaction and organizational commitment significantly reduced an employee's intent to leave. In a 2010 study of turnover intent among jail staff, Lambert and Paoline found a negative relationship between input into decision-making and turnover intent; as input increased, officers reported less intent to leave the agency.

Camp (1994), in his study on organizational commitment for corrections workers, distinguished between commitment to an individual institution and commitment to the Bureau of Prisons (BOP). Camp (1994) hypothesized that higher scores on both measures of commitment should lead to a lower probability of turnover, and commitment

to the BOP should be a stronger predictor of turnover than commitment to individual institutions. In addition, organizational commitment (both institutional and commitment to the BOP) was hypothesized to be a stronger predictor of turnover than job satisfaction. Camp's (1994) findings generally supported the hypotheses: organizational commitment was negatively associated with turnover, and job satisfaction was not significantly associated with turnover. The distinction between commitment to the Bureau and commitment to individual institutions, however, was not significant (Camp, 1994).

### **Moderating Factors**

Studies of job stress indicate that there may be a number of individual characteristics and types of social support that may moderate the relationship between work stressors and job stress. The strength of the relationship between job stressors and job stress may be moderated by individual characteristics (Matteson & Ivancevich, 1987). This study will explore whether the relationships between perceived job stress and stress-related outcomes may also be moderated by these same factors (Crank, Regoli, Hewitt, & Culbertson, 1995; Finney, Stergiopoulos, Hensel, Bonato, & Dewa, 2013). Individual characteristics include age, race/ethnicity, marital status, tenure, gender, and educational level. Social support includes support from peers, from supervisors, friends, and/or family members. In addition, there may be characteristics about the jurisdiction in which an individual works that may moderate these relationships. In particular, the size of jurisdiction one works in could affect the relationships between job stress and organizational commitment, job satisfaction, burnout, and turnover intent.



A moderating variable is one that potentially affects the “direction and/or strength of the relationship between an independent or predictor variable and a dependent or criterion variable” (Baron & Kenny, 1986, p. 1174). In this study, demographic characteristics, levels of social support, and jurisdiction size were hypothesized to affect the strength of the relationship between stress and the negative outcomes of burnout, turnover intent, organizational commitment, and job satisfaction. These variables were said to function as moderators, not mediators, of the relationship between job stress and negative outcomes. A mediating variable is one that “accounts for the relation between the predictor and the criterion” (Baron & Kenny, 1986, p. 1176). In other words, there may be an indirect relationship between the independent and dependent variables that exists because of a third variable.

**Tenure.** In the existing literature, tenure is generally studied as having a direct effect on how an individual reacts to job stress. Holgate and Clegg (1991) discovered that one’s career stage, which is often associated with age, seems to affect the process of burnout related to job stress. For younger officers, the effect of emotional exhaustion on client contact depended on personality disposition (Holgate & Clegg, 1991). Emotional exhaustion decreased the amount of client contact for those low in emotionality, which is a dimension of personality disposition (Holgate & Clegg, 1991). For those high in emotionality, however, the level of emotional exhaustion does not seem to affect the amount of client contact (Holgate & Clegg, 1991). For older officers, emotional exhaustion and lack of personal accomplishment had stronger effects on the amount of client contact than individual dispositions of the officers (Holgate & Clegg, 1991).

Cullen, Link, Wolfe, and Frank (1985) found in a sample of correctional officers that correctional experience increased work stress, but a longer tenure did not necessarily mean those officers were more dissatisfied with their jobs or that they experienced more general psychological depression. In a study of juvenile correctional officers, Auerbach, Quick, and Pegg (2003) found that the longer someone was employed as a juvenile correctional officer, the higher their scores on the Job Stress Index (Sandman, 1992). In their study of police executives and role stress, work alienation, and anomie, Crank, Regoli, Hewitt, and Culberson (1995) found that chiefs with more experience had lower levels of role stress, work alienation, and anomie. Lambert and Paoline (2010) found, in their study of turnover intent of jail staff, that the desire to leave decreased as tenure increased.

Gayman and Bradley (2012) found in their study of probation and parole officers that job tenure was positively associated with burnout. Specifically, they found that for each year of employment, job burnout increased by .01 units (Gayman & Bradley, 2012). This finding held, even when measures of the organizational climate were controlled for (Gayman & Bradley, 2012).

These findings indicate that, while criminal justice practitioners may experience more stress and burnout the longer they are with an agency, it does not necessarily mean that they are more likely to quit their jobs. This is consistent with the idea that the longer a person is employed in a specific job, the harder it is to leave. There may be a desire to leave, but an employee may stay due to loyalty to an agency or to clients, not wanting to look for another job, or being settled in a lifestyle and a community and not wanting potential change in these circumstances that would come with other employment. The

more time an employee has invested toward retirement, or the closer an employee is to actual retirement could also affect the lack of desire to leave an agency, despite negative aspects of the job.

Most studies have studied the direct effect of tenure on how an individual reacts to job stress. Possible moderating effects of tenure have been suggested in the literature, however. For example, career stage theory indicates that the career stage of an employee moderates the effects of workplace factors (including job stress) on different outcomes (Cohen, 1991; Griffin, Hogan, & Lambert, 2013). Career stages are indicative of tenure; Cohen (1991) identified four career stages: organizational entry (1 year or less), transitional (early career; 1-4 years), midcareer building (5-9 years), and later career (10+ years).

**Age.** Most studies of criminal justice occupations study the direct effects age may have on how an individual reacts to stress. Whitehead (1987), for example, found that younger probation officers experienced more frequent job burnout than older workers. This might not be contradictory to other studies looking at age as a predictor of stress or stress-related outcomes, if one assumes that length of service is not necessarily a measure of age, which may be unique to community corrections occupations. In the community corrections professions (both juvenile and adult), there are no age restrictions like those that exist in many policing professions. This means that a new probation officer could potentially be of any age. If turnover in an occupation is relatively high, then an “older” worker may only be a few years older than a “younger” worker. In addition, younger, idealistic officers, especially those who recently graduated from college, may experience a reality shock when they first start their employment in corrections (Whitehead, 1987).

It is for these reasons that both age and tenure were measured as separate variables in the current study.

Holgate and Clegg (1991) studied whether burnout was associated with age in a sample of community corrections officers. They measured each respondent's level of emotionality. Those with high scores in emotionality "are typified by low ego strength, guilt proneness, anxiety, psychosomatic concerns, and worry" (Holgate & Clegg, 1991, p. 328). They also measured respondents' face-to-face contact with clients (measured in hours per week), role ambiguity, role conflict, and perceived participation in decision-making. Measurement of burnout was determined by using the three subscales of the Maslach Burnout Inventory (MBI): emotional exhaustion, depersonalization, and personal accomplishment. Emotionality was measured by using items from the EASI-III Temperament Survey. Role conflict and role ambiguity were measured using the Role Questionnaire developed by Rizzo, House, and Lirtzman (1970). The approach Holgate and Clegg used in this study differs from that of previous studies. Instead of viewing client contact as a cause of burnout, they treated client contact as a response to burnout. Results from the study indicate that emotional exhaustion can result in disengagement from client contact. Younger officers reported less burnout than older officers, and older officers with more experience tended to respond to burnout by disengaging from their work (Holgate & Clegg, 1991).

Griffin, Hogan, Lambert, Tucker-Gail, and Baker (2010) found, in a study with prison staff, that age had a negative relationship with the three dimensions of burnout: emotional exhaustion, a reduced sense of accomplishment, and depersonalization.

Younger staff in the prison reported more depersonalization than older staff. Out of the

personal characteristics that were included in the study (gender, race, age, education, tenure, supervisory status, and position), only age had a significant effect on burnout. Mitchell, Mackenzie, Styve, and Gover (2000) found in a study of juvenile correctional staff that older employees showed fewer tendencies to leave their positions, as they are likely more entrenched in their jobs because of job stability and personal and financial commitments.

While age is usually studied in terms of direct relationships with stress or stress-related outcome variables, there is some indication in the job stress literature that age may have a moderating effect on the relationships between job stress and certain outcomes. For example, Mauno, Ruokolainen, and Kinnunen (2013) studied three different occupations in Finland regarding the moderating effects of age between job stress and well-being. One of the variables included in “well-being” was job satisfaction. Mauno, et al. hypothesized that “in the presence of high job stress older employees can be expected to be less vulnerable, implying lower reduction in well-being compared to their younger counterparts” (p. 413). They found, regarding job satisfaction and nurses, that older nurses reported greater job satisfaction when experiencing job insecurity than younger nurses. Therefore, age moderated the effects of the relationship between job insecurity and job satisfaction.

**Gender.** In the majority of job stress studies in criminal justice occupations, gender is studied in terms of the direct effects it may have on job stress levels or stress-related outcomes. Some studies indicate that females experience more work stress than males (Cullen, Link, Wolfe, & Frank, 1985; Wells, Colbert, & Slate, 2006). Cullen, Link, Wolfe, and Frank (1985), in their study of correctional officers, found that gender

had no effect on a measure of life-stress, but that women reported greater levels of work stress. In a study of probation and parole officers, Gayman and Bradley (2012) found that female officers reported more burnout than males.

In their study of the relationship between gender and stress in a state probation officer sample, Wells, Colbert, and Slate (2006) found that women experienced more physical stress and were more apt to take sick days, while men experienced more internal, job, and personal stress and were more likely to have serious illness. While women often have the dual, conflicting roles of both professional and family caregiver (these familial duties are often referred to as “Second Shift”), men still reported more personal stress (Wells et al., 2006). This may be due to differing coping mechanisms in men and women; it is socially acceptable for females to seek help and/or emotional support from friends and family, while men often fall subject to the so-called John-Wayne syndrome in which seeking emotional support is perceived as weakness (Wells et al., 2006). These findings indicate that the support provided by friends and family may insulate women from more serious health effects.

Results from self-report studies about perceptions of stress in criminal justice occupations have suggested that the “toughness” aspects of police and corrections occupations may lead individuals to under-report or deny any personal weaknesses, including stress (Cheek & Miller, 1983; Mitchell, Mackenzie, Styve, & Gover, 2000; Skolnick, 1966; Wilson, 1971). Cheek and Miller (1983) found such results in their study of corrections officers. They found that when asked about their own stress, male corrections officers denied being stressed. However, when asked about their fellow officers, respondents indicated that the other officers did experience stress and that the

job of being a corrections officer was stressful. When asked about the negative effects of job stress on themselves, officers stated that problems were not very likely to occur.

When asked about their fellow officers, however, respondents reported that their fellow officers “had serious problems with alcohol, marriage, children, health, finances, drugs, and neighbors” (Cheek & Miller, 1983, 109-110). Cheek and Miller (1983) found similar results that reflected denial regarding perceptions about emotional problems, interpersonal problems, physical health problems, and job problems, especially for male respondents.

Contrary to other studies regarding gender and stress, Griffin (2006) found few differences between male and female correctional officers regarding the effects of workplace stressors on job stress. Work-family conflict had the greatest effect for both male and female officers. Cullen, Link, Wolfe, and Frank (1985) found gender and job dissatisfaction to be unrelated in a sample of correctional officers, but female officers did experience more stress while at work. Lambert and Paoline (2010) found no significantly relationship between gender and turnover intent among jail staff.

Griffin (2001) suggests that in sex-typed occupations, such as jails and detention centers, the moderating effect of gender on the relationship between job stress variables (such as organizational climate) and job satisfaction should be considered. Griffin (2001) was referring to male-dominated jobs, such as working in a jail or a prison. It is important to study gender in juvenile probation which, unlike other criminal justice occupations, tends to be mostly female, likely because of the social work-orientation of the job.

**Race/ethnicity.** The majority of studies have not found significant relationships between race and job stress. In their study of police executives and role problems, Crank, Regoli, Hewitt, and Culbertson (1995) found that levels of role stress, anomie, and work alienation were lowest for African American police chiefs; however, this relationship was not significant. In a study of organizational climate and work stress among probation and parole officers, Gayman and Bradley (2013) found that African American officers reported less burnout compared to white officers. However, once measures of organizational climate were included in the model, the relationship was not significant (Gayman & Bradley, 2013).

Other studies of race and turnover intent obtained mixed results. Lambert and Paoline (2010), in their study of turnover intent for jail staff, found no significant relationship between race and turnover intent. In contrast, another study of correctional officer turnover by Ferdik, Smith, and Applegate (2014) found a statistically significant relationship between turnover intentions and being Caucasian. Caucasian officers indicated greater turnover intent than African-American officers.

Most researchers have studied the direct effects of race/ethnicity on job stress, turnover intent, and related variables. However, there are a few studies that have examined the moderating effects of ethnicity on the relationship between job stress and stress-related outcomes. Crank, Regoli, Hewitt, and Culbertson (1995), in their study of police chiefs, found that African American chiefs experienced lower levels of work alienation when experiencing stress than white chiefs. Dowden and Tellier (2003) examined the moderating effect of ethnicity on the relationship between job stress and turnover intent in a meta-analysis of job stress studies in criminal justice occupations.



The theoretical basis for inclusion of ethnicity as a moderating variable, for Dowden and Tellier (2003), was the identification hypothesis (Jacobs & Kraft, 1978) which indicates that minority officers will experience less stress when interacting with inmate populations, due to the disproportionate number of minorities in U.S. prisons (Britton, 1997). Dowden and Tellier (2003) found in their meta-analysis that ethnicity played a significant role in moderating the relationship between stress and turnover intent. Specifically, they found that minority corrections officers experienced higher levels of turnover intent when experiencing job stress than Caucasian officers.

**Education.** The amount of education an individual has may be linked to job stress and negative outcomes. The skills and knowledge obtained through education would aid individuals in coping with the complexities of leadership, and educated individuals may be able to better cope with unclear role expectations (Crank, Regoli, Hewitt, & Culberson, 1995). There are mixed results in the literature regarding the impact of education on stress-related factors. Crank et al. (1995), in their study of police executives and role stress, hypothesized that education would have an impact on role ambiguity and perceptions of role stress. They found that levels of role stress, work alienation, and anomie were lower for those police chiefs with postgraduate education.

While education may moderate the relationship between role problems and stress, education may lead to other negative outcomes. For example, Mitchell, Mackenzie, Styve, and Gover (2000) found that higher education was linked to stronger turnover intentions, possibly because highly educated employees have more alternative employment opportunities and are less amenable to certain management styles typical in correctional facilities.

Auerbach, Quick, and Pegg (2003) surveyed 413 juvenile corrections officers in eight facilities in Virginia. They incorporated several previously validated questionnaires into their survey, including the Lie scale of the Minnesota Multiphasic Personality Inventory (MMPI: Kincannon, 1968), the Specific Sources of Occupational Stress Questionnaire (SSOSQ: Anson, Johnson, & Anson, 1997), and the Job Stress Index (JSI: Sandman, 1992). Auerbach and colleagues found higher stress levels associated with higher educational attainment.

Pitts (2007) studied a nationwide, purposive, snowball sample of probation and parole officers using a web-based survey. He considered the main categories of stress experiences, including internal, external, job, and personal stress. Pitts (2007) also included an overall stress measurement. Of particular interest to Pitts (2007) was the relationship between occupational stress and a parole or probation officer's educational preparation for the job. In Pitts' sample, over 90% of the respondents had at least a four-year degree; 29% of these same respondents did not feel they were educationally well prepared for the job. While caution must be made when generalizing his findings due to the sampling method used, Pitts (2007) found that probation and parole officers who felt underprepared educationally had more reported stress.

Cullen, Link, Wolfe, and Frank (1985) surveyed 155 correctional line officers in a southern prison. They hypothesized that education would be a coping mechanism that would moderate stress. Educated officers in their sample were more dissatisfied with their jobs; however, officers with more education were no more likely to experience stress than those with less education. Lambert and Paoline (2010) found, in their study of turnover intent for jail staff, that the higher the educational level (e.g., college degree),

the more likely an employee indicated a desire to leave.

Most researchers have studied the direct effects of education on job stress and stress-related variables. However, Crank, Regoli, Hewitt, and Culbertson (1995) examined the moderating effects of education on the relationship between job stress and role stress. In their study of police chiefs, Crank, Regoli, Hewitt, and Culbertson (1995) found that police chiefs with postgraduate education reported lower levels of role stress when experiencing stress than less educated chiefs.

**Social support.** In the existing job stress literature, social support is often studied as having a direct effect on how an individual reacts to job stress. Individuals possess or have access to a number of factors that may reduce the negative effects of stress or help them effectively deal with stress (Cullen, Link, Wolfe, & Frank, 1985). This includes interpersonal social supports. Social supports can be outside of the workplace, but they can also include relationships with peers (co-workers) and with supervisors (Cullen et al., 1985). Social support refers to connections people have with each other; these connections can provide assistance, help, psychological support, feedback, and motivation, all of which can mitigate negative aspects of workplace stress (Cohen, Underwood, & Gottlieb, 2000; Harvey, 2014; Lambert, Altheimer, & Hogan, 2010), such as feeling alone and isolated (Ileffe & Steed, 2000).

A study by Lambert, Minor, Wells, and Hogan (2015) included four types of social support in their study of correctional staff: administrative, supervisory, coworker, and family and friends support. Administrative, supervisory, and coworker support were found to decrease reported stress; administrative, supervisory, and coworker support were

found to be associated with job satisfaction; and administrative, supervisory, coworker, and family and friends support were associated with commitment (Lambert et al., 2015).

Cullen, Link, Wolfe, and Frank (1985) included social support as a potential coping factor and defined social supports as "interpersonal networks, which furnish affective and instrumental assistance" (p. 510). Cullen and colleagues developed four scales to measure social supports: peer, supervisory, family, and community. Cullen et al. (1985) found that supportive supervisors lessened feelings of stress for correctional officers while on the job. Interestingly, while family and supervisory support lessened feelings of stress in this study, peer support was positively associated with stress (Cullen et al., 1985). This implies that contacts with peers on the job may actually increase stress.

In their qualitative study of juvenile probation officer burnout, Salyers, Hood, Schwartz, Alexander, and Aalsma (2015) included a question about how officers manage burnout. Several participants indicated that social support from their coworkers and supervisors helped them to deal with feelings of burnout. Others described having supportive others in their home lives, such as spouses, friends, and family members, as a means to help them cope with feelings of burnout (Salyers et al., 2015).

Most of the studies on job stress measure the direct affect social support has on the experience of job stress or how social support affects stress outcomes, such as burnout. Moderating effects of social support have been studied between job stressors (e.g., job controls and job demands) and job stress (Johnson & Hall, 1988). It has also been suggested that support, especially administrative support, may play a role in moderating the relationship between job stress and the effects of job stress (Gayman & Bradley,

2013).

**Jurisdiction size.** In general, jurisdiction size is rarely factored into studies of criminal justice occupations. A few studies have focused on rural law enforcement (Oliver & Meier, 2004; Scott, 2004). Oliver and Meier (2004) tested a previously untested hypothesis originally proposed by Sandy and Devine (1978) that identified four possible dimensions of stress for rural law enforcement personnel: security, social factors, working conditions, and inactivity. Oliver and Meier found that the security dimension was highly supported: how long it takes to get to a call or to get backup affected officers' stress levels. Lack of resources and lack of stress training were found to be sources of stress as well.

Scott (2004) sought to expand the literature on police stress and fill in the gap regarding rural law enforcement. While urban and suburban officers have very distinct roles, Scott (2004) argued that rural officers, including chiefs and supervisors, had multi-tasking roles including patrol. This phenomenon also exists in rural probation offices, in which the Chief JPO supervises a juvenile caseload or, in fact, may be the only juvenile probation officer in the county. Scott (2004) found that department size had a positive, significant effect on organizational stress; those in larger departments had higher mean levels of stress than those in smaller departments. This may be due to the increased participation in decision-making present in smaller departments, whereas officers in larger departments may experience more "top-down" decision-making.

There are a few studies that examine jurisdiction size in relation to juvenile court systems (Steiner, 2005; Steiner, 2009). Steiner's (2009) work is concerned with the courts' decisions to waive juveniles to adult court. One study specifically focused on

juvenile probation officers. Ward and Kupchik (2010) investigated how the size of the jurisdiction affects court procedures and juvenile probation officer decision-making and orientations towards treatment and punishment. They found that nonurban officers were less supportive of punishment. They also found that, overall, when probation officers believe they have access to resources to help youth, they are less supportive of punishment. This has implications for probation officer stress levels. If an officer has a treatment-oriented mindset, but his or her jurisdiction lacks the resources to adequately treat a youth, this can create a stressful work environment for the officer.

A recent study of burnout among juvenile probation officers found that officers from urban jurisdictions reported more cynicism than those in rural jurisdictions, but they also reported greater professional efficacy (White, Holloway, Aalsma, Adams, & Salyers, 2015). The authors indicate that the challenges of serving youth in an urban environment have both risk and protective factors for different aspects of burnout (White et al., 2015). For example, though officers in urban settings may be more emotionally drained, the urban environment may allow for more opportunities to make differences in their clients' lives, thus leaving them feeling more professional accomplishment (White et al., 2015).

Another study, one of probation officers in Poland, found that officers from very large cities (over 500,000 residents) experienced significantly more work-related stress than officers from any other city size (Skowronski, 2015). In this same study, officers from cities with 50,001-100,000 residents reported significantly more stress than those from cities with 100,001-500,000 residents (Skowronski, 2015). Finally, officers living in villages (less than 50,000 residents) were found to experience significantly less stress than officers from cities with 50,001-100,000 residents (Skowronski, 2015). These

results seem to indicate that the larger the city in which an officer lives, the more stress is experienced. Place of residence may be different than jurisdiction size; officers could potentially live in a different place than they work. Regardless, these findings are interesting and justify the inclusion of jurisdiction size in the current study.

Of the few studies conducted regarding stress and probation officers, none have considered jurisdiction size and possible differences between urban, suburban, and rural officers. Rural juvenile probation officers tend to be generalists; it is not uncommon for an officer in a single week to conduct an intake, a detention hearing, an adjudication hearing, place a child on electronic monitoring, conduct school, home, and office visits, and complete the paperwork related to all of these activities. Rural officers often have multiple types of offenders on their caseload; a single caseload may include sex offenders, substance abusers, status offenders, and other types of offenders. Rural officers also tend to have smaller caseloads; this may seem a benefit, but rural areas often have fewer resources and smaller budgets to provide programs and services to offenders. While rural officers may have more discretion in their decision-making due to the lack of bureaucracy, they are more likely to live within the same community as their clients and have a hard time “escaping” their jobs. There is also a greater reliance on informal social controls and less formal procedures (Feld, 1991). According to Skowronski (2015), there is greater social control and less anonymity, which may lead to less stress due to a “greater propensity of these people to cooperate with the probation officer” (p. 469).

Urban officers are often specialists, only managing one aspect of the system (court, intake) or one type of offender (sex offenders). While there are more resources in an urban environment, urban officers tend to have larger caseloads, more gang issues,

higher crime rates, and disorganized communities. Urban officers also tend to work in large offices with high levels of bureaucracy and very little participation in management decision-making. There is less reliance on informal social controls and more formality involved in decision-making (Feld, 1991). These differences in the aspects of the job may or may not affect occupational stress. It is the intent of this study to determine the direct and moderating effects of jurisdiction size on job stress and stress-related outcomes.

## **Discussion**

A review of the literature indicates that there is very little extant research on juvenile probation officers specifically related to juvenile probation officer stress and moderating factors. Juvenile probation officers work with a unique population, and often indicate that they want to work with juveniles instead of adults because they feel that juveniles still “have a chance” and can be “saved.” This orientation may bring with it levels of stress that are unique to the profession and the work environment.

Job stress can be measured by biological, psychological, and/or environmental means. Biological measures, such as self-reported health symptoms, may be indicators of overall stress, but not stress related specifically to one’s occupation. The same can be said of environmental measures, which indicate cumulative effects of stressful life events. As indicated in the literature, most job stress studies in criminal justice occupations utilize a psychological approach to measurement, measuring perceived stress related to the work environment.

The corrections and policing literature strongly supports the idea that job stress can have serious physical and mental consequences for employees (Cheek & Miller,



1983; Finn, 1999; Ivancevich & Matteson, 1980). The focus for much of the job stress literature has been on mental consequences. Organizational commitment, job satisfaction, job involvement, burnout, and turnover intent are all potential consequences of job stress. All of these potentially negative outcomes can affect organizations. When employees have “checked out,” are just “going through the motions” of doing their job, become cynical (a dimension of burnout), or intend to leave the organization, the juvenile probation department and the clients the department serves can be negatively impacted.

There may be some personal characteristics that moderate the relationship between job stress and negative outcomes. While not widely included in job stress studies on criminal justice occupations, there is some suggestion in the literature that age, race, tenure, marital status, and education may moderate the relationships between job stress and stress-related outcomes. In addition, the level of social support may affect the relationship between job stress and negative outcomes. The Job Demands Control Support theory (Johnson & Hall, 1988) indicates that social support both in the work environment and external to the work environment can be a coping mechanism that moderates the relationship between job stress and negative outcomes. Jurisdiction size may also impact the relationship between job stress and stress-related outcomes that a juvenile probation officer experiences. Smaller jurisdictions have limited resources, which can affect adjudication outcomes for delinquent youth. Supervisors in smaller jurisdictions often supervise juvenile probationer caseloads in addition to their administrative duties. In large jurisdictions, the level of bureaucracy may affect job stress. In addition, officers in large jurisdictions may have specialized caseloads that can affect their levels of job stress.

This review of the literature has provided some important guidance regarding the variables that should be included in an exploratory study of job stress and juvenile probation officers, and existing measures of many of the concepts in the current study. The research questions in this study are questions that have been asked and answered, but only with other study populations and not juvenile probation officers. In the next chapter the methodology for the present study is explained, including research questions and associated hypotheses, the study design and background, measures included in the survey, and the plan for data analysis.

### III. METHODS

This chapter begins with the research questions and corresponding hypotheses guiding this dissertation. Next, an overview of the study design, variables used in analyses, and a description of the survey instrument are provided. This will be followed by the methods used to gather data and the statistical analyses that were used in this research.

#### Overview

The purpose of this study was to identify and examine job stress experienced by juvenile probation officers (JPOs) and the potential negative outcomes that can result from experiencing job stress. The effects of job stress on negative outcomes (e.g., burnout and turnover intent) were examined. Also, there are several variables included in this study that will be examined as moderating variables--that is, they potentially affect the “direction and/or strength of the relationship between an independent or predictor variable and a dependent or criterion variable” (Baron & Kenny, 1986, p. 1174). In this study, demographic characteristics, levels of social support, and jurisdiction size are hypothesized to affect the strength of the relationship between job stress and the stress-related outcomes of burnout, turnover intent, organizational commitment, and job satisfaction. These variables are said to function as moderators, not mediators, of the relationship between job stress and negative outcomes. A mediating variable is one that “accounts for the relation between the predictor and the criterion” (Baron & Kenny, 1986, p. 1176). In other words, there may be an indirect relationship between the independent and dependent variables that exists because of a third variable. These are

not the relationships hypothesized, however; this will be discussed in the next section (Cohen, Cohen, West, & Aiken, 2003).

### **Research Questions**

Based on a review of the literature and previous findings, six primary research questions were used to guide this research:

1. What are the work environment stressors and levels of job stress experienced by juvenile probation officers?
2. What are the relationships between work environment stressors (job demands, job control and organizational justice) and job stress?
3. What are the relationships between experiencing job stress and potential negative job stress consequences (organizational commitment, job satisfaction, turnover intent, and burnout)?
4. What are the moderating effects of individual characteristics on the relationship between job stress and job stress consequences?
5. What are the moderating effects of social support on the relationship between job stress and negative outcomes?
6. What are the moderating effects of jurisdiction size on the relationship between job stress and negative outcomes?

### **Hypotheses**

Regarding research question #1, the literature suggests that individuals in criminal justice occupations and other occupations involving “people work” have high levels of job stress. This study was exploratory in nature, in that the specific population of interest

(juvenile probation officers) had not previously been studied in the job stress literature. Therefore, there were no specific hypotheses related to the first research question. By identifying the sources of work environment stress and levels of job stress for juvenile probation officers using common measures, the answers to research question #1 will provide points for comparison with other job stress studies in criminal justice occupations.

**Work environment stressors.** Research question #2 focuses on the relationship between work environment stressors and levels of job stress. Based on a review of the literature and previous findings, this study proposed that when employees have high levels of control over the way in which their work is completed, job stress will decrease. The following hypothesis was used to examine the relationship between job control and job stress:

*Hypothesis 2.1.* If job demands are high and job control is low, job stress will increase.

The second work environment stressor included in this study was organizational justice. Both procedural and distributive justice were measured in this study. Distributive justice refers to the perceived fairness of the distribution of organizational benefits, and procedural justice refers to the perceived fairness of procedures used to reward/discipline behavior. Both procedural and distributive justice were measured and combined into the single variable of organizational justice. The following hypothesis was used to examine the relationship between organizational justice and job stress:

**Hypothesis 2.2.** There is a negative relationship between perceived organizational justice and job stress.

**Consequences of job stress.** Research question #3 refers to the relationships between job stress and the consequences of job stress: job satisfaction, organizational commitment, turnover intent, and burnout. Based on a review of the literature, research indicates that the higher the level of job stress reported by an individual, the more likely the individual is to experience one or several of these negative consequences. The following hypotheses were used to examine research question #3:

**Hypothesis 3.1.** There is a negative relationship between job stress and job satisfaction.

**Hypothesis 3.2.** There is a negative relationship between job stress and organizational commitment.

**Hypothesis 3.3.** There is a positive relationship between job stress and turnover intent.

**Hypothesis 3.4.** There is a positive relationship between job stress and burnout.

**Moderating variables.** In most job stress studies, individual-level variables, such as gender and race, are treated as independent variables. Research question #4 explores individual characteristics of officers as being possible moderators of the strength of the relationship between job stress and stress-related outcomes. The individual-level variables of race, age, gender, education, and tenure have all been included in previous job stress studies, and are included in this study as moderating variables. Hypotheses

related to these individual characteristics and their moderating effects on the relationship between job stress and negative consequences are outlined in the following paragraphs.

**Race.** In previous studies regarding job stress, there have been no consistently significant findings regarding race and its effects on turnover intent, burnout, organizational commitment, or job satisfaction. Because of the exploratory nature of the proposed study, race was included as a variable; however, no specific effect of race on the relationship between job stress and negative consequences is expected:

*Hypothesis 4.1.* Race has no moderating effect on the relationship between job stress and negative consequences.

**Gender.** A review of the literature indicates that gender has an impact on how individuals experience stress. These studies generally attribute this difference to the social acceptability for females to admit that they have problems (e.g., job stress) and to accept help for their problems (e.g., talking to friends or peers). In other words, females are more likely to admit to and seek help for job stress and its negative consequences. There are two hypotheses associated with gender and its moderating effect on the relationship between job stress and negative consequences:

*Hypothesis 4.2.* Gender will moderate the strength of the relationship between job stress and organizational commitment, job satisfaction, turnover intent, and burnout.

*Hypothesis 4.3.* Females will experience less job stress than males.

**Age.** A review of the literature indicates that age may have a moderating effect on the relationship between job stress and the negative consequences of job stress. The following hypothesis will be used to assess the moderating effects age may have on the relationship between job stress and stress-related outcomes:

***Hypothesis 4.4.*** Age will moderate the relationship between job stress and stress-related outcomes (job satisfaction, organizational commitment, burnout, and turnover intent).

**Tenure.** Tenure may or not be associated with the age of a juvenile probation officer. Unlike policing, it is common for relatively older employees to be newly hired juvenile probation officers. Therefore, tenure is included as a separate variable from age. According to the literature, tenure may have moderating effects on the relationship between job stress and the negative consequences of job stress. Tenure does not seem to affect job satisfaction (Cullen, Link, Wolfe, & Frank, 1985), but it may affect the relationship between job stress and burnout (Holgate & Clegg, 1991), organizational commitment (Hogan, Lambert, Jenkins, & Wambold, 2006; Lambert, 2006), and turnover intent (Lambert, 2006). The following hypothesis was used to examine the effects tenure has on the relationship between job stress and stress-related outcomes:

***Hypothesis 4.5.*** Tenure will moderate the relationship between job stress and stress-related outcomes (job satisfaction, organizational commitment, burnout, and turnover intent).

**Education.** An employee's education been associated with stress and negative consequences. According to the literature, education may affect the relationship between



job stress and job satisfaction (Lambert, Hogan, Paoline, & Clarke, 2005) and turnover intent (Mitchell, Mackenzie, Styve, & Gover, 2000). The following hypothesis was used to examine the moderating effects of education on the relationship between job stress and stress-related outcomes:

***Hypothesis 4.6.*** Educational level will moderate the relationship between job stress and stress-related outcomes (job satisfaction, organizational commitment, burnout, and turnover intent).

**Social support.** Research question #5 focuses on the moderating effect social support may have on the relationship between job stress and negative consequences. Social support is indicated, in the literature, to moderate the negative outcomes related to stress. The research suggests that high levels of social support reduce the relationship between job stress and the negative consequences of job stress. Research also indicates that women have stronger levels of social support than men. There is a social stigma for men seeking help or comfort from others, whereas for women this behavior is socially acceptable. The following hypothesis was used to examine the moderating effects of social support on the relationship between job stress and stress-related outcomes:

***Hypothesis 5.1.*** Social support will moderate the strength of the relationship between job stress and stress-related outcomes (job satisfaction, burnout, turnover intent, and organizational commitment).

The following hypothesis was used to examine the difference in social support between male and female officers:

**Hypothesis 5.2.** Female officers will report higher levels of social support than male officers

**Jurisdiction size.** The final moderating variable included in this study was jurisdiction size. This was an exploratory variable not included in any other job stress research. There is some research to suggest that jurisdiction size may moderate the relationship between stress and the negative consequences of job stress. The following hypothesis was used to examine the moderating effects of jurisdiction size on the relationship between job stress and stress-related outcomes:

**Hypothesis 6.1.** Jurisdiction size will moderate the strength of the relationship between job stress and stress-related outcomes.

### **Study Design and Background**

This study employed a cross-sectional design utilizing an online self-report survey. The population of juvenile probation officers in the state of Texas was used for the study. The survey, entitled “Juvenile Probation Officer Work Environment Survey,” examined the sources and levels of stress experienced by juvenile probation officers, the work attitudes of organizational commitment and job satisfaction, and individual-level and jurisdictional characteristics of probation officers.

**Survey.** This study utilized an Internet self-report survey distributed through SurveyMonkey ([www.surveymonkey.com](http://www.surveymonkey.com)) to gather data for analyses and testing of hypotheses. Questions for the survey were formatted so that respondents would be guaranteed anonymity regarding their individual responses; no respondent information, including IP addresses, was collected from respondents. Self-report surveys are a

common method of data collection for measuring attitudes and behavior. In addition, Internet-based surveys have become more commonly used in criminal justice research. In some studies, Internet-based surveys are combined with other survey formats, such as paper-based formats (Mustaine, Tewksbury, Connor, & Payne, 2015). In other studies, Internet-based surveys are the sole method of data collection (Harris, Lobanov-Rostovsky, & Levenson, 2015; Johnson, O.N., 2016; Korre, Farioli, Varvarigou, Sato, & Kales, 2014). The survey was created and approved through the Texas State University Institutional Review Board (IRB). A copy of the survey can be found in the Appendix.

**Sample.** Juvenile probation officers in the state of Texas were surveyed for this study. The sample used in this study was a purposive convenience sample of officers throughout the state. The goal of this study was to obtain a statewide sample of JPOs. Because of the scope of the study, limited resources, and difficulty of recruitment, this non-random sample was chosen due to the ability to gain broad participation across a very large state (Pitts, 2007).

Email addresses for juvenile probation officers are not made available by the Texas Juvenile Justice Department (TJJD). In addition, some counties publish emails for officers, while others do not. Because of the difficulty of access to officers, an email was sent to all chief JPOs in Texas for recruitment of survey participants. For follow-up purposes, the chief juvenile probation officer from each county in Texas was also individually contacted via email regarding the study. In the emails, chiefs were asked to distribute the survey to officers in their jurisdictions. Chief juvenile probation officers are also certified juvenile probation officers, and many of them supervise caseloads in addition to their administrative duties. Therefore, chiefs were also asked to participate in

the survey. In addition to the lack of published email addresses for JPOs, chiefs were contacted instead of individual officers, because they were more likely to endorse the survey and encourage their officers to participate, possibly increasing response rates.

There are 254 counties in the state of Texas, served by 166 juvenile probation departments (TJJJ, 2014). The majority of departments are single-county departments; 44 departments are multi-county departments, covering a range of two to six counties (2014 Juvenile Justice Handbook). Data extrapolated from the Texas Juvenile Justice Department (TJJJ) website indicate there are 2,669 certified juvenile probation officers (JPOs), including chiefs, in Texas. It is worth noting that while an individual may be certified as a JPO, this does not mean that they carry a caseload. Chiefs and other administrators, and officers with specialized duties, such as supervision of juveniles in residential placement, may not carry caseloads.

While it is unknown how many people accessed the survey but did not consent to participate, 318 officers agreed to the consent form incorporated into the survey. Twenty-seven cases were deleted for lack of responses on all but demographic questions. The final number of surveys utilized for analysis was 291 (n=291). Assuming the number of certified JPOs is 2,669, this number represents 9% of the overall population for the state. It is important to note that there is no way of identifying whether the sample is representative of the population of juvenile probation officers in the state of Texas. Therefore, it is not possible to generalize results from the sample in this study to the overall population. This will be discussed further in Chapter 5.

## Measures

Specific questions for each measure used in the survey are found in the Appendix. Many measures used multi-item survey questions; answers were summed to form additive indices for each measure. These measures, and demographic and moderating variables not measured by indices, are described below.

### **Work environment stressors.**

***Job demands and control.*** The Job Demands and Control Scale (JDCS) developed by Jackson, Wall, Martin, and Davids (1993) was adapted to measure work environment stressors in this study. Four areas of job demand and control were included in the present study: timing control (control over scheduling of work completion; two items), method control (control over the method of work completion; three items), monitoring demand (passive monitoring of employees; three items), and problem-solving demand (amount of problem-solving it takes to complete job tasks; two items). These four areas capture the commonly reported sources of job stress within an organization. These items were measured by respondents answering questions on a five-point Likert-type scale, utilizing the response alternatives *not at all* (1), *just a little* (2), *a moderate amount* (3), *quite a lot* (4), and *a great deal* (5) (Jackson et al., 1993). The five items measuring control were summed to form an additive index of job control, and the five items measuring demand were summed to form an additive index of job demand. High scores indicated high levels of job control and job demand. The four subscales for this index had Cronbach's alpha reliability coefficients ranging from .63 to .83.

**Organizational justice.** Perceptions of fairness in an organization have been linked to job stress. The two dimensions of organizational justice, distributive and procedural, were measured by a scale developed by Qureshi, Klahm, Smith, Frank, Lambert, and Hogan (2013) for a survey of Indian police officers. “Prison” was changed to “probation department” in the survey items to accurately reflect the workplace setting in the current study. The 12 items in the scale were measured by respondents identifying a level of agreement to statements on a five-point Likert-type scale, with responses ranging from (1) *very fair* to (5) *very unfair*, and were summed to form a scale of organizational justice. High scores indicate high levels of perceived distributive and procedural justice within the organization. The scale had a Cronbach’s alpha reliability coefficient of .91.

**Job stress.** Job stress for this study was defined as the discomfort or tension that employees experience, psychologically, when they are exposed to potential stressors. The measure of job stress used in the present study came from the environmental and psychological approaches. The measures were perceptual (e.g., individuals’ views of workplace problems, such as lack of resources) and self-reported (e.g., how much stress an individual feels). As indicated in the literature review regarding the measurement of stress, adding biological markers (e.g., medical records, blood tests) as indicators of stress would be the ideal way to measure stress. However, this would be very costly and time consuming (Cullen, Link, Wolf, and Frank, 1985). Additionally, use of perceptual and self-report measures of stress is common throughout the job stress literature.

Job stress in this study was measured using a job stress scale composed of six items developed by Cullen, Link, Wolf, and Frank (1985). These six items were presented to

respondents in the form of statements requiring a level of agreement on a five-point Likert-type scale, with response choices of (1) *strongly disagree*, (2) *disagree*, (3) *neither agree or disagree*, (4) *agree*, and (5) *strongly agree*. Responses were summed to form a scale of job stress. High scores indicate high levels of perceived job stress. The scale had a Cronbach's alpha reliability coefficient of .84.

### **Job stress consequences.**

**Job satisfaction.** Job satisfaction refers to how happy people are with their jobs. Job satisfaction was measured using six items adapted from the job satisfaction index (JSI) developed by Brayfield and Rothe (1951). These six items were presented to respondents in the form of statements requiring a level of agreement on a five-point Likert-type scale with responses ranging from (1) *strongly disagree*, (2) *disagree*, (3) *neither agree or disagree*, (4) *agree*, and (5) *strongly agree*. High scores indicate high levels of job satisfaction. The scale had a Cronbach's alpha reliability coefficient of .79.

**Organizational commitment.** Organizational commitment was measured using eight items adapted from the Organizational Commitment Questionnaire (OCQ) developed by Mowday, Porter, and Steers (1982). These eight items were in the form of statements requiring a level of agreement on a five-point Likert-type scale with responses ranging from (1) *strongly disagree*, (2) *disagree*, (3) *neither agree or disagree*, (4) *agree*, and (5) *strongly agree*. High scores indicate high levels of organizational commitment. The index had a Cronbach's alpha reliability coefficient of .73.

**Turnover intent.** Turnover intent refers to the employees' intentions to voluntary leave their current jobs. Turnover intent was measured by using four questions utilized

by Lambert (2006) in his study on turnover intent among correctional staff. These four items were summed together to form an index of turnover intent. Two of the questions required yes/no responses. The other two questions required answers on a five-point Likert-type scale with responses ranging from (1) *strongly disagree*, (2) *disagree*, (3) *neither agree or disagree*, (4) *agree*, and (5) *strongly agree*. High scores indicate high levels of turnover intent. The scale had a Cronbach's alpha reliability coefficient of .56.

***Burnout.*** Burnout was measured using the Total Exhaustion Index developed by Gernstein, Topp, and Correll (1987) in their study of burnout among correctional personnel. Four questions required answers on a five-point Likert-type scale with responses ranging from (1) *strongly disagree*, (2) *disagree*, (3) *neither agree or disagree*, (4) *agree*, and (5) *strongly agree*. One question required a yes/no response. The remaining 13 measures of total exhaustion required respondents to mark the strength of their feeling between two adjectives describing the way they feel about their job (semantic differential). The online survey method used, SurveyMonkey, does not have a built-in semantic differential format; therefore, it became difficult to collect responses on the semantic differential measures of total exhaustion. In the final analysis, only the four Likert-type statements were used for the measure of burnout. These four items were summed together to form an additive index. High scores indicate high levels of burnout. The index had a Cronbach's alpha reliability coefficient of .82.

**Moderating variables.** Two theoretical perspectives underlying this study, outlined in the literature review, support the inclusion of moderating variables. First, The Job Demands-Control-Support (JDCS) model developed by Johnson and Hall (1988), indicates that perceived social support may moderate the relationship between job



demands, job control, and strain (Brough & Williams, 2007). Second, in their organizational stress theory, Matteson and Ivancevich (1987) indicate that there may be individual differences and coping mechanisms that act as moderators for the relationships between stressors, job stress, and negative outcomes.

***Demographic variables.*** While not widely considered in the job stress literature on criminal justice occupations, there are some studies that have suggested that certain demographic variables may moderate the relationship between job stress and stress-related outcomes. Age, gender, race, ethnicity, education, marital status, and tenure were included in this study as moderating variables on the relationship between job stress and organizational commitment, turnover intent, job satisfaction, and burnout.

Age was measured on an ordinal scale, with the choices of 20-30, 31-40, 41-50, 51-60, and 61+. The starting age was 20 because juvenile probation officers are required to have a Bachelor's degree, which is generally obtained around the age of 20 or older. In the current study, 16% of the sample were ages 20-30, 30% were ages 31-40, 31% were ages 41-50, and 3% were ages 61 and older. Gender was measured as a dichotomous variable. Gender was coded as 0=female and 1=male. In the current study, 38% of the respondents were male, and 62% were female.

Race was measured in the survey to include the 14 categories included in the U.S. Census, adding a fifteenth choice for "some other race." According to Bradburn, Sudman, and Wansink (2004), these are common categories used by non-government researchers. Because of the lack of responses in most of the 14 categories, categories were collapsed into three categories, coded as 0=White, 1=Black, and 2=Other. The respondents in the

current study were 81% White, 12% Black, and 5% other. Ethnicity was also measured, by asking respondents about their Hispanic, Latino, or Spanish origin, including sub-categories of Mexican, Mexican American, Chicano, Puerto Rican, Cuban, and other. Because of the few responses in the sub-categories, these categories were collapsed and coded into 0=No and 1=Yes. Thirty-two percent of the respondents in the current study were of Hispanic, Latino, or Spanish origin.

Education was measured including the same categories as used in the U.S. Census. The state of Texas requires all certified juvenile probation officers to have, at a minimum, a Bachelor's degree, with preference given to those who have additional education beyond the minimum requirement. Education was coded as 0=Bachelor's degree, 1=Master's degree, 2=Professional degree, and 3=Doctorate. Seventy-eight percent of the respondents in this study had a Bachelor's degree, and 21% had Master's degrees. Only one respondent reported having a PhD.

Tenure was measured as a continuous variable, recorded as the number of years the officer has been employed in his or her current agency. The mean number of years reported was 11.7, with a range of zero (presumably new employees who have not been employed for at least a year) to 37 years.

***Social support.*** Social support was measured using 12 items adapted from the four social support scales (supervisory, peer, family, and community) developed by Cullen, Link, Wolfe, and Frank (1985) in their study of correctional officers and stress. All four types of support were measured in the form of statements requiring a level of agreement on a five-point Likert-type scale. There were three statements for each type of

support. The 12 items were summed to form an additive index. High scores indicate high levels of social support. The four subscales for this index had Cronbach's alpha reliability coefficients ranging from .65 to .81. The overall index had a Chronbach's alpha of .83.

*Jurisdiction size.* Jurisdiction size was included in this study to determine if there are any differences in stressors, levels of job stress, and outcomes for those officers who work in rural, suburban, and rural jurisdictions. Counties in the United States are generally classified as: urban, suburban (metropolitan) and rural. The U.S. Census Bureau (2000) classifies what is "rural" by first classifying what is "urban." "Urban" areas are classified by population density: 1,000 people per square mile in core census blocks or 500 people per square mile in surrounding census blocks that, along with adjacent census blocks, include at least 50,000 people. Urban clusters (metropolitan areas) are similar, but the overall population is between 25,000 and 50,000. Everything else (below 25,000) is considered "rural." It should be noted that the category of "urban" includes counties with relatively small populations (50,000) and very large counties with populations of over 1 million. This makes the category of "urban," as designated by the U.S. Census Bureau, somewhat broad.

For the purposes of this study, county size was defined as: urban (population of 50,000 or more), suburban (population of 25,000 to 50,000), and rural (population of 25,000 or less). A fourth category, "large urban," was added to distinguish the larger counties from the smaller ones in the "urban" category. Large urban counties were those with populations of 500,000 or more.

Jurisdiction size was measured by first creating clusters of counties in Texas based on the above designations. Respondents were asked to choose the cluster that included the name of the county in which they worked. By measuring jurisdiction size in this manner, no respondent is identifiable based on the county in which they work, ensuring anonymity. It would be more direct to ask a respondent to simply state what county he or she worked in. However, many of the counties are rural with only one or two officers. Therefore, a respondent might be less likely to return a completed survey for fear of being identified with his or her responses. Of the 288 respondents that indicated an answer for jurisdiction size, 15% were from rural counties, 11% were from suburban counties, 38% were from urban counties, and 36% were from large urban counties.

***Organizational roles.*** Juvenile probation officers may assume specialized roles in a probation department. Some officers have specialized caseloads. This was measured by asking the question, “Do you supervise a specialized caseload? If yes, please indicate what type of specialized caseload you supervise in the space provided below.” Officers in counties that operate juvenile detention facilities may be dual-certified as juvenile supervision officers as well. This was measured by asking the question, “Are you certified as a juvenile supervision officer?” Almost half (45%) of the respondents reported dual certification as both juvenile supervision officers and juvenile probation officers.

Chief juvenile probation officers are also certified JPOs, and they also often supervise a juvenile caseload in addition to administrative duties. In addition, in some agencies there are hierarchies of administration; there may be assistant chiefs or others

who supervise other JPOs. This was measured by asking, “Do you supervise other juvenile probation officers?” Over half of the respondents (58%) reported no supervision of other officers.

Caseload size was measured by asking the question, “What is your current caseload size?” The mean caseload size was 14.5 offenders; the range was zero to 85.

There are other, varied roles that officers may assume in a probation office. Therefore, it is pertinent to ask respondents about any other duties they may perform or any other specialized functions they may have within a probation office. This was measured by the open-ended question, “Do you have any other roles or duties within the probation agency beyond caseload supervision? If yes, please write them in the space provided.” The majority of officers (68%) reported having other roles in the organization beyond caseload supervision.

### **Plan for Analysis**

Analysis for this study utilized data from a self-report survey to test the research hypotheses. Data were collected from returned surveys and entered into SPSS. Descriptive analysis of the variables in the study are reported in table format and a correlation matrix was created to identify what relationships exist between the variables included in the study. These tables are found in Chapter 4.

The indices used in this study were adapted or directly drawn from previous research. Reliability scores were calculated to identify the reliability of the indices used in this study (scores are reported in the description of each measure in the section above and can be found in Table 2). According to current convention, the Chronbach’s alpha reliability coefficient should be .7 or above (DeVellis, 2012). Seven of the eight indices

included in the current study are above .7. The one scale that had a reliability coefficient less than .7, turnover ( $\alpha=.56$ ) only included four items. For scales with less than 10 items, it is sometimes difficult to get an acceptable Chronbach alpha value (Pallant, 2013).

Regression analysis was used to examine the impact of work environment stressors and job stress on job satisfaction, organizational commitment, burnout, and turnover intent. Multiple regression is used when there is more than one predictor (independent) variable. In the present study, both work environment stressors and high levels of job stress were hypothesized to cause a decrease in job satisfaction, job involvement, and organizational commitment, and an increase in burnout and turnover intent.

Ordinary least squares (OLS) regression was used to examine the relationships between the moderating variables and the relationship between job stress and stress-related outcomes. OLS regression allows the researcher to isolate the relationship between one independent variable and the dependent variable by controlling for the confounding effects of other independent variables (Lambert, Hogan, Paoline, & Clarke, 2005). Possible issues with collinearity and multicollinearity were evaluated by identifying whether the independent variables were highly correlated in the correlation matrix and by calculating the variation inflation factor (VIF) statistic.

An interaction variable was created for each moderating variable indicated as having significant effects on job stress. Interaction variables were created by multiplying the total job stress score by the total score for each moderating variable (ex: job stress  $\times$  social support). These interaction variables were included in the statistical analysis to test

the hypotheses specifically addressing the moderating variables' impact (if any) on the relationship between job stress and potential negative outcomes.

In the next chapter, descriptive statistics for the sample and indexes used in this study are provided, and descriptive statistics and explanations for each measure in the indexes are also be provided. Findings from correlation and regression analyses are explained, and an examination of the research questions and hypotheses described in Chapter 4 will be provided, with explanations of hypotheses that were or were not supported by the data in this study.

## IV. FINDINGS

Chapter 4 describes the analyses and findings of this study. First, descriptive statistics of the sample and research variables are provided. Next, a correlation matrix is presented and correlations between variables are explored. Finally, the results of the testing of each hypothesis will be presented.

### **Descriptive Statistics**

Data for this study came from a non-probability online survey of juvenile probation officers (JPOs) in Texas. The survey was distributed to chief JPOs who were asked to (1) complete the survey, and (2) to disseminate the survey to the officers in their department. While it is unknown how many people accessed the survey but did not consent to participate, 318 officers agreed to the consent form incorporated into the survey. Twenty-seven cases were deleted for lack of responses on all but demographic questions. The final number of surveys utilized for analysis was 291 (n=291). Assuming the number of certified JPOs is 2,669 (discussed in the previous chapter), this number represents approximately 9% of the overall juvenile probation officer population for the state. During analysis, pairwise deletion was used to address missing data. This method was used to exclude only cases that were missing information required for specific regression models; missing data for variables not included in the analysis did not exclude a respondent's information from analysis (Pallant, 2013).

### **Description of Sample**

The survey consisted of 39 questions. The first question asked respondents to agree with the terms and conditions of the survey. The first part of the survey asked questions related to demographic and background information, such as age, gender, race,



ethnicity, education, supervisory status, jurisdiction size, and tenure. A review of studies of other criminal justice occupations indicates that these variables are potential moderators in the relationship between stress and stress-related outcomes. Thus, they were included in the current study with a new study population. Descriptive statistics for demographic and background characteristics are presented in Table 1.

### **Descriptions of Indices**

Nine indexes were used in this study: job demands, job control, organizational justice, burnout, organizational commitment, social support, job satisfaction, job stress, and turnover. These indexes have all been used in previous studies. Descriptive statistics for each index are provided in Table 2, and percentage breakdowns are reported in subsequent tables.

The majority of the respondents were female (62%), white (83%) and non-Hispanic (68%). The majority of respondents were ages 31-50 (61%) and were from urban and large urban jurisdictions (74% combined). Having a Bachelor's degree is required for the occupation of juvenile probation officer; 21% of the respondents reporting having acquired a Master's degree. Only one respondent reported having a PhD. Tenure, measured in the number of years a respondent had been employed with the current agency, ranged from zero (indicating employment less than one year) to 37 years, with an average of 11.7 years. It is important to note that there is no available data to compare the demographics of this sample to juvenile probation officers in the state of Texas or in the United States.

**Table 1. Demographics and Background Characteristics**

Categorical Variables		Valid %	N
Gender	Male	38.3%	111
	Female	61.7%	179
<i>Total</i>			<b>290</b>
Education	Bachelor's	77.9%	226
	Master's	20.7%	60
	Professional	1.0%	3
	PhD	.3%	1
<i>Total</i>			<b>260</b>
Age	20-30	15.5%	45
	31-40	29.9%	87
	41-50	31.3%	91
	51-60	20.6%	60
	61+	2.7%	8
<i>Total</i>			<b>291</b>
Race	White	82.6%	237
	Black	12.2%	35
	Other	5.2%	15
<i>Total</i>			<b>287</b>
Ethnicity	Hispanic	32%	93
	Non-Hispanic	68%	198
<i>Total</i>			<b>291</b>
Supervisor	No	58.5%	168
	Yes	41.5%	119
<i>Total</i>			<b>287</b>
Jurisdiction Size	Rural	14.9%	43
	Suburban	11.1%	32
	Urban	38.2%	110
	Large urban	35.8%	103
<i>Total</i>			<b>288</b>
<b>Continuous Variables</b>			
Tenure	Mean=11.70 SD=8.66 Median= 9.5 Min=0 Max=37		

**Table 2. Description of Indices**

Variable	Mean	SD	Median	Minimum	Maximum
Job Demands	17.27	3.83	16.5	5	25
Job Control	19.77	3.40	19.5	5	25
Organizational Justice	29.76	11.96	30.5	0	48
Burnout	75.19	12.36	76.5	38	98
Organizational Commitment	21.61	4.51	21.5	9	29
Social Support	33.53	8.48	33.5	12	48
Job Satisfaction	18.02	4.69	18.5	3	24
Job Stress	15.25	4.41	15.0	6	24
Turnover	3.63	1.94	2.5	0	10

**Job demands and control.** Question 17 included two indexes measuring job demands and job control. As indicated in Chapter 3, two areas of job demand (monitoring demand and problem-solving demand) and two areas of job control (timing control and method control) were included as work environment stressors in the present study. Items reflecting job demands were summed to form an index of job demands. Items reflecting job control were summed to form an index of job control. Higher scores on the job demands index were reflective of officers indicating higher job demands. Higher scores on the job control index were reflective of officers indicating more control in the way they perform their jobs. The descriptive statistics for job demands and job control can be found in Table 2, and percentage breakdowns are provided in Table 3. For the overall job demand index, 45% of officers reported quite a lot of job demands. For the overall job control index, 58.9% of officers reported a great deal of job control.

Juvenile probation officers in this sample reported high levels of control in how they do their jobs, regarding both timing and method. The ability to decide on the order of completing tasks, deciding how to get their jobs done, and setting their own pace of work were scored high by the majority of respondents. Over half of the respondents indicated

they have high degrees of control over choosing and varying the methods they use to complete work.

Answers to monitoring demand questions were mixed. Over half of the respondents indicated that they have to react quickly to prevent problems arising quite a lot or a great deal, and the majority of officers have to keep track of more than one process at once. However, almost half of the respondents reported not having to concentrate much or just a little to watch for things going wrong. Regarding problem-solving demand, there was no clear pattern of responses regarding having to solve problems that have no obvious correct answer. When asked if they come across problems in their jobs they have not met before, the majority of officers reported just a little or a moderate amount, which indicates that problems for most officers are solved in a fairly routine manner.

**Organizational justice.** Question 18 included an index measuring organizational justice. Responses were summed to form an index of organizational justice. Higher scores were reflective of officers perceiving higher levels of organizational justice. The descriptive statistics for organizational justice can be found in Table 2, and percentage breakdowns can be found in Table 4. For the overall index, 78.7% of respondents reported that their organizations were fair or very fair and 5.9% of respondents reported that their organization was unfair (15.4% answered neutrally).

**Table 3. Description of Job Demands and Job Control Index Items, n=282**

	Not at All	Just a Little	A Moderate Amount	Quite a Lot	A Great Deal
<b>Timing Control</b>					
Do you decide on the order in which you do things?	2.1%	3.8%	16.2%	36.6%	41.4%
Do you set your own pace of work?	1.7%	6.9%	20.3%	34.5%	36.6%
<b>Method Control</b>					
Can you choose the methods to use in carrying out your work?	2.1%	9.7%	24.8%	33.4%	30.0%
Can you vary how you do your work?	2.8%	11.4%	27.3%	31.1%	27.3%
Can you decide how to go about getting your job done?	.7%	4.5%	15.1%	33.7%	46%
<b>Monitoring Demand</b>					
Do you have to react quickly to prevent problems arising?	2.4%	13.4%	27.1%	31.3%	25.8%
Do you have to concentrate all the time to watch for things going wrong?	10.4%	33%	27.1%	16%	13.5%
Do you have to keep track of more than one process at once?	1%	1.7%	15.2%	29.8%	52.2%
<b>Problem Solving Demand</b>					
Do you have to solve problems that have no obvious correct answer?	4.8%	22.4%	23.1%	27.9%	21.7%
Do you come across problems in your job you have not met before?	2.4%	34%	33.3%	17.9%	12.4%

The majority of officers in this sample regarded their probation departments as fair or very fair in rewarding them for their responsibilities and the work they have done well. When considering the amount of training and education they have, the amount of effort they put forth, and the stresses and strains of their jobs, over half of the respondents regarded their departments as being fair or very fair. Promotion processes were regarded as fair or very fair by almost half of the respondents. Processes of job performance evaluation were regarded as fair or very fair by the majority of officers.

**Table 4. Description of Organizational Justice Index Items, n=272**

	Very Unfair	Unfair	Neither Fair or Unfair	Fair	Very Fair
How fair has the probation department been in rewarding you when you consider the amount of effort that you have put forth?	6.1%	14.4%	20.9%	37.2%	21.3%
How fair has the probation department been to you when you consider the responsibilities that you have at work?	3.6%	10.5%	12.7%	45.3%	27.9%
How fair has the probation department been in rewarding you when you take into account the stresses and strains of your job?	5.8%	15.9%	23.5%	32.9%	22.0%
How fair has the probation department been in rewarding you when you take into account the amount of education and training you have?	6.5%	12.7%	24.3%	34.4%	22.1%
How fair has the probation department been in rewarding you when you consider the work you have done well?	5.1%	13.0%	20.7%	39.5%	21.7%
How fair is the promotion process at the probation department?	9.4%	10.1%	30.8%	29.7%	19.9%
How fair is the process of the evaluation of your job performance at the probation department?	5.4%	5.4%	19.6%	40.9%	28.6%
How fair of an opportunity do you have for input into organizational decision-making at the probation department?	5.4%	9.8%	15.2%	40.6%	29.0%
How fair is the appeal process for decisions you feel are unjust at the probation department?	4.0%	7.2%	27.9%	38.0%	22.8%
How fair is the probation department in explaining decisions that have a significant effect on you?	4.3%	8.7%	14.8%	43.0%	29.2%
How fair is the probation department in treating you with respect and dignity?	3.2%	5.1%	10.1%	35.7%	45.8%
How fair is the probation department overall in how it treats employees?	4.3%	6.9%	12.6%	35.7%	40.4%

The majority of officers felt their departments were fair or very fair in allowing for input into organizational decision-making and explaining decisions that have a significant effect on them. Most officers felt their departments treated them with respect

and dignity and that their departments were overall fair or very fair in how employees are treated. Appeals processes for decisions they felt were unjust were viewed as fair or very fair by almost half of the officers.

**Job stress.** Question 19 included an index measuring job stress. Individual items in the index were summed to form an index of job stress. Higher scores were reflective of officers perceiving higher levels of stress. The descriptive statistics for job stress can be found in Table 2 and percentage breakdowns can be found in Table 5. For the overall index, 21.4% indicated low levels of stress and 33.9% indicated high levels of stress (44.7% answered neutrally).

Over half (50.7%) of the juvenile probation officers in this study disagreed and 15.4% strongly disagreed that they are usually calm and at ease when working. Half of the respondents disagreed or strongly disagreed that they often feel tense or uptight when they are at work. One-third indicated that they usually feel they are under a lot of pressure at work. Officers were divided in their responses that there are a lot of aspects about their jobs that can make them pretty upset about things (42.6% disagreed or strongly disagreed; 31.4% agreed or strongly agreed). Forty-four percent of officers disagreed or strongly disagreed that a lot of times their jobs make them angry or frustrated; 33.6% agreed or strongly agreed. Officers responses to the statement that they do not feel they have much to worry about when at work were conflicting; 32.9% disagreed or strongly disagreed, while 39.5% agreed or strongly agreed.

**Table 5. Description of Job Stress Index Items, n=271**

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
When I am at work, I often feel tense or uptight.	12%	39.8%	21.9%	22.3%	4.0%
A lot of times, my job makes me very frustrated or angry.	13.2%	30.8%	22.3%	28.6%	5.1%
Most of the time when I am at work, I don't feel that I have much to worry about (reverse coded).	5.5%	27.4%	27.7%	31.8%	7.7%
I am usually calm and at ease when I am working (reverse coded).	15.4%	50.7%	19.5%	12.9%	1.5%
I usually feel that I am under a lot of pressure when I am at work.	8.8%	27.7%	25.2%	30.7%	7.7%
There are a lot of aspects about my job that can make me pretty upset about things.	10.9%	31.8%	25.9%	25.2%	6.2%

**Job satisfaction.** Question 37 included an index measuring job satisfaction. Job satisfaction refers to how happy people are with their jobs. The responses for the individual items were summed to form an index of job satisfaction. Higher scores were reflective of officers reporting higher levels of job satisfaction. The descriptive statistics for job satisfaction can be found in Table 2, and percentage breakdowns can be found in Table 6. For the overall index, the majority (89.4%) of respondents reported high or very high levels of job satisfaction.

Officers in this sample for the most part reported being satisfied or very satisfied with their jobs on all job satisfaction questions. It is important to note that 57% of respondents strongly disagreed with the statement about disliking their work. On all



other questions, the majority of respondents agreed or strongly agreed with positive statements about their work.

**Table 6. Description of Job Satisfaction Index Items, n=265**

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
My job is usually interesting enough to keep me from getting bored.	1.5%	4.1%	12.0%	54.1%	28.2%
I feel fairly well satisfied with my present job.	1.5%	6.8%	14.3%	48.5%	28.9%
I definitely dislike my work (reverse coded).	57.1%	28.6%	12.8%	.8%	.8%
Most days I am enthusiastic about my job.	1.9%	6.4%	16.2%	53.4%	22.2%
I like my job better than the average worker does	.8%	4.5%	24.4%	45.5%	24.8%
I find real enjoyment in my work.	.8%	4.9%	16.2%	51.1%	27.1%

**Organizational commitment.** Question 38 included an index measuring organizational commitment. Individual scores were summed to form an index of organizational commitment. Higher scores were reflective of officers feeling higher levels of organizational commitment. The descriptive statistics for organizational commitment can be found in Table 2, and percentage breakdowns can be found in Table 7. For the overall index, 1.9% reported low levels of organizational commitment and 79.5% of respondents reported having high or very high levels of organizational commitment (18.6% answered neutrally).

Overall, juvenile probation officers in this sample reported high levels of organizational commitment. They agreed to be willing to put in more effort than normally expected and reported that their values and those of their organizations were very similar. However, there was evidence, too, of weak organizational commitment;

over half of the officers agree or strongly agreed that they often find it difficult to agree with their organization's policies on important matters relating to its employees.

**Table 7. Description of Organizational Commitment Index Items, n=258**

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.	2.3%	1.5%	10.7%	47.1%	38.3%
I feel very little loyalty to this organization (reverse coded).	9.9%	13.7%	9.5%	27.5%	39.3%
I would accept almost any type of job assignment in order to keep working for this organization.	10.0%	23.5%	26.9%	26.9%	12.7%
I find that my values and the organization's values are very similar.	3.5%	8.1%	16.2%	46.9%	25.4%
I could just as well be working for a different organization as long as the type of work was similar (reverse coded).	3.4%	23.8%	29.5%	28.7%	14.6%
It would take very little change in my present circumstances to cause me to leave this organization (reverse coded).	5.0%	13.1%	18.5%	33.1%	30.4%
Often, I find it difficult to agree with this organization's policies on important matters relating to its' employees (reverse coded).	7.3%	13.8%	17.7%	35.4%	25.8%
For me this is the best of all possible organizations for which to work.	3.8%	10.7%	27.2%	33.7%	24.5%

**Turnover intent.** Questions 21, 22, and two parts of question 23 included an index measuring turnover intent. The items in these questions were summed to form an index of turnover intent. Higher scores were reflective of officers reporting higher levels of turnover intent. The descriptive statistics for organizational commitment can be found in Table 2, and the percentage breakdowns can be found in Table 8. For the overall

index, only 12.3% of respondents reported having high or very high levels of turnover intent.

**Table 8. Description of Turnover Intent Index Items, n=269**

	No	Yes			
Do you desire to voluntarily leave/quit your job?	81%	19%			
In the last 6 months, have you thought about quitting your current job?	67.2%	32.8%			
	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How likely is it that you will be at this job in a year from now?	4.4%	5.6%	7.0%	31.5%	51.5%
How actively have you searched for a job with outer employers in the last year?	48.8%	24.3%	7.4%	13.6%	6.3%

When asked if they desire to voluntarily leave/quit their jobs, 81% of respondents answered “no.” This indicates that the majority of officers intended to stay in their current positions. When asked if, in the last six months, they had thought about quitting their current jobs, the majority of officers answered “no.” The majority of officers agreed or strongly agreed that it is likely they will be at their job in a year from the time they answered the question. This indicates very little intent to leave. Officers, when asked if they had actively searched for a job with outer employers in the last year, mostly disagreed or strongly disagreed.

**Burnout.** Question 23 of the survey included an index measuring burnout. In addition, one question requires a yes/no response: Do you find some aspects of your job more satisfying, fulfilling, and enjoyable than other parts? This question had no variability in responses, and was thus removed from final analyses. Higher scores were

reflective of officers reporting higher levels of burnout. The descriptive statistics for burnout can be found in Table 2, and the percentage breakdowns can be found in Table 9. For the overall index, almost half of the respondents (48.3%) answered neutrally. Of the remaining respondents, 26% reported low feelings of burnout and 25.7% reported high feelings of burnout.

**Table 9. Description of Burnout Index Items, n=269**

	Neither Agree or Disagree	Strongly Disagree	Disagree	Agree	Strongly Agree
Working at the probation department is sometimes so depressing that it's hard to do a good job.	33.8%	35.7%	18.8%	9.6%	2.2%
I often leave work tired.	5.9%	15.2%	20.4%	46.3%	12.2%
Usually when I leave work for the rest of the day and evening I remain tired.	9.3%	30.7%	26.7%	25.2%	8.1%
Sometimes I seem to be just going from paycheck to paycheck with no real feelings about my job and what happens here	32.7%	36.8%	13.6%	12.9%	4.0%

The majority of officers disagreed or strongly disagreed that their jobs were so depressing that it was hard for them to do a good job. Over half of the officers indicated that they often leave work tired. and a third of officers agreed that they remain tired for the rest of the day and evening. Two-thirds of the officers in this study disagreed or strongly disagreed with the statement that they are just going from paycheck to paycheck and had no real feelings about their jobs. As indicated in the previous chapter, the items measuring the total exhaustion dimension of burnout were not included in the final analysis; therefore, the measure of burnout is incomplete and any results regarding burnout are also incomplete.

**Social support.** Question 39 included an index measuring social support. The 12 items in the index were summed to form an index of social support. Higher scores were reflective of officers reporting higher levels of social support. The descriptive statistics for social support can be found in Table 2, and the percentage breakdowns can be found in Table 10. For the overall index, the majority of respondents reported high or very high levels of social support (88.8% combined).

Regarding overall supervisor support, the majority of officers indicated high or very high levels of supervisor support. When looking at the individual supervisor support statements, the majority of officers reported being encouraged to do the job in a way they would be proud of and that their supervisors often encourage people if they do their jobs well. Supervisors, in this sample, were not viewed as blaming others when things go wrong in their departments. Officers, while generally acknowledging peer support, reported less peer support than supervisor support. In general, over half of officers agreed or strongly agreed that they had the support of their peers. When looking at the individual items, over a quarter of officers agreed that officers complimented each other for good work, and in general officers did not feel like their peers blamed each other when things went wrong. Half of officers indicated that their fellow officers encourage each other to do their jobs well.

Regarding overall family support, the majority of officers reported high or very high levels of support from their families. This same high level of support is found in all three of the individual items measuring family support: officers reported that they can talk to their families about work-related problems, that their families understand how tough their jobs can be, and that they can turn to their families when their jobs get them

down. High or very high levels of community support was also indicated by the majority of officers in the study. Most officers indicated that they have close friends with whom they get together often, and half reported that they have a close friend nearby that they can confide in. Most officers also reported that they had friends outside of work to whom they could turn when things go wrong.

### **Summary of Descriptions**

Overall, juvenile probation officers in this study indicated high levels of control over how they conduct their jobs, and that this control exceeded the demands that are placed upon them. The majority of probation officers also reported that their organizations are fair and only 33.9% reported high levels of job stress. Job satisfaction and organizational commitment levels were high for the majority of officers participating in the study, and most respondents indicated that they plan on staying in their current positions. Regarding burnout, 48.3% of respondents answered neutrally; of those that indicated a level of burnout, the responses were almost equally divided between low and high levels. Almost 90% of officers reported high or very high levels of social support. Support from supervisors was higher than support from peers in the workplace. Both family and community support levels were reported as high or very high.

**Table 10. Description of Social Support Index Items, n=251**

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
<b>Supervisory Support</b>					
My supervisors often encourage us to do the job in a way that we would be really proud of.	5.1%	7.5%	15.4%	42.9%	29.1%
My supervisors often encourage the people I work with if they do their job well.	5.9%	9.4%	16.5%	42.5%	25.6%
My supervisors often blame others when things go wrong, which are possibly not the fault of those blamed (reverse coded).	5.9%	13.4%	19.3%	34.6%	26.8%
<b>Peer Support</b>					
My fellow officers often compliment someone who has done his/her job well.	4.0%	17.8%	21.7%	39.9%	16.6%
My fellow officers often blame each other when things go wrong (reverse coded).	5.9%	17.4%	24.1%	32.0%	20.6%
My fellow officers often encourage each other to do the job in a way that we would be really proud of (reverse coded).	2.0%	11.9%	29.2%	39.1%	17.8%
<b>Family Support</b>					
I have people in my family that I can talk to about the problems I have at work.	5.9%	5.5%	12.6%	47.0%	28.9%
No one in my family can really understand how tough my job can be (reverse coded).	7.9%	19.7%	16.9%	31.5%	24.0%
When my job gets me down, I always know that I can turn to my family and get the support I need to feel better.	2.8%	5.9%	15.0%	41.3%	35.0%
<b>Community Support</b>					
Not counting people that I work with, I have close friends that I can get together with pretty often.	4.0%	11.5%	10.3%	47.8%	26.5%
I have a friend that lives nearby that I can confide in and tell all my problems to.	4.7%	17.4%	17.4%	35.2%	25.3%
Not counting my fellow employees, I have friends that will help me out when things are going wrong.	3.2%	8.7%	9.1%	47.4%	31.6%

## Correlations

Table 11 presents the Spearman's Rank Order ( $\rho$ ) correlations among the variables. Spearman's  $\rho$  was used instead of Pearson product-moment correlations because of the large number of ordinal level variables included in the study; Pearson  $r$  is designed for interval level variables (Pallant, 2013). The variables of gender, race, ethnicity, and supervisor status were not included in the correlation matrix or descriptions because they are nominal-level variables.

**Age.** Age had statistically significant correlations with tenure, jurisdiction size, job control, organizational justice, and turnover intent. As age increased, tenure also increased ( $r=.65$ ). Older officers were more likely to be from smaller jurisdictions ( $r=-.18$ ). Job control and organizational justice were positively associated with age; as age increased, so did job control ( $r=.15$ ) and perceptions of organizational justice (.13). Finally, as age increased, turnover intent decreased (-.14).

**Tenure.** In addition to age, tenure also had a statistically significant correlation with jurisdiction size. Officers with longer tenure were more likely to be from smaller jurisdictions ( $r=-.14$ ).

**Jurisdiction size.** In addition to age and tenure, jurisdiction size also had statistically significant correlations with job control, organizational justice, burnout, and job satisfaction. A larger jurisdiction size was associated with decreased job control ( $r=-.15$ ), decreased perceptions of organizational justice ( $r=-.29$ ), and decreased job satisfaction ( $r=-.15$ ). A larger jurisdiction size was associated with increased burnout.



**Job demands.** Job control, job stress, and burnout had statistically significant positive correlations with job demands. As job demands increased, job control ( $r=.24$ ), job stress ( $.27$ ), and burnout ( $.15$ ) also increased.

**Job control.** In addition to jurisdiction size, age, and job demands, job control also had statistically significant correlations with organizational justice, job stress, burnout, organizational commitment, social support, job satisfaction, and turnover intent. As job control increased, so did perceptions of organizational justice ( $r=.38$ ), organizational commitment ( $r=.25$ ), social support ( $r=.29$ ), and job satisfaction ( $r=.30$ ). As job control increased, job stress ( $r=-.21$ ), feelings of burnout ( $r=-.24$ ), and turnover intent ( $r=-.23$ ) decreased.

**Organizational justice.** In addition to age, jurisdiction size, and job control, organizational justice also had statistically significant correlations with job stress, burnout, organizational commitment, social support, job satisfaction, and turnover intent. As perceptions of organizational justice increased, job stress ( $r=-.44$ ), burnout ( $r=-.58$ ), and turnover intent ( $r=-.54$ ) decreased. As perceptions of organizational justice increased, so did organizational commitment ( $r=.67$ ), social support ( $r=.57$ ), and job satisfaction ( $r=.65$ ).

**Job stress.** In addition to job demands, job control, and organizational justice, job stress also had statistically significant correlations with burnout, organizational commitment, social support, and job satisfaction. As job stress increased, so did burnout ( $r=.63$ ) and turnover intent ( $r=.29$ ). Decreases in organizational commitment ( $r=-.36$ ), social support ( $r=-.43$ ), and job satisfaction ( $r=-.41$ ) were associated with increases in job stress.

**Burnout.** In addition to the associations with jurisdiction size, job demands, job control, organizational justice, and job stress, burnout also had statistically significant correlations with organizational commitment, social support, job satisfaction, and turnover. As burnout increased, organizational commitment ( $r=-.56$ ), social support ( $r=-.39$ ), and job satisfaction ( $r=-.59$ ) decreased. An increase in burnout was associated with increased turnover intent ( $r=-.13$ ).

**Organizational commitment.** As described earlier, organizational commitment is positively associated with job control and organizational justice, and negatively associated with jurisdiction size, job stress, and burnout. In addition, organizational commitment had statistically significant correlations with social support, job satisfaction, and turnover. Increases in social support ( $r=.52$ ) and job satisfaction ( $r=.70$ ) were associated with increases in organizational commitment. As organizational commitment increased, turnover intent decreased ( $r=-.55$ ).

**Social support.** As described above, social support had positive associations with job control, organizational justice, and organizational commitment, and negative associations with job stress and burnout. Additional statistically significant correlations were found between social support and job satisfaction, and social support and turnover intent. As social support increased, both job satisfaction ( $r=.44$ ) and turnover intent ( $r=-.42$ ) decreased.

**Job satisfaction.** As described in the above paragraphs, job satisfaction had positive associations with job control, organizational justice, organizational commitment, and social support and negative associations with jurisdiction size, job stress, and

burnout. In addition, job satisfaction had a statistically significant correlation with turnover intent. As job satisfaction increased, turnover intent decreased ( $r=-.57$ ).

**Table 11. Spearman's Rho Correlations**

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Age	1											
2. Tenure	.65**	1										
3. Jurisdiction size	-.18**	-.14*	1									
4. Job demands	-.01	-.03	-.02	1								
5. Job control	.15*	.11	-.15*	.24**	1							
6. Organizational justice	.13*	.07	-.29**	.01	.38**	1						
7. Job stress	.01	.03	.03	.27**	-.21**	-.44**	1					
8. Burnout	-.03	-.01	.15*	.15*	-.24**	-.58*	.63**	1				
9. Organizational commitment	.06	.06	.04	.04	.25**	.67**	-.36**	-.56**	1			
10. Social support	.08	.02	-.10	-.10	.29**	.57**	-.43**	-.39**	.52**	1		
11. Job satisfaction	.09	.02	-.15*	.10	.30**	.65**	-.41**	-.59**	.70**	-.44**	1	
12. Turnover Intent	-.14*	-.06	.10	.03	-.23**	-.54**	.29**	.42**	-.55**	-.42**	-.57**	1

See Table 1 for a description of the demographic variables. See Chapter 3 for descriptions of the indexes.

\*  $p \leq .05$ , \*\*  $p \leq .01$

## Multiple Regression

Before any additional analyses were done with the index measures included in this study, normality of distribution for these measures was established. Normality is a basic assumption for many statistical tests, including OLS regression analysis, which was used in this study. There are some general rules of thumb for skewness and kurtosis. Skewness values greater than 3 are generally considered extreme and problematic, and kurtosis scores of 8 and above are generally considered extreme and problematic. In reviewing the skewness and kurtosis values for the measures in this study, all measures were within normal tolerance ranges for normality.

The bivariate associations presented in Table 11 and discussed above, while statistically significant, may not continue once the effects of other independent variables are introduced and controlled. As indicated in Chapter 3, multivariate analyses were conducted. Regression analysis “allows for the effects of a variable to be estimated while controlling for the shared effects with the other independent variables” (Paoline & Lambert, 2012, p. 191). Regression analysis was used to examine the impact of work environment stressors and job stress on job satisfaction, organizational commitment, burnout, and turnover intent. In the present study, work environment stressors and high levels of job stress were hypothesized to cause a decrease in job satisfaction, and organizational commitment, and an increase in burnout and turnover intent. Additional regression analyses including interaction variables were also conducted to test the hypotheses regarding the moderating effects of certain variables. These analyses are presented later in the chapter.

Four OLS regression equations were estimated with job satisfaction, organizational commitment, turnover intent, and burnout as the dependent variables. The multiple regression results are presented in Table 12. Variation Inflation Factor (VIF) statistics were calculated for each coefficient (not presented). In assessing these values, there appeared to be no issue with collinearity or multicollinearity. All of the VIF values were well below 10 which is a commonly used rule-of-thumb for extremely high intercorrelations (Cohen, Cohen, West, & Aiken, 2003). Normality of each model was also assessed by evaluating the histograms and normal P-P plots of the regression standardized residuals. The histograms reflected reasonable normal distributions, and all points on the P-P plots lie in reasonably straight diagonal lines from bottom left to top right, suggesting no major deviations from normality (Pallant, 2013).

**Table 12. OLS Models Explaining Stress-Related Outcomes**

Variables	Job Satisfaction	Organizational Commitment	Turnover Intent	Burnout
	B	B	B	B
Female <sup>a</sup>	-.12	-.88	-.37	-.06
Higher Ed <sup>a</sup>	.24	-.58	.35	.55
Age	.24	-.75	-.16	-.23
Hispanic <sup>a</sup>	.86	-.56	.16	-.21
Non-white <sup>a</sup>	-.94	.40	-.16	-.25
Tenure	-.03	.07	.01	.01
Supervisor <sup>a</sup>	-.30	-.71	-.03	.29
Jurisdiction	.10	-.31	-.13	.09
Job Demand	.15	.17	.07	.04
Job Control	-.01	-.14	-.07	.03
Org Justice	.08	.13*	-.03	-.02
Job Stress	-.13	-.19	-.10*	.31*
Social Support	-.01	.18*	-.01	.02
Org Commitment	.37*		-.05	.06
Turnover Intent	.57*	-.38		.26
Burnout	-.22	.17	.11	
Job Satisfaction		.42*	-.09*	-.08
R <sup>2</sup>	.53*	.58*	.33*	.32*

\*p<.05

B=unstandardized coefficients.

<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

Based on the R-squared statistic, 53% of the variance in job satisfaction was explained by the independent variables included in the model. The only variables included in the model that had statistically significant relationships with job satisfaction were organizational commitment and turnover intent, which indicates that organizational commitment and turnover intent made significant unique contributions to the prediction of job satisfaction (Pallant, 2013). The significant bivariate correlations between job satisfaction and jurisdiction size, job control, organizational justice, job stress, organizational commitment, and social support (depicted in Table 11) lost their significance when the effects of other variables were controlled for in the regression model.

Based on the R-squared statistic, 58% of the variance in organizational commitment was explained by the independent variables included in the model. The only variables included in the model that had statistically significant relationships with organizational commitment were social support and job satisfaction. This indicates that these two variables made significant unique contributions to the prediction of organizational commitment. The significant bivariate correlations between organizational commitment and jurisdiction size, job control, organizational justice, job stress, burnout, and turnover intent (depicted in Table 11) became non-significant when their effects were controlled in the regression model.

Based on the R-squared statistic, 33% of the variance in turnover intent was explained by the independent variables included in the model. Two variables, job stress and job satisfaction, had statistically significant relationships with turnover intent, indicating that job stress and job satisfaction made significant unique contributions to the

prediction of turnover intent. The significant bivariate correlations between turnover intent job control, organizational justice, burnout, and organizational commitment (depicted in Table 11) became non-significant when their effects were controlled in the regression model. Interestingly, turnover intent and job stress were not significantly correlated in the bivariate correlation analysis, but job stress became significant in the multiple regression analysis.

Finally, based on the R-squared statistic, 32% of the variance in burnout was explained by the independent variables included in the model. The only variable that had a statistically significant relationship with burnout was job stress, indicating that job stress made a significant unique contribution to the prediction of burnout. It is important to note that these conclusions are made under the assumption that the independent variables are operating independently from one another.

The regression models presented in Table 12 and discussed in the above paragraphs imply that the relationships between job satisfaction, organizational commitment, turnover intent, and burnout are bi-directional. For example, the models indicate that job satisfaction has a causal influence on turnover intent, and turnover intent also has a causal influence on job satisfaction. Bi-directional relationships were not hypothesized in the study, so new regression equations were estimated with job satisfaction, organizational commitment, turnover intent, and burnout as the dependent variables as before; however, these variables were not included as independent variables in the new equations. These new OLS models are presented in Table 13. Assessments for multicollinearity and normality were conducted; the results indicated no issues with collinearity or multicollinearity and no major deviations from normality.



**Table 13. Revised OLS Models Explaining Stress-Related Outcomes**

Variables	Job Satisfaction	Organizational Commitment	Turnover Intent	Burnout
	B	B	B	B
Female <sup>a</sup>	.50	.28	-.48	-.39
Higher Ed <sup>a</sup>	-.57	-.76	.53	.97*
Age	.15	-.35	-.32	.09
Hispanic <sup>a</sup>	.45	.50	.33	-.13
Non-white <sup>a</sup>	-.06	.33	.06	.16
Tenure	-.01	.04	.00	.02
Supervisor <sup>a</sup>	.40	.70	-.07	-.91*
Jurisdiction	.17	.02	-.25	-.02
Job Demand	.15*	.17*	.02	.03
Job Control	-.04	-.13	-.00	-.01
Org Justice	.19*	.29*	-.10*	-.09*
Job Stress	-.18*	-.09	.02	.35*
Social Support	.03	.16*	-.05	-.00
R <sup>2</sup>	.40*	.51*	.28*	.54*

\*p<.05

B=unstandardized coefficients.

<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

R<sup>2</sup>=adjusted R<sup>2</sup>

In the new regression model, the R-squared value decreased for job satisfaction. In the revised model, not including the other dependent variables, 40% of the variance in job satisfaction was explained by the independent variables included in the model. Job demand, organizational justice, and job stress had statistically significant relationships with job satisfaction, indicating that these three variables made significant unique contributions to the prediction of job satisfaction.

As presented in Table 13, the R-squared value for organizational commitment decreased from .58 to .51 when the other dependent variables were removed from the regression model. In the revised model, 51% of the variance in organizational commitment was explained by the independent variables included in the model. Job demand, organizational justice, and social support had statistically significant

relationships with organizational commitment, indicating that these variables made significant unique contributions to the prediction of organizational commitment.

As presented in Table 13, the R-squared value for turnover intent decreased from .33 to .28 when the other dependent variables were removed from the model. In the revised model, 28% of the variance in turnover intent was explained by the independent variables included in the model. The only variable that had a statistically significant relationship with turnover intent was organizational justice, indicating that organizational justice made a significant unique contribution to the prediction of turnover intent.

Regarding burnout, the R-squared value increased from .32 to .54 in the revised model excluding the other dependent variables. In the revised model, 54% of the variance in burnout was explained by the independent variables included in the model. Education, supervisory status, organizational justice, and job stress had statistically significant relationships with burnout, indicating that these variables made significant unique contributions to the prediction of burnout.

## **Research Questions and Hypotheses**

**Research question 1.** What are the work environment stressors and levels of job stress experienced by juvenile probation officers? This was an exploratory research question regarding the nature of work environment stressors and levels of job stress experienced by juvenile probation officers. A description of the correlations between job stress, job demands, job control, and organizational justice follows, along with a regression analysis including job stress as the dependent variable to further explore the relationships among these variables.

***Job demands and job control.*** Two work environment stressors included in this study were job demands and job control. Recall from the previous chapter that job demands included two dimensions, monitoring and problem-solving, and job control included two dimensions, timing and method. Percentage breakdowns for individual items included in this measure can be found in Table 3 in this chapter. The literature indicates that if job demands are high and job controls are low, employees are more likely to experience negative outcomes, such as increased burnout or reduced job satisfaction. In this study, almost half (45%) of the respondents reported quite a lot of job demands, and over half (58.9%) reported a great deal of control over how they complete their work. This positive relationship between job demands and job controls indicates that, for this sample, there is a balance between these two workplace stressors.

***Organizational justice.*** The second work environment stressor included in this study was organizational justice. Organizational justice, according to Lambert (2003), refers to the perceptions of justice and fairness that help shape employee attitudes and behaviors, including the impact on organizational commitment and job satisfaction of workers. Percentage breakdowns for individual items included in this measure can be found in Table 4 in this chapter. In this study, 63.3% of respondents indicated that their organizations were fair or very fair. Overall, organizational justice does not appear to be a source of workplace stress for the majority of officers in this sample.

***Job stress.*** In Chapter 2, job stress was defined as the discomfort or tension that employees experience, psychologically, when they are exposed to potential stressors. Percentage breakdowns for individual items included in this measure can be found in Table 5 in this chapter. While the literature indicates that individuals who do “people

work” often experience relatively high levels of stress, in this sample, 51.2% of respondents reported low levels of job stress.

A regression analysis was conducted including job stress as the dependent variable to further explore the relationships among these variables. Normality and multicollinearity were assessed for the regression model, and results fell with acceptable tolerances. The results of the regression analysis are depicted in Table 14.

**Table 14. OLS Model Explaining Job Stress**

Variables	B
Female <sup>a</sup>	.85
Tenure	-.02
Higher Ed <sup>a</sup>	-1.70*
Age	.15
Hispanic <sup>a</sup>	-.23
Non-White <sup>a</sup>	-.61
Supervisor <sup>a</sup>	1.05
Jurisdiction Size	-.18
Job Demands	.23*
Job Control	-.09
Organizational Justice	-.06
Social Support	-.11*
Job Satisfaction	-.09
Organizational Commitment	.07
Turnover Intent	-.12
Burnout	.78*
R <sup>2</sup>	.57*

\*p<.05

B=unstandardized coefficients.

Dependent variable=job stress

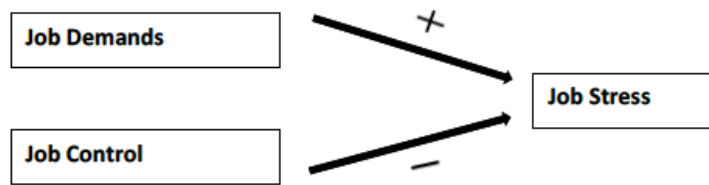
<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

All three of the workplace stressors (job demands, job control, and organizational justice) were found to have statistically significant relationships with job stress in the regression model including job stress as the dependent variable and including other variables, indicating that these variables made unique contributions to the prediction of

job stress when controlling for the other variables in the model. The other variable in the model that made a unique contribution to the prediction of job stress was burnout.

**Research question 2.** What are the relationships between work environment stressors (job demands, job control, and organizational justice) and job stress? There were two hypotheses regarding the relationship between workplace stressors and job stress.

**Hypothesis 2.1.** If job demands are high and job control is low, job stress will increase. *Supported.* Job demand was higher than job control, thereby increasing job stress.



**Figure 1. Job Demands, Job Control, and Job Stress**

As indicated in the regression results in Table 13, the coefficient for job demands was .23. This indicates that for every one-unit increase in job demands, job stress increased by .23 units, on average, and while controlling for other variables in the model. The coefficient for job control was -.09. This indicates that for every one-unit increase in job control, job stress decreased by .09 units, on average, and while controlling for other variables in the model. In this sample, job demands had a stronger effect on job stress than job control. In addition, the relationship between job stress and job demands was statistically significant.

**Hypothesis 2.2.** There is a negative relationship between perceived organizational justice and job stress. *Supported.* As perceptions of organizational justice increased, job stress decreased.

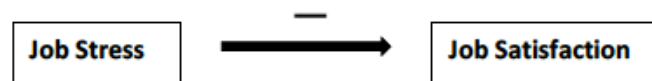


**Figure 2. Organizational Justice and Job Stress**

Referring to the regression results in Table 14, the coefficient for organizational justice was  $-.07$ . This indicates that as perceptions of organizational justice increased by one unit, job stress decreased by  $.07$  units, on average, and while controlling for the other variables in the model. This relationship was statistically significant.

**Research question 3.** What are the relationships between experiencing job stress and job stress-related outcomes (organizational commitment, job satisfaction, turnover intent, and burnout)? There were four hypotheses associated with this research question.

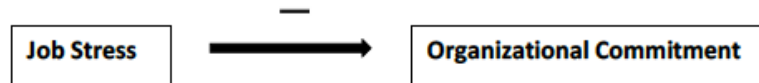
**Hypothesis 3.1.** There is a negative relationship between job stress and job satisfaction. *Supported.* There was a negative coefficient in the regression model, and it was statistically significant.



**Figure 3. Job Stress and Job Satisfaction**

Referring to the regression results in Table 13, the coefficient for job stress with job satisfaction as the dependent variable was  $-.18$ . This indicates that as job stress increased by one unit, job satisfaction decreased by  $.18$  units, on average, and while controlling for the other variables in the model. This effect was statistically significant; therefore, job stress made a statistically unique contribution to the prediction of job satisfaction.

**Hypothesis 3.2.** There is a negative relationship between job stress and organizational commitment. *Not Supported.* There was a negative coefficient in the regression model, but it was not statistically significant.



**Figure 4. Job Stress and Organizational Commitment**

As indicated in the regression results for organizational commitment in Table 13, the coefficient for job stress was  $-.09$ . This indicates that as job stress increased by one unit, organizational commitment decreased by  $.09$  units, on average, and while controlling for the other variables in the model. However, this effect was not statistically significant; therefore, job stress did not make a statistically unique contribution to the prediction of organizational commitment.

**Hypothesis 3.3.** There is a positive relationship between job stress and turnover intent. *Not supported.* There was a positive relationship between job stress and turnover intent, but the relationship was not statistically significant.

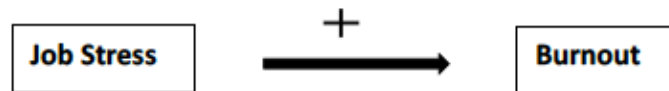


**Figure 5. Job Stress and Turnover Intent**

As indicated in the regression results in Table 13, the coefficient for job stress with turnover intent as the dependent variable was .02. This indicates that as job stress increased by one unit, turnover intent increased by .02 units, on average, and while controlling for the other variables in the model. This effect was not statistically significant; therefore, job stress is not making a statistically unique contribution to the prediction of turnover intent.

**Hypothesis 3.4.** There is a positive relationship between job stress and burnout.

*Supported.* As job stress increased, so did burnout. This relationship was statistically significant.



**Figure 6. Job Stress and Burnout**

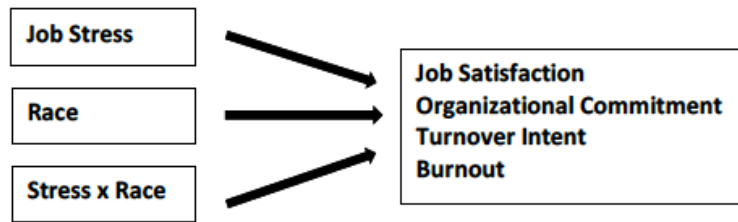
Referring to the regression results in Table 13, the coefficient for job stress with burnout as the dependent variable was .35. This indicates that as job stress increased by one unit, burnout increased by .35 units, on average, and while controlling for the other variables in the model. In addition, this effect was statistically significant; therefore, job stress is making a statistically unique contribution to the prediction of burnout.



**Research question 4.** What are the moderating effects of individual characteristics on the relationship between job stress and job stress consequences? Race, age, tenure, gender, and education were hypothesized to change the relationships between job stress and job stress-related outcomes (burnout, turnover intent, job satisfaction, and organizational commitment). Each of these variables and their related hypotheses are explained in the following sections.

*Hypothesis 4.1.* Race has no moderating effect on the relationship between job stress and negative consequences. *Partially supported.* Race had no moderating effect between job stress and burnout, organizational commitment, and job satisfaction. Race did have a moderating effect between job stress and turnover intent.

A model of the hypothesis is depicted in Figure 7. To assess the moderating effect of race on the relationship between job stress and the four outcome variables, race was first dichotomized to reflect 0=white and 1=non-white. Second, the job stress variable was mean-centered to reduce issues of multicollinearity. Third, the variables of race and stress (centered) were multiplied to create an interaction variable (non-white\*stress). The interaction variable was then entered into a regression equation for each outcome variable. The results of the analyses are presented in Table 15.



**Figure 7. Moderating Effects of Race**

Multicollinearity was assessed by evaluating the VIF scores for each coefficient—all VIF scores were within acceptable ranges. Normality of each model was also assessed by evaluating the histograms and normal P-P plots of regression standardized residuals. The histograms reflected reasonable normal distributions, and all points on the P-P plots lie in a reasonably straight diagonal line from bottom left to top right, suggesting no major deviations from normality.

**Table 15. OLS Models Examining Race as a Moderator of Stress**

Variables	Job	Organizational	Turnover	Burnout
	Satisfaction	Commitment	Intent	
	B	B	B	B
Age	.15	-.52	-.36*	.09
Female <sup>a</sup>	.16	-.22	-.39	-.26
Higher Ed <sup>a</sup>	.05	-.22	.19	.77*
Hispanic <sup>a</sup>	.41	.52	.58*	-.02
Supervisor <sup>a</sup>	-.03	.32	.15	-.78*
Tenure	-.01	.06	.01	.02
Jurisdiction	.07	-.14	-.23	.03
Job Demand	.12*	.13*	.07	.06
Job Control	-.01	-.13	-.03	-.03
Org Justice	.06*	.15*	-.04	-.03
Support	-.03	.14*	-.02	.02
Job Satisfaction		.39*	-.17*	-.15*
Org Commitment	.25*		-.11*	-.09*
Turnover Intent	-.58*	-.34*		.06
Burnout	-.25*	-.25*	.05	
Job Stress <sup>b</sup>	-.06	.10	-.01	.32*
Non-White <sup>a</sup>	-.09	.31	-.04	.17
Non-White <sup>a</sup> *Job Stress <sup>b</sup>	-.00	-.13	-.13*	-.01
R <sup>2</sup>	.59	.62	.41	.59

\*p<.05

B=unstandardized coefficients.

<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

<sup>b</sup>A mean-centered continuous variable.

<sup>c</sup>A coefficient of -.00 is a negative fractional quantity less than .01 in absolute value.

*Job satisfaction.* The effect of job stress on job satisfaction when race=0 (when respondents were white) was -.06 when controlling for the other variables in the model. When race=1 (when respondents were non-white), this effect of -.06 did not change. Race did not affect the relationship between job stress and job satisfaction.

*Organizational commitment.* The effect of job stress on organizational commitment when race=0 (when respondents were white) was .10 when controlling for the other variables in the model. When race=1 (when respondents were non-white), however, this effect of .10 changed to -.13, which became -.03. This indicates that non-white officers reported lower levels of organizational commitment when experiencing job

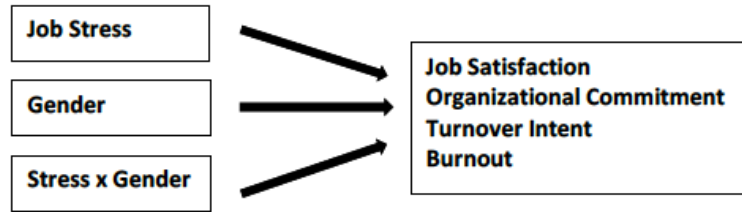
stress than white officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically significant unique contribution to the prediction of organizational commitment.

*Turnover intent.* The effect of job stress on turnover intent when race=0 (when respondents were white) was -.01 when controlling for the other variables in the model. When race=1 (when respondents were non-white), however, this effect of -.01 changed to -.13, which became -.14. This indicates that non-white officers reported lower levels of turnover intent when experiencing job stress than white officers. In addition, while small, this effect was statistically significant; therefore, the interaction variable made a statistically unique contribution to the prediction of turnover intent. However, age and ethnicity were much stronger predictors of turnover intent than the interaction variable.

*Burnout.* The effect of job stress on burnout when race=0 (when respondents were white) was .32 when controlling for the other variables in the model. When race=1 (when respondents were non-white), however, this effect of .32 changed to -.01, which became .31. This indicates that non-white officers reported lower levels of burnout when experiencing job stress than white officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of burnout.

***Hypothesis 4.2.*** Gender will moderate the strength of the relationship between job stress and organizational commitment, job satisfaction, turnover intent, and burnout. *Not supported.* Gender did not change the strength of the relationship between job stress and stress-related outcomes.

A visual model of the hypothesis can be found in Figure 8. To assess the moderating effect of gender on the relationship between job stress and the four outcome variables, gender was first dichotomized to reflect 0=male and 1=female. Second, the job stress variable was mean-centered to reduce issues of multicollinearity. Third, the variables of gender and stress (centered) were multiplied to create an interaction variable (female\*stress). The interaction variable was entered into a regression equation for each outcome variable. The results of the analyses are presented in Table 16.



**Figure 8. Moderating Effects of Gender**

Multicollinearity was assessed by evaluating the VIF scores for each coefficient--all VIF scores were within acceptable ranges. Normality of each model was also assessed by evaluating the histograms and normal P-P plots of regression standardized residuals. The histograms reflected reasonable normal distributions and the all points on the P-P plots lie in a reasonably straight diagonal line from bottom left to top right, suggesting no major deviations from normality.

**Table 16. OLS Models Examining Gender as a Moderator of Stress**

Variables	Job Satisfaction	Organizational Commitment	Turnover Intent	Burnout
	B	B	B	B
Age	.14	-.49	-.34*	.12
Hispanic <sup>a</sup>	.40	.40	.46	-.04
Higher Ed <sup>a</sup>	.06	-.12	.07	.76*
Non-white <sup>a</sup>	-.08	.42	.46	.17
Supervisor <sup>a</sup>	-.04	.29	.12	-.74*
Tenure	-.01	.05	.01	.02
Jurisdiction	.07	-.13	-.22	.04
Job Demand	.12*	.13*	.06	.05
Job Control	-.01	-.12	-.02	-.03
Org Justice	.06*	.16*	-.03	-.04
Social Support	-.03	.13*	-.03	.02
Job Satisfaction		.40*	-.18*	-.15*
Org Commit	.25*		-.10*	-.09*
Turnover Intent	-.35*	-.31*		.07
Burnout	-.25*	-.24*	.06	
Job Stress <sup>b</sup>	-.08	.06	-.05	.38*
Female <sup>a</sup>	.18	-.16	-.34	-.30
Female <sup>a</sup> *Stress <sup>b</sup>	.03	.03	.01	-.11
R <sup>2</sup>	.56	.62	.39	.60

\*p<.05

B=unstandardized coefficients

<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

<sup>b</sup>A mean-centered continuous variable.

*Job satisfaction.* The effect of job stress on job satisfaction when gender=0 (when respondents were male) was -.08 when controlling for the other variables in the model. When gender=1 (when respondents were female), however, this effect of -.08 changed to .03, which became -.05. This indicates that female officers reported higher levels of job satisfaction when experiencing job stress than male officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of job satisfaction.

*Organizational commitment.* The effect of job stress on organizational commitment when gender=0 (when respondents were male) was .06 when controlling for

the other variables in the model. When gender=1 (when respondents were female), however, this effect of .06 changed to .03, which became .09. This indicates that female officers reported lower levels of organizational commitment when experiencing job stress than male officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of organizational commitment.

*Turnover intent.* The effect of job stress on turnover intent when gender=0 (when respondents were male) was -.05 when controlling for the other variables in the model. When gender=1 (when respondents were female), however, this effect of -.05 changed to .01, which became -.04. This indicates that female officers reported higher levels of turnover intent when experiencing job stress than male officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of turnover intent.

*Burnout.* The effect of job stress on burnout when gender=0 (when respondents were male) was .38 when controlling for the other variables in the model. When gender=1 (when respondents were female), however, this effect of .38 changed to -.11, which became .27. This indicates that female officers reported lower levels of burnout when experiencing job stress than male officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of burnout.

**Hypothesis 4.3.** Females will experience lower levels of job stress than males.

*Not supported.* This relationship was found in the regression analysis, but the result was not statistically significant.



**Figure 9. Gender and Job Stress**

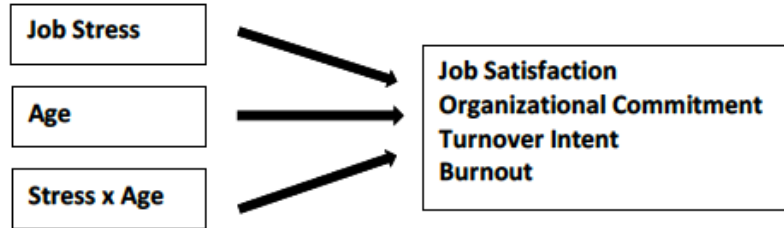
Referring to Table 14, the coefficient for gender with job stress as the dependent variable was .85. This indicates that being male was associated with an increase in job stress by .85, on average, and controlling for the other variables in the model. This effect was not statistically significant.

**Hypothesis 4.4.** Age will moderate the relationship between job stress and stress-related outcomes (job satisfaction, organizational commitment, burnout, and turnover intent). *Not supported.* Age had no statistically significant moderating effects on the relationships between job stress and stress-related outcomes.

A visual model of the hypotheses can be found in Figure 10. To assess the moderating effect of age on the relationship between job stress and the four outcome variables, the variables job stress and age were first mean-centered to reduce issues of multicollinearity. Next, the centered variables of age and stress were multiplied to create an interaction variable (age\*stress). The interaction variable was entered into a



regression equation for each outcome variable. The results of the analyses are presented in Table 17.



**Figure 10. Moderating Effects of Age**

Multicollinearity was assessed by evaluating the VIF scores for each coefficient--all VIF scores were within acceptable ranges. Normality of each model was also assessed by evaluating the histograms and normal P-P plots of regression standardized residuals. The histograms reflected reasonable normal distributions and the all points on the P-P plots lie in a reasonably straight diagonal line from bottom left to top right, suggesting no major deviations from normality.

*Job satisfaction.* The effect of job stress on job satisfaction when age was at its average was -.15 when controlling for the other variables in the model. When age increased by one unit, however, this effect of -.15 changed to .03, which became -.12. This indicates that older officers reported higher levels of job satisfaction when experiencing job stress than younger officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of job satisfaction.

**Table 17. OLS Models Examining Age as a Moderator of Stress**

Variables	Job	Organizational	Turnover	Burnout
	Satisfaction	Commitment	Intent	
	B	B	B	B
Hispanic <sup>a</sup>	.41	.38	.46	-.05
Higher Ed <sup>a</sup>	.06	-.13	.30	.77*
Non-white <sup>a</sup>	-.08	.40	.07	.17
Female <sup>a</sup>	.16	-.16	-.34	-.25
Supervisor <sup>a</sup>	-.00 <sup>c</sup>	.26	.12	-.81*
Tenure	-.01	.05	.01	.02
Jurisdiction	.07	-.13	-.22	.03
Job Demand	.12*	.13	.06	.06
Job Control	-.01	-.12	-.03	-.03
Org Justice	.06*	.16*	-.03	-.03
Social Support	-.03	.13*	-.02	.02
Job Satisfaction		.40*	-.18*	-.15*
Org Commitment	.26*		-.10*	-.10*
Turnover Intent	-.35*	-.31*		.06
Burnout	-.25*	-.25*	.05	
Job Stress <sup>b</sup>	-.15	.19	-.02	.40*
Age	.18	-.53	-.35*	.06
Age*Stress <sup>b</sup>	.03	-.04	-.01	-.03
R <sup>2</sup>	.56	.62	.39	.59

\*p<.05

B=unstandardized coefficients.

<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

<sup>b</sup>A mean-centered continuous variable.

<sup>c</sup>A coefficient of -.00 is a negative fractional quantity less than .01 in absolute value.

*Organizational commitment.* The effect of job stress on organizational commitment when age was at its average was .19 when controlling for the other variables in the model. When age increased by one unit, however, this effect of .19 changed to -.04, which became -.15. This indicates that older officers reported lower levels of organizational commitment when experiencing job stress than younger officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of organizational commitment.

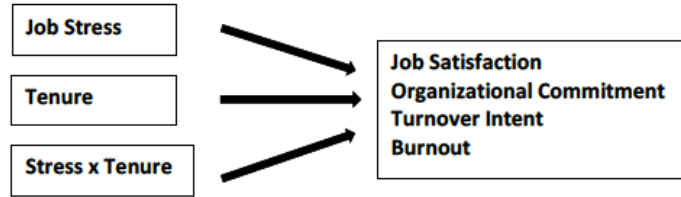
*Turnover intent.* The effect of job stress on turnover intent when age was at its average was  $-.02$  when controlling for the other variables in the model. When age increased by one unit, however, this effect of  $-.02$  changed to  $-.01$ , which became  $-.03$ . This indicates that older officers reported lower levels of turnover intent when experiencing job stress than younger officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of turnover intent.

*Burnout.* The effect of job stress on burnout when age was at its average was  $.40$  when controlling for the other variables in the model. When age increased by one unit, however, this effect of  $.40$  changed to  $-.03$ , which became  $.37$ . This indicates that older officers reported lower levels of burnout when experiencing job stress than younger officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of burnout.

***Hypothesis 4.5.*** Tenure will moderate the relationship between job stress and stress-related outcomes (job satisfaction, organizational commitment, burnout, and turnover intent). *Not supported.* Tenure had no significant moderating effect on the relationship between job stress and stress-related outcomes.

A visual model of the hypothesis can be found in Figure 11. To assess the moderating effect of tenure on the relationship between job stress and the four outcome variables, the variables job stress and tenure were first mean-centered to reduce issues of multicollinearity. Next, the variables of tenure (centered) and stress (centered) were multiplied to create an interaction variable (tenure\*stress). The interaction variable was

entered into a regression equation for each outcome variable. The results of the analyses are presented in Table 18.



**Figure 11. Moderating Effects of Tenure**

Multicollinearity was assessed by evaluating the VIF scores for each coefficient--all VIF scores were within acceptable ranges. Normality of each model was also assessed by evaluating the histograms and normal P-P plots of regression standardized residuals. The histograms reflected reasonable normal distributions and the all points on the P-P plots lie in a reasonably straight diagonal line from bottom left to top right, suggesting no major deviations from normality.

**Table 18. OLS Models Examining Tenure as a Moderator of Stress**

Variables	Job	Organizational	Turnover	Burnout
	Satisfaction	Commitment	Intent	
	B	B	B	B
Hispanic <sup>a</sup>	.42	.37	.45	-.05
Higher Ed <sup>a</sup>	.07	-.14	.29	.77*
Non-white <sup>a</sup>	-.11	.44	.08	.19
Female <sup>a</sup>	.18	-.19	-.35	-.26
Supervisor <sup>a</sup>	-.04	.31	.13	-.78*
Age	.17	-.51	-.34*	.09
Jurisdiction	.06	-.11	-.21	.03
Job Demand	.12*	.12	.06	.06
Job Control	-.01	-.12	-.03	-.03
Org Justice	.06*	.16*	-.03	-.03
Social Support	-.03	.14*	-.02	.02
Job Satisfaction		.41*	-.17*	-.15*
Org Commitment	.26*		-.10*	-.10*
Turnover Intent	-.34*	-.32*		.06
Burnout	-.25*	-.25*	.05	
Job Stress <sup>b</sup>	-.07	.08	-.04	.31*
Tenure <sup>b</sup>	-.01	.05	.01	.02
Tenure <sup>b</sup> *Stress <sup>b</sup>	.01	-.01	-.01	-.00 <sup>c</sup>
R <sup>2</sup>	.56	.62	.39	.59

\*p<.05

B=unstandardized coefficients.

<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

<sup>b</sup>A mean-centered continuous variable.

<sup>c</sup>A coefficient of -.00 is a negative fractional quantity less than .01 in absolute value.

*Job satisfaction.* The effect of job stress on job satisfaction when tenure was at its average was -.07 when controlling for the other variables in the model. When tenure increased by one unit, however, this effect of -.07 changed to .01, which became -.06. This indicates that officers with longer tenure reported higher levels of job satisfaction when experiencing job stress than officers with less tenure. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of job satisfaction.

*Organizational commitment.* The effect of job stress on organizational commitment when tenure was at its average was .08 when controlling for the other

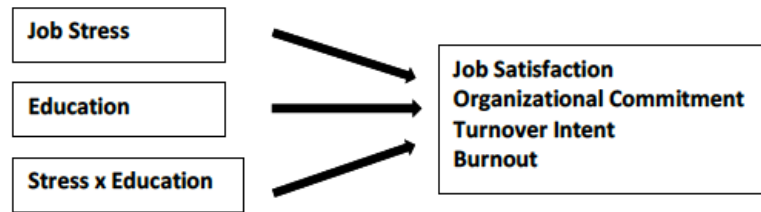
variables in the model. When tenure increased by one unit, however, this effect of .08 changed to -.01, which became .07. This indicates that officers with longer tenure reported lower levels of organizational commitment when experiencing job stress than officers with less tenure. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of organizational commitment.

*Turnover intent.* The effect of job stress on turnover intent when tenure was at its average was -.04 when controlling for the other variables in the model. When tenure increased by one unit, however, this effect of -.04 changed to -.01, which became -.05. This indicates that officers with longer tenure reported lower levels of turnover intent when experiencing job stress than officers with less tenure. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of turnover intent.

*Burnout.* The effect of job stress on burnout when tenure was at its average was .31 when controlling for the other variables in the model. When tenure increased by one unit the effect of .31 did not change. Tenure did not change the effect of job stress on burnout.

**Hypothesis 4.6.** Educational level will moderate the relationship between job stress and stress-related outcomes (job satisfaction, organizational commitment, burnout, and turnover intent). *Not supported.* Education had no significant moderating effect on the relationship between job stress and stress-related outcomes.

A visual model of the hypothesis is depicted in Figures 12. To assess the moderating effect of education on the relationship between job stress and the four outcome variables, education was first dichotomized to reflect 0=Bachelor’s degree and 1=advanced degree. Second, the job stress variable was mean-centered to reduce issues of multicollinearity. Third, the variables of education and stress (centered) were multiplied to create an interaction variable (education\*stress). The interaction variable was entered into a regression equation for each outcome variable. The results of the analyses are presented in Table 19.



**Figure 12. Moderating Effects of Education**

Multicollinearity was assessed by evaluating the VIF scores for each coefficient--all VIF scores were within acceptable ranges. Normality of each model was also assessed by evaluating the histograms and normal P-P plots of regression standardized residuals. The histograms reflected reasonable normal distributions and the all points on the P-P plots lie in a reasonably straight diagonal line from bottom left to top right, suggesting no major deviations from normality.

**Table 19. OLS Models Examining Education as a Moderator of Stress**

Variables	Job	Organizational	Turnover	Burnout
	Satisfaction	Commitment	Intent	
	B	B	B	B
Hispanic <sup>a</sup>	.45	.50	.48	.02
Tenure	-.01	.05	.01	.02
Non-white <sup>a</sup>	-.14	.29	.05	.11
Female <sup>a</sup>	.16	-.18	-.35	-.26
Supervisor <sup>a</sup>	-.01	.34	.13	-.75
Age	.14	-.49	-.34*	.09
Jurisdiction	.07	-.13	-.22	.03
Job Demand	.12*	.13	.06	.06
Job Control	-.01	-.12	-.02	-.03
Org Justice	.06*	.16*	-.03	-.03
Social Support	-.03	.13*	-.03	.02
Job Satisfaction		.38*	-.18*	-.15*
Org Commitment	.25*		-.10*	-.10*
Turnover Intent	-.35*	-.32*		.06
Burnout	-.26*	.26*	.05	
Job Stress <sup>b</sup>	-.07	.07	-.04	.31*
Higher Ed <sup>a</sup>	-.07	-.39	.25	.64
Higher Ed <sup>a</sup> *Job Stress <sup>b</sup>	-.08	-.18	-.03	-.09
R <sup>2</sup>	.56	.62	.39	.59

\*p<.05

B=unstandardized coefficients.

<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

<sup>b</sup>A mean-centered continuous variable.

*Job satisfaction.* The effect of job stress on job satisfaction when education=0 (when respondents had a Bachelor's degree) was -.07 when controlling for the other variables in the model. When education =1 (when respondents had an advanced degree), however, this effect of -.07 changed to -.08, which became -.15. This indicates officers with advanced degrees reported lower levels of job satisfaction when experiencing job stress than officers with Bachelor's degrees. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of job satisfaction.



*Organizational commitment.* The effect of job stress on organizational commitment when education=0 (when respondents had a Bachelor's degree) was .07 when controlling for the other variables in the model. When education=1 (when respondents had an advanced degree), however, this effect of .07 changed to -.18, which became -.11. This indicates officers with advanced degrees reported lower levels of organizational commitment when experiencing job stress than officers with Bachelor's degrees. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of organizational commitment.

*Turnover intent.* The effect of job stress on turnover intent when education=0 (when respondents had a Bachelor's degree) was -.04 when controlling for the other variables in the model. When education=1 (when respondents had an advanced degree), however, this effect of -.04 changed to -.03, which becomes -.07. This indicates officers with advanced degrees reported lower levels of turnover intent when experiencing job stress than officers with Bachelor's degrees. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of turnover intent.

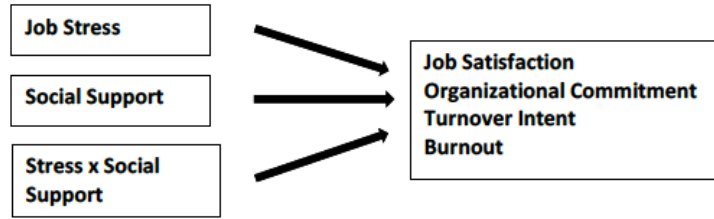
*Burnout.* The effect of job stress on burnout when education=0 (when respondents had a Bachelor's degree) was .31 when controlling for the other variables in the model. When education=1 (when respondents had an advanced degree), however, this effect of .31 changed to -.09, which became .22. This indicates officers with advanced degrees reported lower levels of burnout when experiencing job stress than officers with Bachelor's degrees. However, this effect was not statistically significant;

therefore, the interaction variable did not make a statistically unique contribution to the prediction of burnout.

**Research question 5.** What are the moderating effects of social support on the relationship between job stress and outcomes? One hypothesis addresses the relationships between social support and the stress-related outcomes of job satisfaction, organizational commitment, burnout, and turnover intent. A second hypothesis predicts the relationship between social support and gender.

*Hypothesis 5.1.* Social support will moderate the strength of the relationship between job stress and stress-related outcomes (job satisfaction, burnout, turnover intent, and organizational commitment). *Not supported.* Social support had no significant effect on the relationship between job stress and turnover intent, burnout, organizational commitment, or job satisfaction.

To assess the moderating effects of social support on the relationship between job stress and the four outcome variables, job stress and social support were both mean-centered to reduce issues of multicollinearity. Next, the variables of social support (centered) and stress (centered) were multiplied to create an interaction variable (support\*stress). The interaction variable was entered into a regression equation for each outcome variable. The results of the analyses are presented in Table 20.



**Figure 13. Moderating Effects of Social Support**

Multicollinearity was assessed by evaluating the VIF scores for each coefficient-- all VIF scores were within acceptable ranges. Normality of each model was also assessed by evaluating the histograms and normal P-P plots of regression standardized residuals. The histograms reflected reasonable normal distributions and the all points on the P-P plots lie in a reasonably straight diagonal line from bottom left to top right, suggesting no major deviations from normality.

**Table 20. OLS Models Examining Social Support as a Moderator of Stress**

Variables	Job Satisfaction	Organizational Commitment	Turnover Intent	Burnout
	B	B	B	B
Hispanic <sup>a</sup>	.36	.46	.49	-.00 <sup>c</sup>
Tenure	-.01	.05	.01	.02
Non-white <sup>a</sup>	-.09	.43	.08	.19*
Higher Ed <sup>a</sup>	.08	-.19	.28	.75
Female <sup>a</sup>	.14	-.13	-.33	-.23
Supervisor <sup>a</sup>	-.05	-.33	.14	-.76*
Age	.14	-.48	-.33*	.10
Jurisdiction	.07	-.13	-.22	.03
Job Demand	.13*	.10	.05	.05
Job Control	-.02	-.10	-.02	-.02
Org Justice	.06*	.16*	-.03	-.03
Job Satisfaction		.40*	-.17*	-.14*
Org Commitment	.26*		-.10*	-.10*
Turnover Intent	-.34*	-.32*		.06
Burnout	-.24*	-.26*	.05	
Job Stress <sup>b</sup>	-.07	.08	-.04	.31*
Social Support <sup>b</sup>	-.03	.13*	-.02	.02
Social Support <sup>b</sup> *Job Stress <sup>b</sup>	.01	-.01	-.00 <sup>c</sup>	-.00 <sup>c</sup>
R <sup>2</sup>	.56	.62	.40	.59

\*p<.05

B=unstandardized coefficients.

<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

<sup>b</sup>A mean-centered continuous variable.

<sup>c</sup>A coefficient of -.00 is a negative fractional quantity less than .01 in absolute value.

*Job satisfaction.* The effect of job stress on job satisfaction when social support was at its average was -.07 when controlling for the other variables in the model. When social support increased by one unit, however, this effect of -.07 changed to .01, which became -.06. This indicates that officers with more social support reported higher levels of job satisfaction when experiencing job stress than officers with less social support. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of job satisfaction.

*Organizational commitment.* The effect of job stress on organizational commitment when social support was at its average was .08 when controlling for the other variables in the model. When social support increased by one unit, however, this effect of .08 changed to -.01, which became .07. This indicates that officers with more social support reported higher levels of organizational commitment when experiencing job stress than officers with less social support. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of organizational commitment.

*Turnover intent.* The effect of job stress on turnover intent when social support was at its average was -.04 when controlling for the other variables in the model. When social support increased by one unit, the effect of -.04 did not change. Social support did not change the effect of job stress on turnover intent.

*Burnout.* The effect of job stress on burnout when social support was at its average was .31 when controlling for the other variables in the model. When social support increased by one unit, the effect of .31 did not change. Social support did not change the effect of job stress on burnout.

**Hypothesis 5.2.** Female officers will report higher levels of social support than male officers. *Supported.* Female officers reported higher levels of social support than male officers.



**Figure 14. Social Support and Gender**

A regression analysis was conducted including social support as the dependent variable to further explore the relationships between these variables. Normality and multicollinearity were assessed for the regression model and results fell with acceptable tolerances. The results of the regression analysis are depicted in Table 21. The effect of being female on social stress was 2.49. This indicates that being female was associated with an increase in social support by 2.49, on average, and controlling for the other variables in the model.

**Table 21. OLS Model Explaining Social Support**

Variables	B
Female <sup>a</sup>	2.49*
Tenure	-.05*
Higher Ed <sup>a</sup>	-.56
Age	.51
Hispanic <sup>a</sup>	.55
Non-white <sup>a</sup>	1.13
Supervisor <sup>a</sup>	-.03
Jurisdiction Size	.09
Job Demands	-.13
Job Control	.26*
Organizational Justice	.19*
Job Stress	-.29*
Job Satisfaction	-.11
Organizational Commitment	.34*
Turnover Intent	-.20
Burnout	.12
R <sup>2</sup>	.41

\*p<.05

B=unstandardized coefficients.

Dependent variable - social support

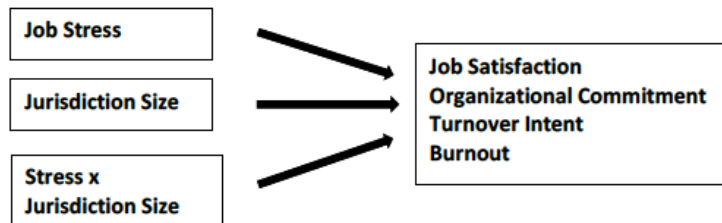
<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

**Research question 6.** What are the moderating effects of jurisdiction size on the relationship between job stress and negative outcomes? There is no research supporting the inclusion of jurisdiction size as a moderating variable, but jurisdiction size was

analyzed as a moderating variable to explore its possible effects on the relationships between job stress and the stress-related outcome variables included in this study.

**Hypothesis 6.1.** Jurisdiction size will moderate the strength of the relationship between job stress and stress-related outcomes.

A visual model of the moderating effects of jurisdiction size is depicted in Figure 15. Regression results of the moderating effects of jurisdiction size are shown in Table 22.



**Figure 15. Moderating Effects of Jurisdiction Size**

To assess the moderating effect of jurisdiction size on the relationship between job stress and the four outcome variables, the variables job stress and jurisdiction size were first mean-centered to reduce issues of multicollinearity. Next, the variables of jurisdiction size (centered) and stress (centered) were multiplied to create an interaction variable (jurisdiction\*stress). The interaction variable was entered into a regression equation for each outcome variable. The results of the analyses are presented in Table 21. Multicollinearity was assessed by evaluating the VIF scores for each coefficient--all VIF scores were within acceptable ranges. Normality of each model was also assessed by evaluating the histograms and normal P-P plots of regression standardized residuals.

The histograms reflected reasonable normal distributions and the all points on the P-P plots lie in a reasonably straight diagonal line from bottom left to top right, suggesting no major deviations from normality

**Table 22. OLS Models Examining Jurisdiction Size as a Moderator of Job Stress**

Variables	Job	Organizational	Turnover	Burnout
	Satisfaction	Commitment	Intent	
	B	B	B	B
Hispanic <sup>a</sup>	.40	.39	.46	-.04
Tenure	-.01	.05	.01	.02
Non-white <sup>a</sup>	-.09	.40	.07	.18
Female <sup>a</sup>	.16	-.18	-.35	-.26
Supervisor <sup>a</sup>	-.03	.29	.12	-.78*
Age	.15	-.49	-.34*	.10
Higher Ed <sup>a</sup>	.04	-.16	.29	.77*
Job Demand	.12*	.13	.06	.06
Job Control	-.01	-.12	-.02	-.03
Org Justice	.06*	.15*	-.03	-.03
Social Support	-.03	.14	-.02	.02
Job Satisfaction		.40*	-.18*	-.15*
Org Commitment	.25*		-.10*	-.09*
Turnover Intent	-.35*	-.32*		.07
Burnout	-.25*	-.25*	.06	
Job Stress <sup>b</sup>	-.06	.08	-.04	.31*
Jurisdiction <sup>b</sup>	.07	-.13	-.22	.03
Jurisdiction <sup>b</sup> *Stress <sup>b</sup>	-.01	-.05	-.02	-.02
R <sup>2</sup>	.56	.62	.39	.59

\*p<.05

B=unstandardized coefficients.

<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

<sup>b</sup>A mean-centered continuous variable.

*Job satisfaction.* The effect of job stress on job satisfaction when jurisdiction size was at its average was -.06 when controlling for the other variables in the model. When jurisdiction size increased by one unit, however, this effect of -.06 changed to -.01, which became -.07. This indicates that officers in larger jurisdictions reported lower levels of job satisfaction when experiencing job stress than officers in smaller jurisdictions.



However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of job satisfaction.

*Organizational commitment.* The effect of job stress on organizational commitment when jurisdiction size was at its average was .08 when controlling for the other variables in the model. When jurisdiction size increased by one unit, however, this effect of .08 changed to -.13, which became -.05. This indicates that officers from larger jurisdictions reported lower levels of organizational commitment when experiencing job stress than officers with from smaller jurisdictions. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of organizational commitment.

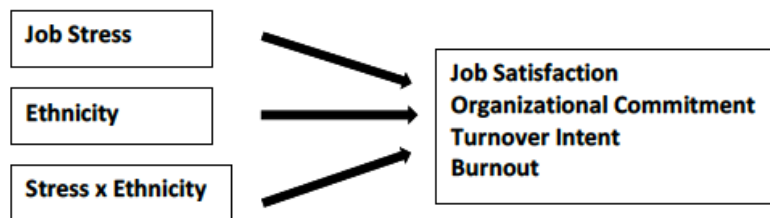
*Turnover intent.* The effect of job stress on turnover intent when jurisdiction size was at its average was -.04 when controlling for the other variables in the model. When jurisdiction size increased by one unit, however, this effect of -.04 changed to -.02, which became -.06. This indicates that officers from larger jurisdictions reported lower levels of turnover intent when experiencing job stress than officers from smaller jurisdictions. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of turnover intent.

*Burnout.* The effect of job stress on burnout when jurisdiction size was at its average was .31 when controlling for the other variables in the model. When jurisdiction size increased by one unit, however, this effect of .31 changed to -.02, which became .29. This indicates that officers from larger jurisdictions reported lower levels of burnout when experiencing job stress than officers from smaller jurisdictions. However, this

effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of burnout.

### **Additional Analysis**

**Ethnicity.** An additional variable was included in the study that was not specifically hypothesized: ethnicity. Ethnicity was included to allow officers to further identify themselves in the study. As with race, ethnicity was dichotomized into 0=non-Hispanic and 1=Hispanic. Stress was mean-centered and an interaction variable was created by multiplying ethnicity\*job stress (centered). The interaction variable was then entered into a regression analysis for each outcome variable. A visual model of the moderating effects of ethnicity on the relationship between job stress and stress-related outcomes can be seen in Figure 16.



**Figure 16. Moderating Effects of Ethnicity**

To assess the moderating effect of ethnicity on the relationship between job stress and the four outcome variables, the variables job stress and ethnicity were first mean-centered to reduce issues of multicollinearity. Next, the variables of ethnicity and stress (centered) were multiplied to create an interaction variable (ethnicity\*stress). The interaction variable was entered into a regression equation for each outcome variable. The results of the analyses are presented in Table 22. Multicollinearity was assessed by

evaluating the VIF scores for each coefficient--all VIF scores were within acceptable ranges. Normality of each model was also assessed by evaluating the histograms and normal P-P plots of regression standardized residuals. The histograms reflected reasonable normal distributions and the all points on the P-P plots lie in a reasonably straight diagonal line from bottom left to top right, suggesting no major deviations from normality.

**Table 23. OLS Models Examining Ethnicity as a Moderator of Stress**

Variables	Job	Organizational	Turnover	Burnout
	Satisfaction	Commitment	Intent	
	B	B	B	B
Age	.15	-.49	-.34*	.10
Female <sup>a</sup>	.18	-.18	-.35	-.26
Higher Ed <sup>a</sup>	.11	-.17	.28	.76*
Non-White <sup>a</sup>	-.02	.36	.05	.16
Supervisor <sup>a</sup>	-.07	.33	.14	-.77*
Tenure	-.01	.05	.01	.02
Jurisdiction	.06	-.12	-.22	.03
Job Demand	.11*	.13*	.07	.06
Job Control	-.01	-.12	-.03	-.03
Org Justice	.06*	.16*	-.03	-.03
Social Support	-.03	.13*	-.03	.02
Job Satisfaction		.40*	-.17*	-.15*
Org Commitment	.25*		-.10*	-.09*
Turnover Intent	-.35*	-.32*		.07
Burnout	-.25*	-.25*	.06	
Job Stress <sup>b</sup>	-.04	.05	-.05	.30*
Hispanic <sup>a</sup>	.38	.41	.47	-.03
Hispanic <sup>a</sup> *Stress <sup>b</sup>	-.09*	.08	.04	.03
R <sup>2</sup>	.56	.64	.39	.59

\*p<.05

B=unstandardized coefficients.

<sup>a</sup>A dummy-coded variable where 0 indicates the absence of the characteristic.

<sup>b</sup>A mean-centered continuous variable.

**Job satisfaction.** The effect of job stress on job satisfaction when ethnicity =0 (when respondents were non-Hispanic) was -.04 when controlling for the other variables in the model. When ethnicity =1 (when respondents were Hispanic), however, this effect of -.04 changed to -.09, which became -.13. This indicates that non-Hispanic officers

reported higher levels of job satisfaction when experiencing job stress than Hispanic officers. In addition, this effect was statistically significant; therefore, the interaction variable did make a statistically unique contribution to the prediction of job satisfaction.

**Organizational commitment.** The effect of job stress on organizational commitment when ethnicity=0 (when respondents were non-Hispanic) was .05 when controlling for the other variables in the model. When ethnicity=1 (when respondents were Hispanic), however, this effect of .05 changed to .08, which became .13. This indicates that non-Hispanic officers reported higher levels of organizational commitment when experiencing job stress than Hispanic officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of organizational commitment.

**Turnover intent.** The effect of job stress on turnover intent when ethnicity=0 (when respondents were non-Hispanic) was -.05 when controlling for the other variables in the model. When ethnicity=1 (when respondents were Hispanic), however, this effect of -.05 changed to .04, which became -.01. This indicates that non-Hispanic officers reported lower levels of turnover intent when experiencing job stress than Hispanic officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of turnover intent.

**Burnout.** The effect of job stress on burnout when ethnicity=0 (when respondents were non-Hispanic) was .30 when controlling for the other variables in the model. When ethnicity=1 (when respondents were Hispanic), however, this effect of .30 changed to .03, which became .33. This indicates that non-Hispanic officers reported

higher levels of burnout when experiencing job stress than Hispanic officers. However, this effect was not statistically significant; therefore, the interaction variable did not make a statistically unique contribution to the prediction of burnout.

### **Conclusion**

This chapter focused on the findings of this study on juvenile probation officer stress. Descriptive statistics, correlation matrix evaluation, and regression analyses were all utilized to identify which hypotheses in the study were supported. A discussion of the significant findings, their implications, limitations of the sample and study, and direction for future research is included in the following chapter.

## V. DISCUSSION AND CONCLUSION

The purpose of this study was to explore juvenile probation officers' work environment stressors, job stress, and outcomes associated with job stress. The study sought to accomplish three goals. The first goal was to identify the work environment stressors and the extent of job stress experienced by juvenile probation officers. The second goal was to identify the relationships between perceived levels of job stress and the outcomes of experiencing job stress. Third, the potential roles of moderating factors were explored: age, race, ethnicity, gender, tenure, social support, and jurisdiction size. This chapter will summarize the findings of the study, discuss the implications for research and policy, provide a description of the limitations of the current study and suggestions for future research, and end with an overview of the most revealing findings.

### Summary of Research Findings

#### **Work environment stressors.**

**Job demands and control.** The job demands and control theory (JDC) indicates that when job demands are high and control is low, job strain will occur (Karasek, 1979). If workers perceive that their job demands are high and that they have low levels of control over their work, they will likely experience negative job-related outcomes (Brough & Williams, 2007). When considering the different dimensions of job demands and control, officers in this study indicated moderate-to-high levels of both timing and method control, moderate-to-high levels of monitoring demand, and low-to-moderate levels of problem-solving demand. Regression analysis indicated a negative relationship between job demands and job control. With job demands being higher than job control, the effect was that job stress increased.

Therefore, the job demands and control theory seems to be supported by the current study.

**Organizational justice.** Study results showed that the majority of officers indicated that their organizations were fair or very fair. Organizational justice had a negative correlation with stress that was statistically significant. As levels of organizational justice increased, levels of stress decreased among the sample of officers in this study. Organizational justice also had a moderate positive correlation with job satisfaction that was statistically significant. As levels of organizational justice increased, so did levels of job satisfaction. This is similar to the findings in a study by Lambert (2003), that perceptions of organizational justice had positive effects on job satisfaction for correctional staff. In the regression analysis, organizational justice was found to be a statistically significant predictor for turnover intent and burnout. As perceptions of organizational justice decreased, turnover intent and burnout increased.

**Job Stress.** Overall, more officers reported lower levels of stress than higher levels; 33.9% of officers reported lower levels of stress and 21.4% reported higher levels of stress. It is important to point out that 44.7% of the respondents answered neutrally regarding job stress. While it is commonly perceived that the job of a probation officer is a people-oriented, intense, and stressful job (Slate, Wells, & Johnson, 2003), this sample of juvenile probation officers did not perceive themselves, overall, to be particularly stressed because of their jobs. This may be related to the compatibility of the sample to the work environment in a juvenile probation department. According to Armstrong, Hartje, and Evans (2014), “compatibility between individuals and the work environment occurs when there is a match between the needs of the individual and the environment”

(p. 6). Juvenile probation officers work with young offenders and tend to have a rehabilitative approach to working with these offenders. This could also be a function of the sampling method used for this study. Since this was a convenience sample, it may be that those who chose to take the survey were less stressed than those who chose not to take the survey.

Overall, the most significant predictors of job stress were, in order of magnitude, education level, burnout, job demands, and social support. As education level increased, job stress decreased. Burnout increased as job stress increased. As job demands increased, so did job stress. Social support was associated with a decrease in job stress. Job stress had statistically significant relationships with all four outcome variables: burnout, organizational commitment, job satisfaction, and turnover, but when considered in a regression analysis, the significant effects disappeared for job satisfaction and organizational commitment when the other variables in the model were controlled for. As job stress increased, so did burnout. Job stress was found to be the most significant contributor to burnout.

These findings are inconsistent with the job stress literature in criminal justice occupations. For example, Mitchell, Mackenzie, Styve, and Gover (2000) found stress to be significantly related to turnover intent, which was not the case in the current study. Lambert and Paoline (2008) found that high levels of job stress were inversely related to job satisfaction among corrections officers, but in this study the relationship between job stress and job satisfaction was not significant when other factors were controlled.



**Stress-related outcomes.** The four stress-related outcome variables, job satisfaction, turnover intent, organizational commitment, and burnout, were moderately correlated with each other and all of these associations were statistically significant. Initial regression analysis results, depicted in Table 12 in the previous chapter, indicated that the most significant relationships were between the outcome variables. For example, turnover intent was the largest predictor of job satisfaction and job satisfaction was the largest predictor of organizational commitment.

This is consistent with previous studies. For example, job satisfaction was correlated with turnover intent for police, institution corrections, and community corrections officers (Matz, Woo, and Kim, 2014). Job satisfaction and organizational commitment were found to be highly significant in reducing an employee's intent to leave for correctional staff (Lambert, 2006). A strong positive association was found between job satisfaction and organizational commitment (Lambert & Paoline, 2008). Lower levels of organizational commitment indicated a greater desire and intent to leave among correctional officers (Griffin, Hogan, & Lambert, 2013).

Although job satisfaction, organizational commitment, turnover intent, and burnout were treated as distinct outcome variables in this study, they were also included as independent variables in the regression model for each outcome variable. The results indicate that these outcome variables may actually act as predictor variables and are interrelated, thus confounding some of the outcomes in the current study.

A revised analysis was conducted for each outcome variable, removing the other outcome variables as independent variables. The results of this re-analysis can be seen in Table 13. In the revised analysis, organizational justice became a significant predictor

for all four outcome variables. In addition, job demand became a significant predictor for job satisfaction and organizational commitment, job stress became a significant predictor for job satisfaction and burnout, social support became a significant predictor for organizational commitment, and education and supervisory status became significant predictors for burnout.

The only demographic variables that had any statistically significant relationship with the outcome variables in the revised regression analysis were educational level and supervisory status. Age, tenure, gender, race and ethnicity had no significance regarding prediction of any of the outcome variables.

**Moderating variables.** Moderating effects were not found for most of the hypothesized moderating variables in this study. Age, tenure, gender, jurisdiction size, and education had no moderating effects on the relationships between job stress and stress-related outcomes. However, race moderated the relationship between job stress and turnover intent and ethnicity moderated the relationship between stress and job satisfaction.

Non-White officers reported lower levels of turnover intent when experiencing job stress than white officers. A study by Jones and Harter (2005) looked at the racial composition of the supervisor-employee dyad as it relates to turnover intent and engagement level. They found that same-race dyads at low engagement levels resulted in lower turnover intent. However, at higher engagement levels, same-race dyads resulted in higher turnover intent.

Non-Hispanic officers reported higher levels of job satisfaction than Hispanic officers. For some officers, there may be differences in expectations or discrimination

leading to lower job satisfaction among Hispanic officers. Differences in real or perceived inequality or injustice could also contribute to lowered job satisfaction for Hispanic officers when experiencing job stress (Campbell, 2011).

While significantly correlated with all four outcome variables in a review of the correlation matrix, social support had no moderating effects on any of the stress-related outcome variables. In addition, social support only had a significant effect on the prediction of organizational commitment when considered in regression models controlling for the other variables in the model. This is consistent with some of the literature regarding correlations. For example, administrative, supervisory, and coworker support were found to decrease reported stress; administrative, supervisory, and coworker support were found to correlate with job satisfaction; and administrative, supervisory, coworker, and family and friends support were all correlated with commitment (Lambert et al., 2015). However, this finding does not support the job demands control support (JDCS) model, which indicates that perceived social support may moderate the relationship between job demands, job control, and strain (Brough & Williams, 2007).

**Other findings.** In the criminal justice occupational stress literature, there are mixed results regarding gender and stress. While Cullen, Link, Wolfe, and Frank (1985) found that women reported greater levels of work stress, Wells, Colbert, and Slate (2006) found that men reported higher rates of personal stress. Griffin (2006) found few differences between male and female correctional officers regarding the effects of workplace stressors on their levels of job stress. Males in the current study were found to experience more stress than females, although this finding was not statistically

significant. Females in the current study were also found to report higher levels of social support than males, which is consistent with the literature.

Most studies have found no significant relationships between race and job stress, and this study supports these previous findings (Crank, Regoli, Hewitt, & Culberson, 1995; Gayman & Bradley, 2013). In previous job stress studies regarding direct effects on turnover intent, education has been linked to stronger turnover intentions (Mitchell, Mackenzie, Styve, & Gover, 2000), but this finding was not supported in the current study. Officers with higher education reported higher levels of turnover intent; however, this association was small and not significant.

The variable of jurisdiction size that was included in the current study has not been included in most job stress studies for criminal justice occupations. This variable was included to see if the size of the jurisdiction a juvenile probation officer worked in had any impact on the relationship between job stress and stress-related outcomes. While no moderating effects were found regarding jurisdiction size, there were some findings of interest. As jurisdiction size increased, job control decreased. In other words, employees in larger jurisdictions had lower levels of control over how they completed their jobs. As jurisdiction size increased, organizational commitment and job satisfaction decreased. Both of these may be due to organizational structures, community involvement, and social support systems that are different in smaller agencies and communities from larger ones. Finally, as jurisdiction size increased, organizational justice decreased. Officers in smaller jurisdictions perceived their agencies as being more fair. Officers in smaller departments may work more closely with chiefs and administrators and may have more input into decision-making within the organization. There also tend to be fewer levels of

bureaucracy in smaller departments; in larger departments the bureaucratic structure may leave employees feeling disconnected from chiefs and administrators.

### **Implications, Limitations, and Future Research**

The present study examined juvenile probation officers' experiences of stress, work-related stressors, stress-related outcomes, and related variables that might impact the strength of the relationships between stress and negative outcomes. Several theoretical and practical implications can be derived from the findings of this study. First, this study provides some important data about the relationships between stress, social support, turnover intent, burnout, job satisfaction, organizational justice, and organizational commitment. While there is quite a bit of occupational stress literature related to police and institutional corrections officers that explore these relationships, there is very little known about the experiences and perceptions of juvenile probation officers. This study adds to this dearth of research and provides some insight that can be utilized in future research on this population.

While not generally considered in job stress studies, the variable of jurisdiction size should continue to be explored. Two recent studies of probation officers included jurisdiction size. Skowronski (2015) found that the larger the city that the officer resided in, the more work-related stress the officer experienced. While not a significant finding, this same phenomenon was found in the current study. Another study identified that officers in urban officers experienced more cynicism, but also more professional efficacy (White, Holloway, Aalsma, Adams, & Salyers, 2015). These are both dimensions of burnout. This indicates that urban environments have both risk and protective factors.

Findings in this study provide chiefs and administrators in the field of juvenile probation with an understanding of the effect that balancing job demands and job control can have on job stress levels. The more control an officer has over how they complete their jobs when job demands are increased, the less likely the officer is to experience job stress. In addition, an understanding of the impact organizational justice has on job stress and on organizational commitment, can help chiefs and administrators reduce the negative impacts of job stress. Specifically, the more an agency can do to ensure processes such as promotions, appeals, and job evaluations are fair, the more satisfied and committed officers will be and officers will be less likely to leave. It is also important to provide opportunities for officers to have input into decision-making within departments, especially when the decisions being made have a significant effect on them. Rewarding positive behavior, significant contributions, and work well done will also increase employee commitment and satisfaction and reduce turnover.

Consistent with most other research on job stress, this study utilized a cross-sectional design. This study design allowed for research to be conducted in a timely manner with minimal costs, but does limit the interpretation of the results. A cross-sectional study can identify associations between variables, but to empirically demonstrate causal relationships, a longitudinal design is needed. In this study, some of the strongest associations were between the outcome variables of job satisfaction, organizational justice, turnover intent, and burnout. In addition, these variables were some of the strongest predictors of each other. In the job stress literature, variables such as burnout, turnover intent, job satisfaction, and organizational commitment have often been treated as independent variables. In future studies, it may be important to explore

these alternative relationships with the population of juvenile probation officers. In addition, there may be possible reciprocal relationships between some of the stress-related variables included in this study; the only way to demonstrate the direction of the relationships would be with a longitudinal design. Therefore, the relationships presented in this study may be incorrect regarding causal direction.

Also consistent with most other research on job stress, this study utilized a self-report survey as the method of data collection. This may result in respondents being less-than-truthful in their responses. While it may be preferable to use more objective measures (e.g., peer and supervisor observations, evaluations, and personnel records), these are generally more difficult to obtain and coordinate. To increase honesty and responses, respondents were guaranteed anonymity by the researcher. In addition, demographic information collected was reviewed and pre-tested to ensure that a participant was not identifiable with their set of responses.

It was this anonymity that presented some difficulty in obtaining buy-in by some chiefs, particular those from large jurisdictions; this probably affected response rates quite a bit, although the exact amount is unknown. The chief of one large urban county stated that she would not encourage her officers to participate, since the results would not be able to be applied directly to that agency. This led to a discussion about a potential follow-up study solely within that county, but did not help with the collection of responses for the current study. Other aspects that may have affected response rates are chiefs that ignored the multiple emails sent to them about the study, officers ignoring emails from their chiefs, or bad email addresses (some of these were known to the researcher, and attempts were made to identify the correct email addresses). Officers

may have decided not to participate in the study once they read the questions that were asked; this would explain why responses for demographic information were more complete than responses for some of the indexes in the study. The total number of responses represented about 9% of the overall number of officers for the state. This is not ideal, and, if repeated, a more systematic approach to sampling should be employed.

A convenience sample was used for this study (e.g., non-probability). This leads to caution in generalizing any of the findings of this study to officers outside of the sample. Also, because there is no published information about the demographics of juvenile probation officers themselves, it is impossible to compare this sample to a general population of JPOs to determine in what ways it might be different. Therefore, it is not possible to generalize the findings of this study to JPOs in the state as a whole.

The measure used for burnout in this study came from a study of corrections officers by Gernstein, Topp, and Correll (1987). The measure included a semantic differential measuring the total exhaustion dimension of burnout (Gernstein, Topp, & Correll, 1987). The survey platform used in this study, SurveyMonkey, does not have a semantic differential format available. An attempt to create a semantic differential was made, and data was collected. However, this data was largely incomplete, likely because it was very confusing to the respondents. This semantic differential was not included in the final analysis. By excluding this aspect of the burnout measure, the dimension of total exhaustion was largely missing from the study. Therefore, any analysis regarding burnout is incomplete in this study. Any future studies should ensure that all dimensions of the variable (e.g., emotional exhaustion, cynicism, and professional efficacy) are included in the study for a full understanding of the relationship burnout has to job stress.



The measure of social support in this study included four dimensions: family, peer, supervisor, and community. For data analysis, however, social support was treated as a unidimensional variable, which did not distinguish support from the workplace from support coming from personal relationships. Previous studies indicate that different types of support are correlated with stress and different stress-related outcomes. For example, Lambert, Minor, Wells, and Hogan (2015) found that support from family and friends did not decrease reported stress, but administrative, supervisory, and coworker support did. This unidimensional measure of social support may not accurately reflect the effects different types of social support have on the relationships between stress and stress-related outcomes. Future studies should include the different dimensions of social support for a better understanding of the role social support has regarding job stress.

In Chapter IV, OLS regression models in Table 12 included all of the outcome variables as independent variables--this implied a reciprocal relationship between the outcome variables. These regression models were re-analyzed, excluding the outcome variables as independent variables. As shown in Table 13, the R-squared values for all but burnout were reduced, and significance was found for some of the independent variables that was not present in the initial analysis. For example, in the re-analysis, organizational justice became significant for all four outcome variables.

The regression models for the moderating variables of race, ethnicity, age, social support, tenure, gender, and education included the outcome variables as independent variables, similar to the models in Table 12. However, the same problem indicated in the above paragraph is likely to be the case for the analysis of the moderating variables in this study. Therefore, any research replicating this study design should exclude the

outcome variables as independent variables in any regression models explaining turnover intent, burnout, organizational commitment, and job satisfaction.

In preparation for this study, it was discovered that very little research has been directed towards the occupation of juvenile probation officer regarding how they perceive their organizations, their stress, and other related variables. Since starting this project, a few articles have been published in this area, and hopefully this trend will continue.

There are several avenues to explore in future research. Instead of a state-wide study, it may be useful to distribute the survey within one large juvenile probation department to get an idea of how an entire agency's officers view their jobs in terms of stress and negative outcome variables. This would not answer questions about jurisdiction size, but it would provide a full accounting of employee perceptions within a single agency; this would provide the administration of that department with results that can be directly addressed. Adding variables related to agency-specific and client-specific stressors could expand upon the information provided by this study.

The measure of job demands used in this study was based on the JDC model developed by Karasek (1979). However, these job demands were very broad in scope and not occupation-specific. Focus groups might be a valuable way to identify job demand variables that are job-specific, organization-specific, or specific to working with juvenile probation clients that were missing from the present study. For example, anecdotally, working with parents is one of the biggest headaches for many who work with juvenile populations.

While there are some limitations to the current study, this was largely an exploratory study on a previously unstudied population, and a great deal was learned

about juvenile probation officers and their experiences with job stress. In addition, the study design is easily replicated; juvenile probation officers in individual organizations and in other states, and other occupational groups, could be studied using the same design with relative ease. This study's contribution to the literature on juvenile probation officers provides insight into these practitioners' experiences with job stress and related outcomes. In addition, this study provides evidence that demographic variables such as age and gender play less significant roles in stress and stress-related outcomes than do social support systems.

### **Conclusion**

The purpose of this study was to explore the relationships between job stressors, job stress, stress-related outcomes, officer demographics, social support, and jurisdiction size. Most of the moderating variables included in the study had no significant effects on the relationships between job stress and stress-related outcomes; the two exceptions were race and ethnicity. Juvenile probation officers in this study maintained a balance of job demands and job control that appears to keep stress levels relatively low. Overall, officers in this study identified their organizations as being fair and indicated high levels of organizational commitment. This study adds to the scant existing literature on the populations of juvenile probation officers and would be easily replicated for use with other samples of JPOs or with other populations.

## APPENDIX SECTION

### APPENDIX A. Juvenile Probation Officer Work Environment Survey

Title of Project: Juvenile Probation Officer Work Environment Survey

Principle Investigator: Lynn M. Greenwood

Dissertation Chair: Dr. Joycelyn Pollock

You are being invited to take part in a research study because you are a Juvenile Probation Officer or Chief Juvenile Probation Officer. Only certified Juvenile Probation Officers (JPOs) should complete this survey. Anyone who is a certified JPO, including Chief JPO, is encouraged to complete this survey.

The questions asked in this study are designed to obtain a picture of what the general work environment is like for Juvenile Probation Officers (JPOs) in the state of Texas. More specifically, this survey will ask questions about your work environment, job characteristics, job-related attitudes, and social support. The survey will also include demographic and caseload-specific questions.

This survey is online and anonymous. Responses will not be identifiable to individual officers. Your responses to the survey are transmitted through a SSL secure server and your IP address is NOT being collected.

The survey should take approximately 15 minutes to complete.

There is no compensation being offered for participating, but your participation is greatly appreciated. There are two goals for this study. The first goal is to gain insight into the work environment of juvenile probation officers and the effects that environment may have on them. Second, the findings from the study may provide useful information for Chief JPOs and other officials to improve the work environments for their employees, thus benefiting the entire agency or organization.

This survey is completely voluntary. While full participation is appreciated, you can stop at any time or skip questions you do not feel comfortable answering.

This project was approved by the Texas State University Institutional Review Board on 10/15/2014 (Exemption Request number EXP2014R729583C).

Any inquiries about this study should be directed to Lynn Greenwood at lgreenwood@tamuct.edu. A summary of the findings will be provided to participants upon completion of the study, if requested. To access the results of the study, contact Lynn Greenwood.

\* 1. Please identify if you agree with the terms and conditions as described above before beginning the survey

- Agree
- Disagree (I do not wish to participate in this survey)

2. What is your gender?

- Male  
 Female

Other (please specify)

3. What is the highest degree you have received?

- Bachelor's degree  
 Master's degree  
 Professional degree (e.g., MD, DDS, DVM, JD, DD, LLB)  
 Doctorate (e.g., PhD or ED)

4. What is your marital status?

- Currently married  
 Separated  
 Divorced  
 Widowed  
 Never married

5. What is your age

- 20-30  
 31-40  
 41-50  
 51-60  
 61+

6. Are you of Hispanic, Latino, or Spanish origin?

- No, not of Hispanic, Latino, or Spanish origin
- Yes, Mexican, Mexican Am., Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, another Hispanic, Latino, or Spanish origin

7. What is your race? Check all that apply.

- White
- Black, African American, or Negro
- American Indian or Alaska Native
- Asian Indian
- Chinese
- Japanese
- Filipino
- Korean
- Vietnamese
- Other Asian
- Native Hawaiian
- Guamanian or Chamorro
- Samoan
- Other Pacific Islander
- Some other race

8. How many years have you been employed with your current agency, as of January of this year?

9. Are you certified as a juvenile supervision officer (JSO)?

Yes

No

10. Do you supervise a specialized caseload?

Yes

No

11. If you answered "Yes" to question 10, please indicate what type of specialized caseload you supervise

12. How many probationers do you currently supervise?

13. Do you supervise other juvenile probation officers?

Yes

No

14. Do you have any other roles or duties within the probation agency beyond caseload supervision?

Yes

No

15. If you answered "Yes" to question 14, please write your responses in the space provided below:



16. Indicate the row that includes the county you are currently employed by:

- Andrews, Aransas, Archer, Armstrong, Bailey, Bandera, Baylor, Blanco, Borden, Bosque, Brewster, Briscoe, Brooks, Burleson, Calhoun, Callahan, Camp, Carson, Castro, Childress, Clay, Cochran, Coke, Coleman, Collingsworth, Colorado, Comanche, Concho, Cottle, Crane, Crockett, Crosby, Culberson, Dallam, Dawson, Deaf Smith, Delta, DeWitt, Dickens, Dimmit, Donley, Duval, Eastland, Edwards, Falls, Fayette, Fisher, Floyd, Foard, Franklin, Freestone, Frio, Gaines, Garza, Gillespie, Glasscock, Goliad, Gonzales, Gray, Hall, Hamilton, Hansford, Hardeman, Hartley, Haskell, Hemphill, Hockley, Houston, Hudspeth, Hutchinson, Irion, Jack, Jackson, Jeff Davis, Jim Hogg, Jones, Kames, Kenedy, Kent, Kimble, King, Kinney, Knox, La Salle, Lamb, Lampasas, Lavaca, Lee, Leon, Limestone, Lipscomb, Live Oak, Llano, Loving, Lynn, Madison, Marion, Martin, Mason, McCulloch, McMullen, Menard, Milam, Mills, Mitchell, Montague, Moore, Morris, Motley, Newton, Nolan, Ochiltree, Oldham, Panola, Parmer, Pecos, Presidio, Rains, Reagan, Real, Red River, Reeves, Refugio, Roberts, Robertson, Runnels, Sabine, San Augustine, San Saba, Schleicher, Scurry, Shackelford, Sherman, Somervell, Stephens, Sterling, Stonewall, Sutton, Swisher, Terrell, Terry, Throckmorton, Trinity, Tyler, Upton, Ward, Wheeler, Wilbarger, Willacy, Winkler, Yoakum, Young, Zapata, Zavala,
- Atascosa, Austin, Bee, Brown, Burnet, Caldwell, Cass, Chambers, Cooke, Erath, Fannin, Grimes, Hale, Hill, Hopkins, Howard, Jasper, Jim Wells, Kendall, Kerr, Kleberg, Lamar, Matagorda, Medina, Navarro, Palo Pinto, Polk, San Jacinto, Shelby, Titus, Upshur, Uvalde, Val Verde, Waller, Washington, Wharton, Wilson, Wood
- Anderson, Angelina, Bastrop, Bowie, Brazos, Cherokee, Comal, Coryell, Ector, Ellis, Galveston, Grayson, Gregg, Guadalupe, Hardin, Harrison, Hays, Henderson, Hood, Hunt, Jefferson, Johnson, Kaufman, Liberty, Lubbock, Maverick, McLennan, Midland, Nacogdoches, Orange, Parker, Potter, Randall, Rockwall, Rusk, San Patricio, Smith, Starr, Taylor, Tom Green, Van Zandt, Victoria, Walker, Webb, Wichita, Wise
- Bell, Bexar, Brazoria, Cameron, Collin, Dallas, Denton, El Paso, Fort Bend, Harris, Hidalgo, Montgomery, Nueces, Tarrant, Travis, Williamson

17. The following questions describe characteristics of work environments. For each question, please indicate how much each of these questions relate to your current work environment.

	not at all	just a little	a moderate amount	quite a lot	a great deal
Do you decide on the order in which you do things?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you set your own pace of work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can you choose the methods to use in carrying out your work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can you vary how you do your work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can you decide how to go about getting your job done?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you have to react quickly to prevent problems arising?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you have to concentrate all the time to watch for things going wrong?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you have to keep track of more than one process at once?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you have to solve problems that have no obvious correct answer?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you come across problems in your job you have not met before?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. The following questions relate to perceptions of fairness within work environments. For each question, please indicate how you feel about the fairness of your current work environment.

	very unfair	unfair	neither fair or unfair	fair	very fair
How fair has the probation department been in rewarding you when you consider the amount of effort that you have put forth?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fair has the probation department been to you when you consider the responsibilities that you have at work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fair has the probation department been in rewarding you when you take into account the stresses and strains of your job?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fair has the probation department been in rewarding you when you take into account the amount of education and training you have?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fair has the probation department been in rewarding you when you consider the work you have done well?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fair is the promotion process at the probation department?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fair is the process of the evaluation of your job performance at the probation department?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fair of an opportunity do you have for input into organizational decision-making at the probation department?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fair is the appeal process for decisions you feel are unjust at the probation department?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fair is the probation department in explaining decisions that have a significant effect on you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fair is the probation department in treating you with respect and dignity?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	very unfair	unfair	neither fair or unfair	fair	very fair
How fair is the probation department overall in how it treats employees?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. The following statements relate to characteristics of work environments. Please indicate your level of agreement with how much each statement relates to your current work environment.

	strongly disagree	disagree	neither agree or disagree	agree	strongly agree
When I am at work, I often feel tense or uptight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A lot of times, my job makes me very frustrated or angry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most of the time when I am at work, I don't feel that I have much to worry about.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am usually calm and at ease when I am working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I usually feel that I am under a lot of pressure when I am at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are a lot of aspects about my job that can make me pretty upset about things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following questions reflect how some people feel about their work environments. Please check the box indicating how you feel about your current work environment.

20. Do you find some aspects of your job more satisfying, fulfilling, and enjoyable than other parts?

- Yes  
 No

21. Do you desire to voluntarily leave/quit your job?

- Yes  
 No

22. In the last 6 months, have you thought about quitting your current job?

- Yes  
 No

23. The following statements reflect how people sometimes feel about their work environments. Please indicate your level of agreement with how much each question relates to your current work environment.

	strongly disagree	disagree	neither agree or disagree	agree	strongly agree
It is likely I will be at this job in a year from now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have actively searched for a job with outer employers in the last year.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working at the probation department is sometimes so depressing that it's hard to do a good job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often leave work tired.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I leave work, I usually remain tired for the rest of the day and evening.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes I seem to be just going from paycheck to paycheck with no real feelings about my job and what happens here.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following questions ask how you feel about your work environment. Please indicate the strength of your feeling between two words describing the way you feel about your current work environment.

24. Indicate the strength of your feeling about your work environment:

Personally fulfilling Unfulfilling

25. Indicate the strength of your feeling about your work environment:

Hard Easy

26. Indicate the strength of your feeling about your work environment:

Comfortable Uncomfortable

27. Indicate the strength of your feeling about your work environment:

Unchallenging Challenging

28. Indicate the strength of your feeling about your work environment:

Tiring Energizing

29. Indicate the strength of your feeling about your work environment:

Exciting Boring



30. Indicate the strength of your feeling about your work environment:

Goal-oriented							Not goal-oriented
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following questions ask how you feel about your work environment. Please indicate the strength of your feeling between two adjectives describing the way you feel about your current work environment.

31. Indicate the strength of your feeling about your work environment:

Flexible Rigid

32. Indicate the strength of your feeling about your work environment:

Anxiety-producing Satisfying

33. Indicate the strength of your feeling about your work environment:

Meaningful Meaningless

34. Indicate the strength of your feeling about your work environment:

Secure Insecure

35. Indicate the strength of your feeling about your work environment:

Positive Negative

36. Indicate the strength of your feeling about your work environment:

Helpful Harmful

37. The following statements reflect how people sometimes feel about their work environments. Please indicate your level of agreement with how much each statement relates to your current work environment.

	strongly disagree	disagree	neither agree or disagree	agree	strongly agree
My job is usually interesting enough to keep me from getting bored.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel fairly well satisfied with my present job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I definitely dislike my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most days I am enthusiastic about my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like my job better than the average worker does.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find real enjoyment in my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

38. The following statements relate to how people feel about their work environments. Please indicate your level of agreement with how much each statement relates to your current work environment.

	strongly disagree	disagree	neither agree or disagree	agree	strongly agree
I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel very little loyalty to this organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would accept almost any type of job assignment in order to keep working for this organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find that my values and the organization's values are very similar.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could just as well be working for a different organization as long as the type of work was similar.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It would take very little change in my present circumstances to cause me to leave this organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Often, I find it difficult to agree with this organization's policies on important matters relating to its' employees.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For me this is the best of all possible organizations for which to work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

39. The following statements reflect the types of support people may have within and outside of their work environments. Please indicate your level of agreement with how much each statement relates to your social support both within and outside of your current work environment.

	strongly disagree	disagree	neither agree or disagree	agree	strongly agree
My supervisors often encourage us to do the job in a way that we would be really proud of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisors often encourage the people I work with if they do their job well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisors often blame others when things go wrong, which are possibly not the fault of those blamed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My fellow officers often compliment someone who has done his/her job well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My fellow officers often blame each other when things go wrong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My fellow officers often encourage each other to do the job in a way that we would be really proud of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have people in my family that I can talk to about the problems I have at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No one in my family can really understand how tough my job can be.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When my job gets me down, I always know that I can turn to my family and get the support I need to feel better.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No counting people that I work with, I have close friends that I can get together with pretty often.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a friend that lives nearby that I can confide in and tell all my problems to.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not counting my fellow employees, I have friends that will help me out when things are going wrong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The survey is now completed. Thank you for your participation!

If you have any questions or comments about this survey, please contact the principle investigator Lynn Greenwood (lgreenwood@tamuct.edu).

## REFERENCES

- Andreou, E., Alexopoulos, E.C., Lionis, C., Varvogli, L., Gnardellis, C., Chrousos, G.P., & Varviri, C. (2011). Perceived stress scale: Reliability and validity study in Greece. *International Journal of Environmental Research and Public Health*, 8, 3287-3298.
- Anson, R.H., Johnson, B., & Anson, N.Q. (1997). Magnitude and source of general and occupation-specific stress among police and correctional officers. *Journal of Offender Rehabilitation*, 25, 103-113.
- Armstrong, M.M., Hartje, J.A., & Evans, W.P. (2014). Factors affecting juvenile care workers' intent to continue working in juvenile corrections. *Criminal Justice Review*, 39(1), 5-18.
- Auerbach, S., Quick, B., & Pegg, P. (2003). General job stress and job-specific stress in juvenile correctional officers. *Journal of Criminal Justice*, 31, 25-36.
- Baron, R.M. & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Beehr, T. A., & Bhagat, R. S. (1985). Introduction to human stress and cognition in organizations. *Human stress and cognition in organizations*, 3, 19.
- Blader, S.L. & Tyler, T.R. (2003). What constitutes fairness in work settings? A four-component model of procedural justice. *Personality and Social Psychology Review*, 7(4), 349-361.

- Bradburn, N., Sudman, S., & Wansink, B. (2004). *Asking questions: The definitive guide to questionnaire design – For market research, political polls, and social and health questionnaires*. San Francisco, CA: Jossey-Bass.
- Brayfield, A.H. & Rothe, H.F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35*, 307-311.
- Britton, D.M. (1997). Perceptions of the work environment among correctional officers: Do race and sex matter? *Criminology, 35*, 85-105.
- Brough, P. & Williams, J. (2007). Managing occupational stress in a high-risk industry: Measuring the job demands of correctional officers. *Criminal Justice and Behavior, 34*, 555-567.
- Brown, J.M. & Campbell, E.A. (1994). *Stress and policing: Sources and strategies*. New York: John Wiley.
- Burke, K.J. & Paton, D. (2006). Predicting police officer job satisfaction: Traditional versus contemporary models of trauma in occupational experience. *Traumatology, 12*, 189-197.
- Camp, S. (1994). Assessing the effects of organizational commitment and job satisfaction on turnover: An event history approach. *The Prison Journal, 74*, 279-305.
- Campbell, D.G. (2011). Diversity and job satisfaction: Reconciling conflicting theories and findings. *International Journal of Applied Management and Technology, 10(1)*, 1-15.
- Casper, Tyler, & Fisher (1988). Procedural justice in felony cases. *Law and Society Review, 22(3)*, 483-507.



- Cheek, F.E. & Miller, M.D. (1982). *Managerial stress in correctional facilities handbook*. Trenton: New Jersey Department of Corrections.
- Cheek, F.E. & Miller, M.D. (1983). The experience of stress for correction officers: A double-blind theory of correctional stress. *Journal of Criminal Justice*, 11, 105-120.
- Cohen, A. (1991). Career stage as a moderator of the relationship between organizational commitment and its outcomes: A meta-analysis. *Journal of Occupational Psychology*, 64, 253-268.
- Cherniss, C. (1980). *Professional burnout in human service organizations*. New York: Praeger.
- Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3<sup>rd</sup> ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Cohen, S., Kamarck, T, & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396.
- Cohen, S., Kessler, R. C., & Gordon, L. U. (Eds.). (1997). *Measuring stress: A guide for health and social scientists*. Oxford University Press, USA.
- Cohen, S., Underwood, L., & Gottlieb, B. (2000). *Social support measurement and intervention: A guide for health and social scientists*. New York, NY: Oxford University Press.
- Cooper, C.L., Hoel, H., & Faragher, B. (2004). Bullying is detrimental to health, but all bullying behaviours are not necessarily equally damaging. *British Journal of Guidance & Counseling*, 32(3), 367-387.

- Crank, J.P., Regoli, R., Hewitt, J.D., Culbertson, R.G. (1995). Institutional and organizational antecedents of role stress, work alienation, and anomie among police executives. *Criminal Justice and Behavior*, 22, 152-171.
- Cullen, F.T., Link, B.G., Wolfe, N.T., & Frank, J. (1985). The social dimensions of correctional officer stress. *Justice Quarterly*, 2, 505-533.
- De Bruin, G.P. (2006). The dimensionality of the general work stress scale: A hierarchical exploratory factor analysis. *South American Journal of Industrial Psychology*, 32(4), 68-75.
- De Cremer, D. & Tyler, T.R. (2007). The effects of trust in authority and procedural fairness on cooperation. *Journal of Applied Psychology*, 92(3), 639.
- De Silva, P.V., Hewage, C.G., & Fonseka, P. (2009). Burnout: An emerging occupational health problem. *Galle Medical Journal*, 14(1), 52-55.
- DeVellis, R.F. (2012). *Scale development: Theory and applications* (3<sup>rd</sup> ed.). Sydney: Allen & Unwin.
- Dictionary.com <http://dictionary.reference.com/browse/stress>
- Dowden, C. & Tellier, C. (2004). Predicting work-related stress in correctional officers: A meta-analysis. *Journal of Criminal Justice*, 32, 31-47.
- Feld, B.C. (1991). Justice by geography: Urban, suburban and rural variations in juvenile justice administration. *The Journal of Criminal Law & Criminology*, 82(1), 156.
- Ferdik, F.V., Smith, H.P., & Applegate, B. (2014). The role of emotional dissonance and job desirability in predicting correctional officer turnover intentions. *Criminal Justice Studies*, 27(4), 323-343.

- Finn, P. (1999). Correctional officer stress: A cause for concern and additional help. *Federal Probation, 62(2)*, 65-74.
- Finn, P. & Kuck, S. (2005). *Stress among probation and parole officers and what can be done about it*. Research for Practice Series. U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.
- Finney, C., Stergiopoulos, E., Hensel, J., Bonato, S., & Dewa, C.S. (2013). Organizational stressors associated with job stress and burnout in correctional officers: A systematic review. *BMS Public Health, 13*, 82-95.
- Fruedenberger, H.J. (1980). *How to beat the high cost of success*. New York: Bantam Books.
- Gayman, M.D. & Bradley, M.S. (2012). Organizational climate, work stress, and depressive symptoms among probation and parole officers. *Criminal Justice Studies, 26(3)*, 326-346.
- Gernstein, L.H., Topp, C.G., & Correll, G. (1987). The role of the environment and person when predicting burnout among correctional personnel. *Criminal Justice and Behavior, 14*, 352-369.
- Greenberg, J. & Tyler, T.R. (1987). Why procedural justice in organizations? *Social Justice Research, 1(1)*, 41-65.
- Griffin, M.L. (2001). Job satisfaction among detention officers: Assessing the relative contribution of organizational climate variables. *Journal of Criminal Justice, 29(3)*, 219-232.
- Griffin, M.L. (2006). Gender and stress: A comparative assessment of sources of stress among correctional officers. *Journal of Contemporary Criminal Justice, 22*, 5-25.

- Griffin, M.L., Hogan, N.L., & Lambert, E.G. (2013). Career stage theory and turnover intent among correctional officers. *Criminal Justice and Behavior, 41(1)*, 4-19.
- Griffin, M.L., Hogan, N.L., Lambert, E.G., Tucker-Gail, K.A., & Baker, D.N. (2010). Job involvement, job stress, job satisfaction, and organizational commitment and the burnout of correctional staff. *Criminal Justice and Behavior, 37*, 239-255.
- Harris, A.J., Lobanov-Rostovsky, C., & Levenson, J.S. (2015). *Law enforcement perspectives on sex offender registration and notification preliminary survey results*. Lowell, MA: University of Massachusetts Lowell.
- Harvey, J. (2014). Perceived physical health, psychological distress, and social support among prison officers. *The Prison Journal, 94*, 242-259.
- Hogan, N.L., Lambert, E.G., Jenkins, M., & Wambold, S. (2006). The impact of occupational stressors on correctional staff organizational commitment: A preliminary study. *Journal of Contemporary Criminal Justice, 22*, 44-62.
- Holgate, A.M. & Clegg, I.J. (1991). The path to probation officer burnout: New dogs, old tricks. *Journal of Criminal Justice, 19*, 325-337.
- Holmes, T.H. & Rahe, R.H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research, 11(2)*, 213-218.
- Hurrell, J.J., Nelson, D.L., & Simmons, B.L. (1998). Measuring job stressors and strains: Where we have been, where we are, and where we need to be. *Journal of Occupational Health Psychology, 3(4)*, 368-389.
- Ileffe, G. & Steed, L. (2000). Exploring the counselor's experience of working with perpetrators and survivors of domestic violence. *Journal of Interpersonal Violence, 15*, 393-412.

- Jackson, P.R., Wall, T.D., Martin, R. & Davids, K. (1993). New measures of job control, cognitive demand, and production responsibility. *Journal of Applied Psychology*, 78(5), 753-762.
- Jacobs, J.B. & Kraft, L.J. (1978). Integrating the keepers: A comparison of Black and White prison guards in Illinois. *Social Problems*, 25, 304-318.
- Johnson, J.V. & Hall, E.M. (1988). Job strain, workplace social support, and cardiovascular disease: A cross-sectional study of a random sample of the Swedish Working population. *American Journal of Public Health*, 78, 1336-1342.
- Johnson, O.N. (2016). Police officer wellness evaluation response survey results. *The Journal of Law Enforcement*, 5(3), 1-35.
- Jones, J.R. & Harter, J.K. (2005). Race effects on the employee engagement-turnover intention relationship. *Journal of Leadership & Organizational Studies*, 11(2), 78-88.
- Karasek Jr., R.A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285-308.
- Kincannon, J.C. (1968). Prediction of the standard MMPI scale scores from 71 items: The Mini-Mult. *Consulting and Clinical Psychology*, 32, 319-325.
- Korre, M., Farioli, A., Varvarigou, V., Sato, S., & Kales, S.N. (2014). A survey of stress levels and time spent across law enforcement duties: Police chief and officer agreement. *Policing*, 8(2), 109-122.
- Lambert, E. (2001). To stay or quit: A review of the literature on correctional staff turnover. *American Journal of Criminal Justice*, 26, 61-76.

- Lambert, E. (2003). The impact of organizational justice on correctional staff. *Journal of Criminal Justice*, 31, 155-168.
- Lambert, E.G. (2006). I want to leave: A test of a model of turnover intent among correctional staff. *Applied Psychology in Criminal Justice*, 2(1), 57-83.
- Lambert, E., Altheimer, I., & Hogan, N. (2010). Exploring the relationship between social support and job burnout among correctional staff: An exploratory study. *Criminal Justice and Behavior*, 37, 1217-1236.
- Lambert, E., Barton, S., & Hogan, N. (1999). The missing link between job satisfaction and correctional staff behavior: The issue of organizational commitment. *American Journal of Criminal Justice*, 24, 95-116.
- Lambert, E.G., Hogan, N.L., Paoline III, E.A., & Clarke, A. (2005). The impact of role stressors on job stress, job satisfaction, and organizational commitment among private prison staff. *Security Journal*, 18(4), 33-50.
- Lambert, E.G., Minor, K.I., Wells, J.B., & Hogan, N.L. (2015). Social support's relationship to correctional staff job stress, job involvement, job satisfaction, and organizational commitment. *The Social Science Journal*, 53, 22-32.
- Lambert, E.G. & Paoline, E.A. (2008). The influence of individual, job, and organizational characteristics on correctional staff job stress, job satisfaction, and organizational commitment. *Criminal Justice Review*, 33(4), 541-564.
- Lambert, E. & Paoline III, E.A. (2010). Take this job and shove it: An exploratory study of turnover intent among jail staff. *Journal of Criminal Justice*, 38, 139-148.
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice-Hall.

- Maslach, C. & Jackson, S.E. (1981). *The Maslach Burnout Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Matteson, M.T. & Ivancevich, J.M. (1987). *Controlling work stress: Effective human resource and management strategies*. San Francisco: Jossey-Bass, Inc.
- Matz, A.K., Woo, Y., & Kim, B. (2014). A meta-analysis of the correlates of turnover intent in criminal justice organizations: Does agency type matter? *Journal of Criminal Justice*, 42, 233-243.
- Mauno, S., Ruokolainen, M., & Kinnunen, U. (2013). Does aging make employees more resilient to job stress? Age as a moderator in the job stress--well-being relationship in three Finnish occupational samples. *Aging & Mental Health*, 17(4), 411-422.
- McShane, M. & Williams, F. (1993). *The management of correctional institutions*. New York: Garland Publishing, Inc.
- Minor, K.I., Wells, J.B., Angel, E., & Matz, A.K. (2011, March). Predictors of early job turnover among juvenile correctional facility staff. *Criminal Justice Review*, 36(1), 58-75.
- Mitchell, O., Mackenzie, D.L., Styve, G.J., and Gover, A.R. (2000, June). The impact of individual, organizational, and environmental attributes on voluntary turnover among juvenile correctional staff members. *Justice Quarterly*, 17, 333-357.
- Mowday, R., Porter, L., & Steers, R. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism and turnover*. New York: Academic Press.

- Mustaine, E.E., Tewksbury, R., Connor, D.P., & Payne, B.K. (2015). Criminal justice officials' views of sex offenders, sex offender registration, community notification, and residency restrictions. *Justice System Journal, 36(1)*, 63-85.
- O'Donnell, C. & Stephens, C. (2001). The impact of organizational, social environmental and job content stressors on the work related strains of probation officers. *The Australian and New Zealand Journal of Criminology, 34(2)*, 193-203.
- Oliver, W.M. & Meier, C. (2004). Stress in small town and rural law enforcement: Testing the assumptions. *American Journal of Criminal Justice, 29(1)*, 37-57.
- Ospio, S.H., & Spokane, A.R. (1983). *A manual for measures of occupational stress, strain and coping*. Columbus, OH: Marathon Consulting and Press.
- Pallant, J. (2013). *SPSS survival guide: A step by step guide to data analysis using IBM SPSS (5<sup>th</sup> ed.)*. New York, NY: McGraw Hill.
- Palmer, S., Cooper, C., & Thomas, K. (2003). *Creating a balance: Managing stress*. London: The British Library.
- Patterson, B.L. (1992). Job experience and perceived stress among police, correctional, and probation/parole officers. *Criminal Justice and Behavior, 19(3)*, 260-285.
- Peacock, E.J. & Wong, P.T.P. (1990). The stress appraisal measure (SAM): A multidimensional approach to cognitive appraisal. *Stress Medicine, 6*, 227-236.
- Pearlin, L. & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*, 2-21.



- Pitts, W. (2007). Educational competency as an indicator of occupational stress for probation and parole officers. *American Journal of Criminal Justice: AJCJ*, 32(1/2), 57-75.
- Price, J. & Mueller, C. (1986). *Absenteeism and turnover among hospital employees*. Greenwich, CT: JA Press.
- Qureshi, H., Klahm, C., Smith, B., Frank, J., Lambert, E., & Hogan, N. (2013). I want justice: The relationship between perceptions of distributive and procedural justice with organizational commitment. *Paper presented at the 2013 annual meeting of the American Society of Criminology in Atlanta, Georgia*.
- Reynolds, P.D. (2015). *The impact of fairness, organizational trust, and perceived organizational support on police officer performance* (Doctoral dissertation). Retrieved from Texas State University (Proquest #3725346).
- Rizzo, J., House, R., & Iwanicki, E.F. (1982). Role conflict and role ambiguity in complex organizations. *Administrative Science Quarterly*, 15, 150-163.
- Rodriguez, I., Bravo, M.J., Peiro, J.M., & Schaufeli, W. (2001). The demands-control-support model, locus of control and job satisfaction: A longitudinal study. *Work & Stress*, 15, 97-114.
- Salyers, M.P., Hood, B.J., Schwartz, K., Alexander, A.O., & Aalsma, M.C. (2015). The experience, impact, and management of professional burnout among probation officers in juvenile justice settings. *Journal of Offender Rehabilitation*, 54(3), 175-193.

- Sandman, B. (1992). The measurement of job stress: Development of the job stress index. In Cranny, C., Smith, P., & Stone, E. (Eds.), *Job satisfaction: How people feel about their jobs and how it affects their performance*. New York: Lexington Books.
- Sandy, J.P. & Devine, D.A. (1978). Four stress factors unique to rural patrol. *Police Chief*, 45(9), 42-44.
- Schaufeli, W.B. & Peeters, M.C.W. (2000). Job stress and burnout among correctional officers: A literature review. *International Journal of Stress Management*, 7(1), 19-48.
- Schwalbe, C.S. & Maschi, T. (2009). Investigating probation strategies with juvenile offenders: The influence of officers' attitudes and youth characteristics. *Law and Human Behavior*, 33(5), 357-367.
- Scott, Y.M. (2004). Stress among rural and small-town patrol officers: A survey of Pennsylvania municipal agencies. *Police Quarterly*, 7(2), 237-261.
- Selye, H. (1984). *The stress of life*. New York: McGraw-Hill.
- Simmons, C., Cochran, J.K., & Blount, W.R. (1997). Effects of job-related stress and job satisfaction on probation officers' inclinations to quit. *American Journal of Criminal Justice*, 21(2), 213-229.
- Skolnick, J. (1966). *Justice without trial: Law enforcement in a democratic society*. New York: Wiley.

Skowronski, B. (2015). Stress in probation officers enforcing judgments in criminal and juvenile cases. *Polish Journal of Social Rehabilitation, 10*, 453-471.

Slate, R.N., Johnson, W.W., & Wells, T.L. (2000). Probation officer stress: Is there an organizational solution? *Federal Probation, 64(1)*, 56-60.

Slate, R.N. and Vogel, R.E. (1997). Participative management and correctional personnel: A study of the perceived atmosphere for participation in correctional decision-making and its impact on employee stress and thoughts about quitting. *Journal of Criminal Justice, 25*, 397-408.

Slate, R.N., Wells, Terry L., and Johnson, W.W. (2003). Opening the manager's door: State probation officer stress and perceptions of participation in workplace decision making. *Crime Delinquency, 49*, 519-541.

Spector, P. (1996). *Industrial and Organizational Psychology: Research and Practice*. New York: John Wiley.

Steiner, B. (2005). Predicting sentencing outcomes and time served for juveniles transferred to criminal court in a rural northwestern state. *Journal of Criminal Justice, 33(6)*, 601-610.

Steiner, B. (2009). The effects of juvenile transfer to criminal court on incarceration decisions. *Justice Quarterly, 26(1)*, 77-106.

Steiner, B., Purkiss, M. Kifer, M., Roberts, E., & Hemmens, C. (2004). Legally prescribed functions of adult and juvenile probation officers. *Journal of Offender Rehabilitation, 39(4)*, 47-67.

- Stinchcomb, J.B. & Leip, L.A. (2013). Turning off jail turnover: Do generational differences matter? *Criminal Justice Studies*, 26(1), 67-83.
- Stohr, M., Self, R., & Lovrich, N. (1992). Staff turnover in new generation jails: An investigation of its causes and preventions. *Journal of Criminal Justice*, 20, 455-478.
- Texas Juvenile Justice Department (2013). The juvenile justice system's backbone: County probation departments and courts. Retrieved from <http://www.tjjd.texas.gov/about/overview.aspx>
- Texas Juvenile Justice Department (2014). The state of juvenile probation activity in Texas: Statistical and other data on the juvenile justice system in Texas for calendar year 2012. Report Number RPT-STAT-2012.
- Texas Juvenile Probation Commission (2011, November). The state of juvenile probation activity in Texas: Statistical and other data on the juvenile justice system in Texas for calendar years 2009 and 2010. Report Number RPT-STAT-2010.
- Texas Juvenile Probation Commission (2014, September). The state of juvenile probation activity in Texas: Statistical and other data on the juvenile justice system in Texas for calendar year 2012. Report Number RPT-STAT-2012.
- Texas Legislative Council (2013). Judicial District Requirements. Retrieved from <http://www.tlc.state.tx.us/redist/requirements/judicial.html>

- Triplett, R., Mullings, J.L., and Scarborough, K.E. (1996). Work-related stress and coping among correctional officers: Implications from organizational literature. *Journal of Criminal Justice*, 24, 291-308.
- Tyler, T.R. (1984a). The role of perceived injustice in defendant's evaluations of their courtroom experience. *Law and Society Review*, 18, 51.
- Tyler, T.R. (1984b). The influence of citizen satisfaction with police behavior upon public support for increases in police authority. *Law and Policy*, 6(3), 329-338.
- Tyler, T.R. (1986). When does procedural justice matter in organizational settings. *Research on Negotiation in Organizations*, 1, 7-23.
- Tyler, T.R. (1988). What is procedural justice – Criteria used by citizens to assess the fairness of legal procedures. *Law and Society Review*, 22, 103-135.
- Tyler, T.R. (1990). *Why People Obey the Law: Procedural Justice, Legitimacy, and Compliance*. New Haven, CT: Yale University Press.
- Tyler, T.R. (1991). Using procedures to justify outcomes: Testing the viability of a procedural justice strategy for managing conflict and allocating resources in work organizations. *Basic and Applied Social Psychology*, 12(3), 259-279.
- Tyler, T.R. (2001). A psychological perspective on the legitimacy of institutions and authorities. In *The Psychology of Legitimacy: Emerging Perspectives on Ideology, Justice, and Intergroup Relations* (eds. Jost, J.T. & Major, B.), 416-432. Cambridge: Cambridge University Press.
- Tyler, T.R. (2002). Leadership and cooperation in groups. *American Behavioral Scientist*, 45(5), 769-782.

- Tyler, T.R. (2006). Psychological perspectives on legitimacy and legitimation. *Annual Review of Psychology, 57*, 375-400.
- Tyler, T.R. & Blader, S.L. (2000). Cooperation in groups: Procedural justice. *Social Identity, and Behavioral Engagement, Philadelphia, PA*.
- Tyler, T.R. & Caine, A. (1981). The influence of outcome and procedures on satisfaction with formal leaders. *Journal of Personality and Social Psychology, 41(4)*, 642.
- Tyler, T.R. & De Cremer, D. (2005). Process-based leadership: Fair procedures and reactions to organizational change. *The Leadership Quarterly, 16(4)*, 529-545.
- Tyler, T.R. & DeGoey, P. (1995). Collective restraint in social dilemmas: Procedural justice and social identification effects on support for authorities. *Journal of Personality and Social Psychology, 69(3)*, 482.
- Tyler, T.R. & DeGoey, P. (1996). Trust in organizational authorities. In *Trust in Organizations: Frontiers of Theory and Research* (eds. Kramer, R.M. & Tyler, T.R.), 351-356, Thousand Oaks, CA: SAGE Publications, Inc.
- Tyler, T.R. & Folger, R. (1980). Distributional and procedural aspects of satisfaction with citizen-police encounters. *Basic and Applied Social Psychology, 1(4)*, 281-292.
- Tyler, T.R. & Lind, E.A. (1992). A relational model of authority in groups. *Advances in Experimental Social Psychology, 25*, 115-191.

- Tyler, T.R., Rasinski, K.A., & McGraw, K.M. (1985). The influence of perceived injustice on the endorsement of political leaders. *Journal of Applied Social Psychology, 15*(8), 700-725.
- U.S. Census Bureau (2000). Urban and rural classifications. Retrieved from <https://www.census.gov/geo/reference/urban-rural.html>
- Ward, G. & Kupchik, A. (2010). What drives juvenile probation officers?: Relating organizational contexts, status characteristics, and personal convictions to treatment and punishment orientations. *Crime & Delinquency, 56*(1), 35-69.
- Wells, T., Colbert, S. & Slate, R. (2006). Gender matters: Differences in state probation officer stress. *Journal of Contemporary Criminal Justice, 22*, 63-79.
- Wells, J.B., Minor, K.I., Angel, E., Matz, A.K., & Amato, N. (2009). Predictors of job stress among staff in juvenile correctional facilities. *Criminal Justice and Behavior, 36*, 245-258.
- Whisler, P.M. (1994). *A study of stress perception by selected state probation officers*. Unpublished Master's thesis, University of South Florida, Tampa, FL.
- White, L.M., Holloway, E.D., Aalsma, M.C., Adams, E.L., & Salyers, M.P. (2015). Job-related burnout among JPOs: Implications for mental health stigma and competency. *Psychological Services, 12*(3), 291-302.
- Whitehead, J. (1987). Probation officer job burnout: A test of two theories. *Journal of Criminal Justice, 15*, 1-16.

Williams, S. & Cooper, C.L. (1998). Measuring occupational stress: Development of the Pressure Management Indicator. *Journal of Occupational Health Psychology*, 3(4), 306-321.

Wilson, J.Q. (1971). *Varieties of police behavior*. New York: Athencum.

Zhao, J., He, N., & Lovrich, N. (2002). Predicting five dimensions of police officer stress: Looking more deeply into organizational settings for sources of police stress. *Police Quarterly*, 5, 43-62.

2014 Juvenile Justice Handbook (revised 11/14). *Office of the Attorney General*. Austin, TX: Office of the Texas Attorney General.