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Examining Correlates of Correctional Officer Risk Perceptions and Decision-Making

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EXAMINING CORRELATES OF CORRECTIONAL OFFICER RISK PERCEPTIONS
AND DECISION-MAKING

by

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DEDICATION

I would first like to dedicate completion of this doctor of philosophy program to my parents, Frank George Ferdik and Maria Teresa Sardo-Ferdik, who have provided invaluable support throughout the entire process. Without their constant assistance and belief in my abilities, I would never have been able to complete this program. I am forever indebted to them for their support, love and confidence. I would also like to dedicate completion of this program to my chair, Dr. Hayden P. Smith. He always believed in my abilities and was an integral part my success in this program. I would finally like to dedicate completion of my dissertation and doctoral program to Mikaela Cooney. I appreciate all of her support and will always be grateful for what she has done for me.

ABSTRACT

Developing a more complete understanding of the dangers and risks present within correctional environments can enhance prison safety. Research has revealed, however, that existing prison-based risk assessment and management instruments suffer considerable deficiencies, including failing to account for contextual factors that influence inmate misconduct, and basing generalizations off small sample sizes. Several studies have shown that correctional officers are often very accurate when it comes to the risk assessment and management of prison-based dangers. To expand this literature, the current study collected survey data from a statewide sample of maximum security correctional officers. Ultimately the objectives of this dissertation were to: 1)-Access what correctional officers perceive as dangers and risks within their respective work environment; 2)-Examine predictor variables of risk perceptions; 3)-Collect information concerning the decision-making strategies officers employ while at work; and 4)-Explore predictors, inclusive of officer risk perceptions, of these strategies.

Descriptive analyses revealed high mean ratings of officer risk perceptions. A number of demographic, work-based and psychological predictors surfaced as significant in multivariate regression models assessing correctional officers risk perceptions. Regression models examining officer decision-making found that their risk perceptions, as well as demographic features and work-based emotions, significantly influenced these outcomes. Directions for future research and potentially relevant policy implications are discussed in light of these findings.

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CHAPTER 1

INTRODUCTION

Uncertainty surrounding events such as natural disasters, criminal activity and the proliferation of new technologies has ignited in many a growing concern over the various risks that threaten humanity. Johnson and Tversky (1983) even claim that “as a society, we have never been more concerned with the assessment, management and regulation of risk” (p. 20). Such widespread preoccupations have prompted authors across numerous academic disciplines to research the multidimensional nature of the concept of risk.

Results from these studies have not only broadened our understanding of the meaning of this term, but have also contributed to a number of important policy implications and a more refined understanding of human behavior. For instance, research within the sociological (Rojek, 2005), economic (Renn, 1992) and psychological arenas (Slovic, 1987; Fischhoff et al. 2000; Slovic et al. 2000) has attributed human risk perceptions to a host of salient predictors. Other related investigations have not only revealed how one’s risk perceptions significantly influence subsequent decision-making, but that a variety of cognitive biases surround the average lay-person’s risk perceptions and decision-making processes (Johnson and Tversky, 1983; Tversky and Kahneman, 1971; Slovic, 1987; Renn, 1992; Slovic et al. 2000). Recently there has also been a movement to examine the effectiveness of programs designed to reduce the risks threatening human beings.

Some of the more notable risk reduction efforts undertaken and introduced come from the Department of Homeland Security, the Food and Drug Administration, resource

officers throughout our nation's schools and offender classification systems (O'Malley, 1985; Glaser, 1985; Clear and Berry, 1983). Although these risk management departments and techniques were designed with public protection in mind, research has unearthed several of their shortcomings. For instance, O'Malley (1991) and Garrick (2008) noted that poorly designed risk classification schemes, ineffective communication between risk management agencies and improperly executed responses to risk have led to mounting concern over the utility of these strategies. Muhlbauer (2004) even reports that "human errors...in risk assessment...are estimated to have caused 62% of...accidents in the United States" (p. 117). These observations underscore the need for improvements in the techniques developed to protect the public from life's dangers.

Within the criminal justice field, and corrections more specifically, assessing the risks associated with criminals has been of central concern to many. Citizens desire to be shielded from deviant behavior and agents of the system have been tasked with this responsibility. With respect to offender recidivism, its assessment has generally relied upon either professional or actuarial judgments. While the former are guided by parole board and judicial evaluations, the latter rest primarily upon aggregate statistical calculations of inmate's propensities for criminal involvement (Austin, 2004). Similar to the risk management instruments outlined above, even these strategies suffer considerable deficiencies. Failure to account for contextual factors influencing aberrant conduct, generalizations based on relatively small sample sizes and the inherent difficulties in predicting events with low probabilities (i.e., assault and murder) seriously undermine the efforts of these risk assessment and management instruments (Austin, 2004). This has led to a call for the development of improved and innovative strategies.

In their study of correctional officer risk perceptions, Gonsalvez et al. (2012) found that officers properly classified between 66 and 99 percent of offenders into the categories of low, medium and high risk for both sexual perpetration and victimization. They also found that each of the risk factors selected by the officers were statistically significant predictors of these outcomes. The authors finally added that because of the close contact officers have with inmates and the in-depth knowledge they possess regarding prison activities, they are in a unique position to provide interested stakeholders valuable information concerning not just the risks of offender recidivism, but the collective risks posed by penal environments. Sentiments such as these have been echoed by others who have found on more than one occasion that expert risk judgments are “accurate...and correspond closely to objective statistical frequencies of...risk events” (Slovic et al. 2000, p. 143). Correctional institutions contain a number of hazards that have the potential to pose significant risks of injury or even death to the individuals housed within them. Given the importance of assessing such risks, the limitations of current correctional risk assessment instruments and the expert status ascribed by many to correctional officers (Lipsky, 2010; Gonsalvez et al. 2012), at least with respect to their knowledge of penal environments, soliciting their input can enhance efforts geared towards establishing and maintaining safer correctional institutions. The risk perceptions held by correctional officers may also prove instrumental in predicting the likelihood of offender recidivism.

With the above observations in mind, this dissertation was concerned with fulfilling a number of objectives. First, via administration of a survey to a statewide population of maximum security correctional officers employed in South Carolina, this

study collected information from them concerning the presence and salience of workplace dangers and their potential for risk. Second, this dissertation was also interested in uncovering factors accounting for variation in officer risk perceptions. Third, and given how an established body of research has found risk perceptions to significantly influence human decision-making, this investigation intended to also understand the various work-related decisions officers make, and whether their perceptions of risk in particular influenced them. Insight gleaned from these officers may prove valuable in terms of both improving upon the limitations of existing correctional-based risk assessment instruments, and enlightening those interested about the general safety of corrections institutions.

This dissertation is organized in the following manner: Chapter 2 provides a general overview of the literature on prisons, inmates and correctional officers. This information is intended to provide a basic understanding of officer working conditions and of how they negotiate such a demanding profession. Chapter 3 provides an account of the theoretical and empirical literature on the concept of risk perceptions. This section not only identifies some of the problems inherent in properly conceptualizing this concept, but it also outlines some of the dominant theories proposed regarding how humans formulate risk perceptions. Chapter 4 details the various limitations of existing risk management and assessment strategies and argues in favor of soliciting correctional officer input as an improvement to these practices. Chapter 5 provides a summary of the research that has examined relationships between the variables under investigation in this study, which include officer demographics, work-related emotions officers experience, psychometric characteristics of dangers, correctional workplace hazards, and finally,

officer power base reliance, punishment orientations and turnover intentions. This chapter also outlines the purpose of the current study. Research models and hypotheses, along with the methodological and data analytic techniques undertaken throughout the course of this research, are explained in Chapter 6. Outcomes from quantitative analyses are overviewed in light of extant empirical literature in Chapter 7, with a discussion of the results and policy considerations, finally, reviewed in the eighth and final chapter.

CHAPTER 2

OVERVIEW OF UNITED STATES CORRECTIONAL SYSTEM

A history of the American correctional system is replete with significant changes in inmate demographics, the philosophical orientation of staff and the overall operations of facilities (McKelvey, 1977). Numerous researchers have noted that such social and administrative changes can have important implications for the way correctional officers both approach and handle their occupational demands (Turner, 1975; Whitehead & Lindquist, 1989; Kauffmann, 1989; Garcia, 2008; Lambert et al. 2009). Given the importance of recognizing what the correctional environment consists of, especially when investigating correctional officer risk perceptions and decision-making, this section will provide a brief historical overview of U.S. and South Carolina¹ prisons, as well as information pertaining to the current state of these institutions and the officers charged with establishing and maintaining order within them. Through this, a wider knowledge base regarding the formulation of correctional officer risk perceptions can be generated.

Historical Overview of U.S. Prisons

Prisons were first established in the United States during the 18th century (McKelvey, 1968; McKelvey, 1977; Roberts, 1997). Guided largely by the theological principles of the time, their central purposes were to offer a humane form of rehabilitation for offenders, isolate them from the criminogenic elements of society and serve as detention centers for accused offenders awaiting trial (McKelvey, 1977; Craig,

¹ Given how study subjects consist of officers employed within maximum security correctional institutions located in South Carolina, it is important to provide relevant information concerning this state's correctional system.

2005). Although imprisonment was originally not perceived as a punishment, correctional administrators and public members during this time believed that by isolating offenders from one another, mandating that they read biblical excerpts and sentencing them to manual labor, offenders would be purified of the sins that engendered their anti-social behavior (McKelvey, 1968; McKelvey, 1977; Rothman, 1977). Soon, however, with the expansion of the Industrial Revolution and the social changes it brought about, this correctional philosophy proved ineffective. Prisons became overcrowded and marked by increased violence, while inmates began to lament their inhumane treatment and religious indoctrination (McKelvey, 1977). Following a series of reforms, prisons would undergo substantial changes in their nature and structure.

Throughout the United States during the 19th and 20th centuries, various different penal models were introduced as answers to the problems early correctional practices faced². Beginning with the introduction of contract labor systems that forced offenders into hard manual labor (Roberts, 1997; Pratt et al. 1998), prisons across the country later adopted medical reform models aimed to medicinally treat inmates since it was believed their criminality stemmed from biological and psychological abnormalities (McKelvey, 1977). As the 1960's approached, a more community-oriented mindset was adopted (McKelvey, 1977). Here, rehabilitation and other restorative practices (Braithwaite, 1989) were viewed as central to the successful treatment of offenders. Finally, and from the 1980's to the present, the United States embraced crime control models aimed to severely punish law violators (Roberts, 1997; Pratt et al. 1998). Despite the efforts of

² Southern states throughout the 19th century also adopted slave system models. Contrary to the East, Western states during this same time period held many offenders in military bases and territorial facilities. For those interested in a more complete history of American correctional practices, see (McKelvey, 1968; McKelvey, 1977; Rothman, 1977).

these different reforms, prisons across the U.S. continued to suffer problems such as overcrowding, unfair prisoner treatment and recidivism (Mauer, 1999). Nonetheless, imprisonment within the United States still serves as the primary response to wayward conduct. With this said, in order to understand even more the nature and structure of our nation's prisons, the subsequent sections will provide an overview of the inmates housed within them and of the correctional officers responsible for managing these facilities.

Table 2.1: Historical evolution of U.S. prison systems

| Years | Total Prisons | Inmates in State Prisons | Inmates in Federal Prisons | Total Officers |
|-------|--------------------|--------------------------|----------------------------|-----------------------|
| 1880 | -- | 30,659 ^a | -- | -- |
| 1904 | -- | 55,429 ^a | 1,641 ^a | -- |
| 1923 | 64 ^a | 77,295 ^a | 4,664 ^a | 7,672 ^{af} |
| 1940 | 117 ^{ac} | 146,325 ^a | 19,260 ^a | 18,871 ^a |
| 1960 | 1,072 ^a | 201,324 ^a | 25,020 ^a | 38,922 ^{ag} |
| 1980 | 2,560 ^a | 261,292 ^a | 41,085 ^a | 287,635 ^{ah} |
| 2000 | 1668 ^b | 1,236,476 ^b | 145,416 ^b | 429,456 ^{il} |
| 2005 | 1821 ^c | 1,338,306 ^c | 187,618 ^c | 445,000 ^{il} |
| 2010 | -- | 1,402,624 ^d | 206,771 ^d | 493,100 ^{kl} |

Notes: ^a Reflects figures obtained from Cahalan and Parsons (1986); ^b Reflects figures obtained from Beck & Harrison (2001); ^c Reflects figures obtained from Harrison & Beck (2006); ^d Reflects figures obtained from Guerino, Harrison & Sabol (2011); ^e Reflects 1933 total count of prisons; ^f Reflects 1926 figures; ^g Reflects 1958 figures; ^h Reflects 1979 figures; ⁱ Reflects figures obtained from Camp & Camp (2000); ^j Reflects figures obtained from Stephan (2008); ^k Reflects figures obtained from the Bureau of Labor Statistics (2011); ^l Represents all correctional facilities

Historical Changes to Prisons and Inmates

Data from Table 2.1 provide additional information on the historical evolution of U.S. prisons. From these data, we see that whereas in 1923 there were 64 prisons in operation across the country, by 2005, that number reached a total of 1,821 (Harrison & Beck, 2006). Even the number of individuals housed within prisons witnessed dramatic increases—with roughly 30,000 persons incarcerated in state facilities in 1880, and over 1 million by 2010 (Cahalan & Parsons, 1986; Beck & Harrison, 2001; Harrison & Beck,

2006; Guerrino, Harrison & Sabol, 2011). Part of this rise can be explained by the passage of 1980's legislation aimed to 'get tough' on crime (Cullen et al. 1985; Mauer, 1999). During this period, policy-makers and legislators adopted 'truth-in-sentencing,' 'mandatory-minimum,' and 'three-strike' statutes partly in response to public outcries over increased crime rates. Arguably the most noteworthy increase took place between 1980 and 2000 when the inmate population more than quadrupled from roughly 260,000 to over 1.2 million (Cahalan & Parsons, 1986; Beck & Harrison, 2001; Harrison & Beck, 2006; Guerrino, Harrison & Sabol, 2011).

Accompanying this rise in the total inmate population was an increase in the percentage of offenders incarcerated for violent, property and drug-related offenses. It is important to acknowledge such changes in the offender distribution given the risks these inmates in particular pose to correctional line staff (Gonzalves et al. 2012). Subsequently, research reveals that while the percentage of inmates imprisoned for homicide in 1945 was 1, that number increased to 4 by 1984 (Cahalan & Parsons, 1986). Even more, while in 1910 only 4.8 percent of inmates were incarcerated for robbery, by 1981, 17.9 percent of the prison population consisted of this class of offenders. Even the percentage of imprisoned burglars increased from 22.1 in 1910 to 25.6 by 1981 (Cahalan & Parsons, 1986)³.

More recently, Beck and Harrison (2001) documented that the percentage of inmates incarcerated in state facilities for drug related offenses increased from 20 in 1990 to 26 in 1999. Between 1995 and 2003, Harrison and Beck (2006) noted an increase from 46.5 to 52.8 in the percentage of both state and federal inmates incarcerated for violent

³ Each of the percentages referenced in this paragraph reflect both state and federal prison facility offender distributions.

crimes. As of December 31st, 2009, Guerrino, Harrison & Sabol (2011) found that: a)- 53.2 percent of the entire state inmate population consisted of violent offenders, b)-19.2 percent consisted of property offenders and c)-17.8 percent consisted of drug-related offenders. What is evident from these figures is that the offender distribution is mutable and that correctional officers are often responsible for regulating the conduct of dangerous persons. In fact, research notes that these changes to the inmate population were partial explanations for some of the problems referenced earlier such as overcrowding and escalations in prison-based violence (Cullen et al. 1985; Mauer, 1999).

According to Park (1976), within all California prisons between 1970 and 1974, incidents of inmates assaulting other inmates rose from 79 to 220. During those same years, episodes of employees, including correctional officials, being assaulted by inmates escalated from 59 to 93. Park (1976) asserts that these accounts of violence were not isolated to California prisons alone, but instead, were part of a wider culture of violence prevalent within most all U.S. prisons during this time. As the years progressed though, American prisons witnessed reductions in the rate of various forms of violence. The total rate of prison homicides per every 100,000 inmates, for instance, decreased from 55.5 in 1980 to 8.5 by 2004. During this same time period, the rate of inmate suicides per every 100,000 fell from 38.0 to 18.0 (Byrne, Hummer & Taxman, 2008). However, across all U.S. prisons between 1995 and 2005, there was an increase from 13,938 to 17,952 in the total number of inmate assaults perpetrated against correctional line staff (Byrne, Hummer & Taxman, 2008). South Carolina instead witnessed a downturn from 516 such incidents in 2008 to 425 by 2012 (South Carolina Department of Corrections, 2013). Though some of these figures point to reductions in the incidence of violence occurring

within our prisons, they should not detract from the fact that physical aggression is still a frequent occurrence within penal environments. For this reason, it is important to also understand the characteristics of the individuals tasked with regulating the conduct of inmates—the correctional officers.

Historical Changes to Correctional Officers

Despite the perils that accompany their work, prisons have seen a historical growth in the number of correctional officers employed. Returning again to Table 2.1, we see that in 1923 there were roughly 7,000 correctional officers working throughout the United States, yet that number rose to nearly 500,000 by 2010. Although the majority of correctional officers are White, non-Hispanic males between the ages of 25 and 44 (Garcia, 2008), recent years have witnessed a rise in the total number of females currently occupying this position. In 1989, with a total of 141,129 COs working throughout all prisons, only 22,161, or 15.70 percent, were female. In 2002, however, of the 234,490 COs, 55,470, or 23.66 percent, were female—a 7.96 percent increase from 1989 (Garcia, 2008)⁴. Of the 3,827 correctional line staff employed throughout South Carolina in 2011, 1,497 were female, which represented 39.1 percent of the entire workforce for that year (American Correctional Association, 2013). It should be noted, however, that increased minority and female representation within the correctional workforce has occurred amidst turmoil.

⁴ Though contact was made with representatives of the American Correctional Association (ACA) in order to retrieve figures regarding historical changes in the number of C.O.'s by race, this information was never provided. Although other data sources were consulted (i.e., National Institute of Justice, Bureau of Justice Statistics, Bureau of Labor Statistics), the researcher was unable to piece together a more complete picture of the historical evolution of minority representation within the correctional workforce. However, research does note an increase in the amount of African Americans in particular working as correctional officers (Tewksbury & Collins, 2006; Van Voohris et al. 1991; Jurik & Halemba, 1984).

Prior to the civil rights movements of the 1960's, only White males, predominantly, were employed as correctional officers. As the 20th century progressed though, and as some of the above statistics illustrate, there was an increase in the number of African Americans and females working as correctional guards (Garcia, 2008; Tewksbury & Collins, 2006; Van Voohris et al. 1991; Jurik & Halemba, 1984). However, and especially with respect to females, concerns were voiced by correctional administrators, public members, inmates and male CO's regarding their abilities to adequately perform this job. Specifically, it was originally thought that only males had the characteristics of assertiveness, aggressiveness and intrepidity required for this profession (Tewksbury & Collins, 2006). Even Potter (1980) documented some of the controversy surrounding the employment of females as COs when stating:

Many female officers complain that they are harassed by male guards and inmates and that more is expected of them than of males. Many male guards resent the intrusion of women and complain that women are too weak physically to protect themselves or their fellow officers in confrontations with prisoners. Some male prisoners welcome the change, arguing that women humanize the atmosphere of a prison and tend to be less abusive and more willing to talk, and that their presence makes the artificial world of prison seem more like the outside world. Other inmates object to the female guards' presence because they do not want to be reminded of their sexual deprivations (p. 30).

Additional research found that even African American and Hispanic COs faced similar obstacles when first entering this profession (Kauffman, 1989; Crawley, 2004). Many were not only discriminated against, but were treated like inmates given the over-representation of minorities within the correctional population (Mauer, 1999; Kauffman, 1989; Crawley, 2004). Apart from other variables, which will be outlined below, it has been found that being a Black and/or female CO is a statistically significant predictor of

outcomes such as work-related stress, job dissatisfaction, burnout and even psychotropic drug use (Britton, 1997; Van Voohris et al. 1991; Lavigne et al. 2011; Tewksbury & Collins, 2006). Despite the wealth of problems faced by minority and female COs, other research found several positive outcomes resulting from their increased employment. Higher levels of inmate satisfaction, reductions in the number of inmate assaults on correctional staff and improved employee morale were all noted following greater representation of Blacks and females as COs (Cadwaladr, 1993; Carlson, 1997).

Although there has been a substantial growth in the number of COs working throughout the country, a large portion often resign shortly after their initial employment. Between 2000 and 2008, the average annual turnover rate for American correctional officers was 16.2 percent, according to the Management and Training Corporation Institute (2011). A more recent report issued by Ferdik, Smith and Applegate (2013) found that over 35 percent of South Carolina correctional officers desire to voluntarily terminate their employment. Apart from some of the ones outlined above, other reasons for such high resignation rates include stress (Lambert et al. 2009) dangerous work environments (Whitehead & Lindquist, 1989; Ferdik, Smith and Applegate, 2013) and a lack of recognition and fair treatment from superiors (Lambert et al. 2010a).

As indicated by the information presented thus far, penal institutions are unpredictable environments that can pose significant threats to both the welfare and safety of correctional line staff. Within prisons, COs are required to supervise inmate activities, offer access to counseling and rehabilitative services, report inmate conduct, enforce rules, and overall, maintain order (BLS, 2011; SCDC, 2013). Additionally, officers are required to adopt myriad other roles as their interactions with inmates extend

beyond issues of security. In many respects then, this type of employment is unlike any other given its unique working conditions and mandates. Only until recently, however, have researchers begun investigating how the prison influences correctional officers and how they negotiate such a demanding profession.

Overview of Correctional Officers and Their Work Environment

Before the 1970's, very little attention, academic or otherwise, was devoted to correctional officers working throughout our nation's prisons (Ross, 1981). This is somewhat surprising when one considers the nature of the overall prison and of some of the inmates with whom COs are forced to interact on a daily basis. Beginning in the 1980's though, an extensive line of research documented the working conditions of correctional officers and the perceptions they hold regarding inmates, their employers, and even their private lives (Ross, 1981; Johnson & Toch, 1982; Kauffmann, 1988; Lombardo, 1989; Kupers, 1999; Crawley, 2004).

The 'Typical' American Correctional Officer and General Correctional Working Conditions

Although attempts have been made to provide a portrait of the 'typical' American correctional officer (Ross, 1981), variability within and between both line staff and penal institutions makes this task difficult. For instance, Ross (1981) noted that while prisons in Maine had such low rates of officer injuries that these institutions did not even maintain records of such incidents, California prisons had some of the highest rates of officer injuries in the country. More recently, in a large scale and nationally representative study of correctional officer injuries, Biermann (2007) noted that mixed level security facilities (both medium and maximum) suffered some of the highest rates of officer injuries with

0.47/1000 workers falling victim to some type of injury. For all minimum level security facilities, instead, no injuries were reported. Disparities in correctional officer to inmate ratios have also been found. While prisons in the state of Vermont averaged 2.7 inmates to every correctional officer in 2005, South Carolina prisons averaged 8.8 inmates to every CO (Stephan, 2008).

Individual variance between officers has also been noted, especially regarding their punishment orientation. It has been found that while some officers believe the primary purpose of prison is to severely punish law violators, others ascribe to the idea that prison should serve a predominantly rehabilitative function (Crawley, 2004). Such differences have the potential to produce widely different estimations of who the American correctional officer is and what his/her perceptions are. This variability notwithstanding, similarities amongst correctional line staff have also been found.

Correctional officers cite job security (Crawley, 2004); relatively stable pay (Ross, 1981) and interesting work (Kauffmann, 1988) as the primary motivators leading to their employment in the corrections industry. They are typically required to work rotating eight (8) hour shifts that may take place throughout all hours of the day. Their work in general has low visibility since it is physically and socially hidden from public view (Garcia, 2008). Although day-to-day duties and the characteristics of them may vary between correctional officers, generally, all COs are required to monitor the behavior of society's criminals, man guard towers, abide to procedural guidelines in their quest to establish order and mitigate potentially life threatening situations such as riots (Kauffmann, 1989). Additionally, officers are often required to interact with dangerous individuals such as gang members (Lombardo, 1989), mentally unstable offenders

(Kupers, 1999; Turner, 1975), drug addicts (Ross, 1981), and as of recently, even terrorists (Crawley, 2004). Given the close proximity officers have with these and other inmates, the prison has been labeled a total institution, which is defined as “a place...where a large number of like-situated individuals, cutoff from the wider society for an appreciable period of time, together lead an...enclosed life” (Goffman, 1961, p. xiii).

*Bases of Power, Officer Perceptions and Work-Related Problems*⁵

To assist in regulating inmate conduct and maintaining a safer work environment, a number of scholars found that correctional officers utilize various forms of power (Stojkovic, 1984; Hepburn, 1985; Kauffman, 1989). French and Raven (1959) documented five variations of power found within organizational settings including referent, expert, reward, legitimate and coercive. Kauffman (1989) added to this list after finding how some officers use authority, persuasion, inducement, manipulation and force as a means of assuring inmate compliance with institutional rules and regulations. Both Kauffman (1989) and Crawley (2004), moreover, referenced how officers have developed specific techniques to understand when and under what conditions any one form of power will prove most efficacious in accomplishing such objectives.

Research further reveals that correctional officers abide to an ‘officer code’ (Garcia, 2008; Crawley, 2004; Kauffman, 1989). Code stipulations include: 1)-Always going to the aid of officers in distress; 2)-Never ‘lugging’ drugs; 3)-Never rattling; 4)-Never making a fellow officer look bad; 5)-Always supporting an officer; 6)-Never being a white hat, or, never siding with administration; and 6)-Always maintaining officer

⁵ Added discussion of correctional officer bases of power, correctional orientations and other workplace-related decision-making strategies is provided in Chapter 5.

solidarity (Kauffman, 1989). Other similarities between officers include their job perceptions. Most believe that because they work in such isolated environments, public members fail to appreciate and understand their work. Complaints about ambiguous political and administrative policies are also common amongst many correctional line staff because they believe this leads to, among other things, role conflict (Lambert et al. 2009), a misunderstanding of their duties (Crawley, 2004) and tension (Lombardo, 1989). Collectively then, the threats to well-being posed by the prison environment, the strenuous work schedules, the sometimes ineffective inmate behavioral management techniques, the demanding tasks and lack of support from both public members and superiors have each contributed to a wealth of problems for prison guards.

A growing body of literature finds that stress, anxiety, burnout, job dissatisfaction, and, ultimately, resignation, are significantly predicted by the problems most correctional officers face (Ross, 1981; Crawley, 2004; Levigne et al. 2010; Garcia, 2008; Lasswell, 2010; Lambert & Paoline, 2012; Lambert et al. 2009; Lambert et al. 2012b). Qualitative interviews conducted by Crawley (2004) uncovered how COs often bring their work experiences home with them and that this adversely influences their domestic relationships. Reports of spouses and children leaving their CO-employed partners were cited in these interviews, as well as reports of officers resorting to drugs and alcohol as coping mechanisms. In the end, despite the initial attractions of stable pay and job security, most officers resign from this position mostly in an effort to avoid additional social and psychological problems.

Having now provided a baseline from which to better understand correctional officers and their work environment, the next section will provide an overview of the

concept labeled 'perception of risk' (Slovic, 1987). It is important to understand what this concept means and how it influences human behavior. In order to do this, research on the meaning and significance of risk will be documented, as well as research on how it relates to the field of criminal justice, and corrections more specifically. Additionally, literature on the major theoretical paradigms used to understand risk perceptions will also be catalogued.

CHAPTER 3

THE PERCEPTION OF RISK

The concept of risk has been a topic of considerable interest amongst academics, policy-makers and members of the general public for several decades now. It has been researched across a wide domain of academic disciplines including business and economics (Floud, 1982), public health (Lee, 2007), environmental health (Duan, 2005), education (Bowen, 2013) and even criminal justice (Gonsalves et al. 2012). Results from this extensive line of research have provided insight regarding how human beings differentially interpret, perceive and react to risks (Slovic, 1981; 1987), how cognitive differences between people influence such varied assessments and behaviors (Slovic, Fischhoff, Lichtenstein, 2000; Slovic, 1987) , whether risk reduction/management techniques are effective (Glaser, 1985; O'Malley, 1998) and the strategies and techniques adopted by risk experts and governmental agencies in their attempts to quantify and control potentially catastrophic risks (Garrick, 2008). Researchers have also investigated how the concept of risk works to govern political and social action (Beck, 1992; O'Malley, 1998). Taken together, this scientific literature has contributed to a better understanding of how humans behave and how society functions.

Definitions of Risk Perceptions

A perception of risk is a highly subjective and contextually-based concept. Since human beings make personal judgments of what various phenomena within the world mean to them (Slovic, 1987), and included in this, risks, a common definition is

somewhat elusive. Rohrman and Renn (2000) even state that “there is no commonly accepted definition of the term risk – neither in the sciences nor in the public understanding” (p. 13). Nevertheless, different disciplines such as economics and sociology have formulated their own interpretations of this concept. Though there is variability between each definition, all of them share a set of commonalities and address similar issues humans consider when estimating risks. In the sections to follow, the definitions of risk perceptions offered by various disciplines will be presented, as well as analyzed for their ability to sufficiently define this concept.

One of the more widely accepted definitions of risk perceptions, offered by technical-objectivists, involves “the probability of an adverse event multiplied by the magnitude of its consequences” (Rayner, 1992, p. 93). This definition accords with the rational models of criminology, particularly the notion of the felicity calculus (Bentham, 1789; Cornish & Clarke, 1987). By utilizing aggregate data of some population, individuals make assessments of the likelihood of a particular event and how consequential its resulting outcomes might be. As an illustration, if a recently released inmate were to enter back into a community, human beings, including both the general public and experts like probation/parole officers, may make risk-based assessments concerning the possibility of the offender recidivating and the extent of the damage that may ensue as a result. To arrive at a technical risk-based calculation, mathematically, we would multiply the likelihood of the crime occurring by its potential consequences. The lower the probability and consequences, according to this definition, the less likely individuals will perceive any risk.

The probability X consequence definition, however, has been criticized on several fronts. First, it assumes that all risks imply adverse outcomes (Zinn, 2008). Though this may be true in a variety of circumstances, it is not always the case. Take for example the acts of hiring personnel, investing in a stock or even gambling in a casino where in each scenario there are a variety of possible outcomes, but not all are necessarily negative. There could be the possibility of the employee becoming an essential asset to the company, as well as the possibility of a stock doubling over night or of a gamble at a blackjack table resulting in substantial winnings for the player. Even criminal involvement has the possibility of producing positive outcomes such as economic benefits and social status. Research (Lyng, 2008) has even noted that voluntary risk-taking itself can be beneficial in the sense that it provides some people with exhilaration and a sense of excitement.

A second criticism leveled at the probability X consequence definition is that it loses the distinction “between high likelihood-low consequence events and low likelihood high-consequence events” (Garrick, 2008, p. 5). Kasperson (1992) adds that “consequences can be identified only through...human activity...and that social processes and settings influence...hazard events” (p. 155). Average risk estimates, in other words, cannot be applied equally to all public members given how every individual experiences risk in different manners. By utilizing only aggregate data, we risk losing contextual information that can help better understand how people view and experience risk. As a result, risk factors, or the riskiness, defined as “elements of a risk scenario that serve to either mitigate or aggravate risks” (Garrick, 2008, p. 6), may be lost if we rely merely upon an average probability estimate.

Consider, for example, the factors that can distinguish between high probability, low consequence events and low probability, high consequence events. The possibility of catching a cold—a high probability, low consequence event—is arguably greatest when compared to a volcanic eruption or a nuclear power plant explosion. When placed on this metric and according to documented accounts (Garrick, 2008), we can see that the possibility of the cold scenario coming true exceeds that of the other risks scenarios, thus increasing its level of risk, at least according to likelihood. Further increasing the probability are risk factors such as working in public schools, prisons or even universities and living in colder climates during certain times of the year. Geographical location and season become factors that must be considered when making assessments of the risks associated with a cold, while also serving to demarcate the degrees to which one considers something to be a risk. Furthermore, what can make the common cold a low consequence event is that it seldom constitutes a substantial mortality threat. From a consequence standpoint at least, the cold scenario, in comparison to the others listed above, now becomes less of a risk since fewer adverse outcomes are likely. With all this said then, had we relied solely upon an average probability calculation, we may have lost valuable information individuals weigh when estimating the risks associated with a cold.

To bypass some of the limitations of the probability X consequence definition, Garrick (2008) proposes a tripartite definition of risk that includes the following three questions: “1)-What can go wrong; 2)-How likely is it to happen; and 3)-What are the consequences if it does?” (p. 5). According to Garrick (2008), by asking these questions, a risk definition becomes more encompassing because it is open not only to a variety of probability and consequence scenarios, but it considers the subjectivity inherent in these

assessments. In other words, Garrick considers the role of the social actor and his/her individual perceptions of risk. He continues by proposing a 6-step process toward quantitative risk assessment, which includes: 1)-Defining the system being analyzed in terms of what constitutes a normal operation; 2)-Identifying and characterizing the sources of danger; 3)-Developing “what can go wrong” scenarios; 4)-Quantifying the likelihood of the scenarios; 5)-Assembling the scenarios according to damage levels; and 6)-Interpreting the results in order to inform risk management (Garrick, 2008). However, this definition also suffers the limitation of not considering beneficial outcomes pertaining to risks.

Due to its broader scope and attention to social context, the risk perception definition proposed by Rohrman and Renn (2000) offers arguably the best understanding of this multidimensional concept. The authors define risk as “the possibility that human actions, situations or events might lead to outcomes that affect aspects of what humans value” (p. 14). By introducing the concept of value and by not restricting the definition of risk exclusively to negative outcomes, this definition acknowledges the relative nature of probability and consequence scenarios and considers the subjectivity inherent in human risk perceptions. Rohrman and Renn (2000) even state that this definition “includes the analysis of cause-effect relationships...and...carries the message to reduce undesirable effects through the modification of causes...or...mitigation of consequences” (p. 14). Given its comprehensiveness and for purposes of this dissertation, Rohrman and Renn’s (2000) definition is adopted as the guiding framework from which to better understand the concept of risk perceptions.

Analogous Terms

Although definitions of risk vary and must be understood “against the background of their epistemological foundation” (Zinn, 2008, p. 4), each, as mentioned, shares certain similarities. These similarities include a set analogous terms that when defined according to their relationship to risk, help to link these definitions and better understand the meaning of this concept. Included in this set of terms are: (a)-reality and possibility; (b)-peril and hazard; (c)-uncertainty and probability; and (d)-value.

Reality and Possibility

Every risk concept and perception has in common the distinction between reality and possibility (Zinn, 2008; Renn, 1992). When assessing risks, we make predictions of the likelihood of a specific event and what it may produce, essentially formulating hypothetical cause-effect relationships (Zinn, 2008). Rohrman and Renn (2000) add to this by stating that

If the future were either predetermined or independent of present human activities, the term “risk” would make no sense. If the distinction between reality and possibility is acknowledged, the term “risk” is often associated with the possibility that an undesirable state of reality (adverse effects) may occur as a result of natural events or human activities (p. 13).

As an illustration, in returning to the offender example above, since we cannot forecast the future, a victimization (or state of reality) as a result of the offender, will, in present contexts, remain only a possibility. Adverse outcomes such as victimization are a reality (Zinn, 2008), yet whether they will occur, while in the present at least is only a possibility. According to Rohrman and Renn (2000), then, all risk concepts and perceptions have in common this distinction.

Peril and Hazard

Reichman (1986) states that “the concept of risk should not be confused with that of peril; perils are the causes of risk” (p. 51). She adds that risk is “uncertainty of loss, or the probability that loss will occur” and that “dangers are those conditions which contribute to the probability of loss” (p. 50). Rohrman and Renn (2000) further define hazard as “a situation, event or substance that can become harmful” (p. 14). Accordingly then, smoking is not a risk; instead, it is a hazard that has the potential to create risk—risk of lung cancer, emphysema and heart disease. As a hazard, it is the source of risk because again, we do not know to what it may lead. Even within the context of crime, the criminal is not a risk, but rather a peril that creates risk since s/he poses the possibility of consequences, i.e., victimization, property loss, etc. Within every risk scenario, therefore, there is always an action, event or entity that can create the possibility of loss.

Uncertainty and Probability

Vose (2001) defines uncertainty as “the assessor’s lack of knowledge (level of ignorance) about the parameters that characterize the physical system that is being modeled” (p. 19). He defines probability as “a numerical measurement of the likelihood of an outcome of some stochastic process... Probability is used to define a probability distribution, which describes the range of values a variable can take” (Vose, 2001, p. 20). Knight (1921) adds to this distinction by defining risk as “randomness with knowable properties” and uncertainty as “randomness with unknowable properties” (p. xii). As an example, consider a scenario in which a correctional official is asked to estimate the probability of being assaulted by an inmate. If s/he is unaware that such an outcome is even likely or of the risk factors associated with being assaulted, then s/he is uncertain of

the parameters characterizing this scenario. This lack of knowledge, according to Knight (1921), represents only uncertainty and not risk since there is no information with which to make a probability or risk judgment. From the correctional officer's standpoint at least, even if the assault took place, Knight (1921) would classify it as a random event with unknowable properties. However, if the correctional official were apprised of the likelihood of an assault, such that s/he were presented with information documenting the number of inmate assaults perpetrated against correctional line staff, then s/he knows of the risks and can make a probability judgment. While ultimately the feature distinguishing risk from uncertainty is one's level of knowledge about outcomes and parameters, even in the latter scenario there is still uncertainty regarding whether the correctional official will actually be assaulted. This indicates that the concept of risk involves both probability and uncertainty.

Value

A final element that needs to be considered when conceptualizing the concept of risk is value (Bennett & Calman, 1999). To illustrate, correctional officers are frequently subjected to countless dangers in the course of their work—one of which including lawsuits. A successfully litigated liability claim, as a danger, may pose the risk of job loss. If the correctional official cares about losing his/her job, then the lawsuit poses a risk; however if s/he does not care about such an outcome, then by comparison there is no risk. The distinguishing feature becomes value, which has been defined as “attitudes...about how society is and should be, about our relationship with nature, the benefits and disadvantages of technology, etc.—not to mention religious beliefs” (Bennett & Calman, 1999, p. 7). In any risk scenario, whether it includes gambling, an

incoming hurricane or lawsuit, there is the possibility of an outcome, yet what meaning we attach to it will modify the totality of the risk scenario. Although values will vary between individuals, any risk perception will also include this concept.

To summarize, perceptions of risk are highly variable and subject to social context. Despite the differences between the definitions, each shares certain similarities that help to broaden the understanding of risk. In an effort to further expand on the meaning of this concept, the following section will provide an overview of the theoretical literature on risk perceptions. Researchers within disciplines such as economics, sociology and psychology have each contributed to a growing body of theoretical work on this topic. As was done with the definition section, an outline of each discipline's theoretical understanding of risk perceptions will be provided, as well as an outline of the various differences and similarities between each theory.

Theories of Risk and Risk Perceptions

With respect to risk, several theories have been formulated to explain not only what they are, but how people interpret and react to them. Given the complexities surrounding risk conceptualizations, theorizing about them can perhaps add some degree of clarity. The dominant theories of risk include: (i)-the technical approach, (ii)-the economic approach; (iii)-the socio-cultural approach and (iv)-the psychological approach, including psychometric analyses. While it is acknowledged that other theories of risk and risk perception exist (e.g., the social amplification of risk)⁶ (Renn, 1992), these four are most relevant to criminal justice-related risk studies, which provides the rationale for their selection.

⁶ For added information on other risk theories, see also Krimsky & Golding (1992).

Technical Approaches

Technical approaches to risk perceptions encompass actuarial, toxicological/epidemiological and probabilistic analyses (Renn, 1992). Despite slight differences in terms of their methods of study and risk typologies, as outlined in Table 2, these three approaches share many similarities. Each perspective views physical harm as the base unit of risk and shares the assumption that virtually all members of society perceive this risk as the one of greatest concern. Renn (1992) further groups these three approaches together on the basis that

They anticipate potential physical harm to human beings or ecosystems, average these events over time and space, and use relative frequencies (observed or modeled) as a means to specify probabilities (p. 59).

Advantages of technical risk assessments include how they can reveal, avoid or modify the causes that lead to undesirable outcomes, as well as guide in the formation of risk reduction measures. Several of their disadvantages have already been outlined (see pages 12 and 13), yet critics further note that technical risk experts fail to consider issues such as equity, fairness and resilience in their risk assessments (Renn, 1992; Beck, 1992; O'Malley, 1998). Even more, these experts are often reluctant to listen to the opinions of lay-persons because they believe their risk calculations to be robust enough (Slovic, 1987). It has also been noted that interactions between human activities and consequences may be more complex than the calculation of mere averages, which implies that human agency itself must be considered when formulating risks (Renn, 1992).

Economic Approach

(i)-Overview of Economic Approach: Economic perspectives on risk are very similar to the technical, yet differ in what they consider to be consequences. Here, there is

a “transformation from physical harm...into subjective utilities” (Renn, 1992, p. 61). Renn (1992) continues by stating that “...in economics, the criterion is subjective satisfaction with the consequences rather than...undesirable effects” (p. 62). Under the economic perspective, in other words, people are not solely concerned with risks to physical well-being, but instead include other possible adverse events such as loss of money and assets in their risk calculations. By using subjective assessments of what people consider to be either beneficial or detrimental, risk assessors are better able to understand the range of entities people consider to be important and potentially at-risk. An example could include attending college in the hopes of obtaining gainful employment following graduation. Despite the considerable amount of money often required for a college degree and our inability to forecast the future, those who attend college see greater long-term benefits in this activity, thereby outweighing any associated risks (such as no return on the invested money).

Implicit within the economic perspective is the idea that human beings are rational actors (Knight, 1921; Starr, 1969) and that given full information (Renn, 1992), individuals are capable of weighing the costs and benefits of any activity. In the above scenario, a person would hypothetically make judgments concerning the costs of college and weigh those against the likelihood of obtaining quality employment in the near future. From a utility standpoint, because the subjective benefits outweigh the subjective costs, college attendants increase their utility and promote their self-interests by engaging in this activity. As rational actors, any risks associated with college attendance are outdone by the potential gains—making this activity less risky by comparison.

(ii)-Research and Limitations of Economic Approach: Though studies (Floud, 1982; Pratt, 1995) have found the rational and economic perspectives to be vital in predicting human risk assessments, limitations have also been found. Renn (1992), for instance, states that “the problem of aggregating individual utilities, the existence of individual preferences for probabilities and the effects of transactions on third parties impede the application of this concept in risk policies” (p. 63).

Furthermore, humans are not always rational in their decision-making, as illustrated by Hollway & Jefferson (1997) who state that “fear of the risk of crime...is a variable affair that does not reduce to official...rates and rationality” (p. 265). These authors note that even in light of small probability estimates of victimization, people still invest in expensive anti-crime measures, which arguably do not promote their own economic self-interests. Other authors within criminology (Akers, 1985; Shaw & McKay, 1969) further note that rationality is not a robust predictor of criminal behavior given that other variables, (e.g., poverty), significantly influence aberrant conduct. As a consequence, the human as rational actor hypothesis has limited explanatory power regarding human risk perceptions.

Socio-Cultural Approach

Sociological and cultural approaches to risk, contrary to the technical and economic approaches, stress that risk is either a socially mediated or socially constructed phenomenon (Beck, 1992; O’Malley, 1998; Reichman, 1986; Zinn, 2008; Renn, 1992). Differences between people regarding their social status, family characteristics, political upbringing, birth nation as well as a host of other variables contribute to their differential understandings of and orientations towards the various phenomena that surround us. In

addition to this, sociologists and anthropologists have emphasized that “risk perception is determined by the norms, value systems and cultural idiosyncrasies of societies” (Rohrman & Renn, 2000, p. 18). Influenced by all these differences are perceptions of risk, whereby one person may perceive a recently built nuclear power plant as high-risk, yet another may view only positive benefits resulting from its construction. These differences may be attributed to the aforementioned sociological factors. Literature in the socio-cultural field of risk perception, although predominantly theoretical in nature, has contributed to a better understanding of how context and social relations drive people’s understandings of risk (Rohrman & Renn, 2000; Renn, 1992; Douglas & Wildavsky, 1982).

(i)-Overview of Socio-Cultural Approach: Douglas’ (1966) anthropological work illustrated that groups selectively choose what they perceive as risks. Norms, customs, values and traditions that are idiosyncratic guide in the formation of these perceptions. For instance, she notes that even though most individuals find pollution to be a danger to the environment, people will vary in their interpretations of this risk factor. While some view pollution as a threat to the well-being of the eco-system, others view it as a threat to the symbolic order of the earth. Both sets of people perceive this danger to pose a risk, yet differ in their underlying motivations, which may be attributed to socio-cultural differences. Rohrman (2000) even found statistically significant differences between a sample of American and French nationals regarding their risk perceptions of crime. While over 72% of the American sample viewed crime as something that poses significant risks of loss, only 37% of the French sample expressed similar sentiments.

Although not explained by Rohrman (2000), these differences may be due to socio-cultural differences between the sample representatives.

Along with Douglas (1966), other cultural sociologists view risk as an instrument of social stratification and regulation (Douglas & Wildavsky, 1982; Rayner, 1987; Rayner & Cantor, 1987). Specifically, these theorists developed the grid/group typology in order to identify how status and social position structure risk assessments. Renn (1992) defines group as the “extent to which individuals take on a group mind-set” and grid as the “extent to which someone accepts...a formal system of hierarchy” (p. 73). Within the grid/group typology are different classes of individuals including the: 1)-entrepreneurial; 2)-egalitarian; 3)-bureaucrat; 4)-atomized/stratified; and 5)-autonomous. Entrepreneurial prototypes are less concerned about equity issues in the distribution of risks and instead desire to take risks because they view them as essential to success in a competitive market. Egalitarians, who contrast mostly with the entrepreneurial individuals, emphasize cooperation and equality and are less prone to risk-taking behavior. Bureaucrats rely on rules and procedures in the governing of risk distribution and taking. Atomized/stratified persons are said to be confused about risk issues, and though they will take high risks for themselves, they oppose any risk imposed on them. Finally, people in the autonomous category have been described as self-centered hermits and short-term risk evaluators (Thompson, 1980).

Beck (1992) adopted a predominantly Marxist framework when conceptualizing risk. Whereas Marx saw economics as the element that stratified members of society, Beck (1992) instead saw risk as the mechanism defining social positions. Zinn (2008) states that “...Beck...introduces the relations of definitions as the primary definers,

organizers and regulators of risk” and that “...social class loses its significance and has to be supplanted by risk as the new mode of social integration” (p. 170). The advent of modernization, globalization and new technologies introduce a variety of risks which pose threat to the entire global community, but in unequal ways. Individuals with the power and knowledge to regulate the evolution of society are the ones who will dictate how risks will be distributed and regulated. Much like Marx hypothesized that people in predominantly capitalist societies would compete amongst one another for economic motives, Beck (1992) hypothesized that in the risk society people will compete against one another for purposes of gaining and utilizing knowledge. Within the risk society, “various systems of knowledge compete...and are subject to a selection process that is governed by structurally determined criteria” (Renn, 1992, p. 70). Access to the knowledge concerning risks, in the end, is the fundamental variable that distinguishes classes of people.

Largely pioneered by the work of Foucault (1977), the governmentality perspective “examines the phenomenon of governance from a broad range of societal domains, such as: childcare, crime, health, sexuality and cyberspace” (Zinn, 2008, p. 171). The governmentality perspective expresses Foucault’s comprehensive view of power and domination. Education, insurance, credit, healthcare and a host of other social services are regulated according to risk assessments, which are mostly based upon aggregate measures of the population. Individuals with the authority to do so, govern these social services by making estimates of the risk various people pose. These risk assessments, further, define social interactions. For instance, banks rely on aggregate measures of the population to determine who will have access to greater lines of credit.

Those who pose too much of a risk of not paying or of defaulting on payments will not receive the amenities the bank has to offer, and thus, are treated on the basis of subjective threat. Risk in this case conditions the relationship between both parties. Governmentality then becomes a framework for understanding how risk becomes a method of ordering social relations.

(ii)-Research on Socio-Cultural Approach: As referenced, although most of the work within the socio-cultural perspective on risk is theoretical (Rohrmann & Renn, 2000), several empirical studies have been conducted. A qualitative analysis of a police tactical unit's response to uncertain environments by Rojek (2005) revealed that these law enforcement officials applied a tactic known as "...collective sensemaking...that accounts for how unit members identify and respond to risk" (p. 304). Social factors such as the organizational structure of the unit, the level of authority the unit commander exerts and the opinions voiced by fellow officers each contributed to a shared sense of risk between the officers. Similar to Rojek (2005), Poetz (2010) found social variables such as social cohesion and relationship building to influence negotiation talks between local community members and nuclear power plant representatives regarding the risks associated with this activity. Finally, Lee (2007) found that organizational, psycho-social and physical job characteristics, each socio-cultural phenomena, exert significant influences on the safe-work behaviors and risk perceptions of Critical Care Nurses.

Cross-cultural studies on risk perceptions, although limited, have also been conducted (Opwis & May, 1985; Winterfeldt, John & Borcharding, 1981; Rohrmann, 1991). Findings from these studies are important because they underscore the point that risk, as a highly abstract concept, must be understood against the backdrop of socio-

cultural contexts. One of the more notable of these studies comes from Slovic and colleagues (2000) who found significant differences in perceptions of risk between a national sample of French and Americans. Whereas French respondents perceived nuclear waste, AIDS, street drugs and cigarette smoking as high risk, Americans had slightly more moderate perceptions of the risks associated with these dangers. American respondents, contrary to the French, perceived coal burning, high voltage power lines and sun tanning as high risk. As will be discussed in more detail in the psychometric paradigm section, it was also found that qualitative characteristics such as the catastrophic potential of and level of control respondents thought they had over these dangers were each significant predictors of risk perceptions.

(iii)-Summary of Socio-Cultural Approach: What is clear from the different socio-cultural perspectives on risk is that status, social position, group membership and other related variables impact our perceptions of and behaviors towards risk. Whether we are in positions of power or submission, social context and environment exert significant influences on our assessments of the risks that surround us. Each of these perspectives also understands that although risk is either socially mediated or constructed, it is still a part of human life, and individuals will engage in practices to minimize uncertainty and maximize security.

(iv)-Limitations of Socio-Cultural Approach: Despite its contributions, the socio-cultural perspective on risk perceptions suffers several limitations. First, the grid/group typology referenced earlier has received very little empirical attention, making its assumptions somewhat tentative. Second, although cross-cultural studies have provided insight regarding national differences on risk perception, much of this research is dated

and fails to provide an understanding of how exactly nation of origin contributes to differential risk assessments. The socio-cultural perspective has also been criticized for its inability to develop broad-based (Reyner, 1992) risk management techniques that can be applied to general populations. Finally, findings from the psychometric paradigm have uncovered numerous psychologically related variables found to influence human perceptions of risk.

Psychological/Psychometric Approach

(i)-Overview and Research on Psychological Approach: Psychological and psychometric research has offered significant contributions to the study of human risk perceptions (Johnson & Tversky, 1983; Slovic et al. 2000; Fischhoff, Slovic & Lichtenstein, 2000; Slovic, Fischhoff & Lichtenstein, 2000; Gregory, Flynn & Slovic, 2000; Finucane, Alhakami, Slovic & Johnson, 2000). Aside from explaining why individuals do not base their risk judgments on numerical probabilities alone, this line of research has also revealed several underlying thought-processes humans apply when making risk assessments. Research from this field also unveiled several biases in people's "ability to draw inferences from probabilistic information" (Renn, 1992, p. 64). Even more, contextual variables such as the catastrophic potential of a danger, the beliefs associated with the causes of risk and the level of trust invested in the 'experts' within the field of risk management have each been found to significantly influence the perceived seriousness of a risk. When combined, results from the psychometric paradigm reinforce the point that risk is a multidimensional concept that cannot be reduced to mere averages alone.

Slovic, Fischhoff & Lichtenstein (2000) found an array of things people consider to be either beneficial, risky or both. Activities and entities as diverse as hunting, fluorescent light bulbs, satellites and crime were each rated according to their beneficial potential and level of risk. Beneficial characteristics included whether the activity was fun and/or whether it had the ability to produce a return upon investment. Risks were rated according to certain qualitative attributes of the activities such as the level of control the respondent thought s/he had over them, whether these activities were perceived as an imposition and whether they had catastrophic potential. Factor analytic results revealed high inter-item correlations between these characteristics, indicating that they could be condensed to produce a smaller set of higher-order factors that represent the overall dimension of risk perceptions. Regression analyses illustrated that many of these qualitative attributes were significant predictors of people's perceptions of risk.

Other studies within the psychometric paradigm uncovered various biases inherent in people's judgments and decision-making processes, and not just concerning risks (Slovic, 2000; Slovic et al. 2000). Moreover, the theory of bounded rationality stresses that "cognitive limitations of the decision-maker force him to construct a simplified model of the world in order to deal with it" (Slovic, 2000, p. 5). For instance, when placed in situations that pose a direct and immediate threat, humans act upon emotional instincts that often preclude them from adequately assessing the range of available responses. Fischhoff, Slovic & Lichtenstein (2000) also found that because humans are generally overconfident in their assessments of the world, they will frequently misjudge the likelihood of certain outcomes. The experience of being recently victimized, for example, may cause someone to feel that this event will take place again

in the near future. Even if the victim were presented with contrary evidence, the victim will almost certainly remain ‘confident’ in his/her assessment of future victimization.

Slovic (2000) adds to this by stating that:

Once formed, initial impressions tend to structure the way that subsequent evidence is interpreted. New evidence appears reliable and informative if it is consistent with one’s initial beliefs; contrary evidence is dismissed as unreliable, erroneous or even unrepresentative (p. 185).

He further points out that such “...overconfidence is dangerous...it indicates that we often do not realize how little we know and how much additional information we need about...the risks we face” (p. 109).

Numerous other cognitive limitations, commonly referred to as “affect heuristics” (Finucane et al. 2000), have been examined within the psychometric paradigm. One of these limitations includes how human beings tend to inaccurately perceive risks because they are heavily influenced by memorability of past events and imaginability of future events. Recent disaster experiences, exposure to frequent media coverage or vivid film depictions “could seriously distort perceptions of risk...In particular, risks from dramatic...causes of death such as homicides tend to be overestimated...and risks from un-dramatic causes such as diabetes tend to underestimated” (Finucane et al. 2000, p. 184). These researchers also note that the seriousness of a risk and the way in which information about it is presented can greatly influence how individuals respond to it.

Additional psychometric research also found that tenuous prior opinions are subject to easy manipulation. McNeil and colleagues (2000) asked a random sample of Americans to imagine they had cancer and to then choose between two therapies—surgery or radiation. Both samples of subjects had limited background information regarding the positive and negative aspects of each of these treatments. Some subjects

were then presented with the cumulative probabilities of surviving after the treatment, while other subjects received the same cumulative probabilities but framed in terms of dying (e.g., instead of being told that 68% of those having surgery survived, they were told that 32% died). The authors state that “framing the statistics in terms of dying dropped the percentage of subjects choosing radiation over surgery from 44% to 18%” (McNeil et al. 2000, p. 185). The authors concluded that:

The fact that subtle differences in how risks are presented can have such marked effects suggests that those responsible for information programs have considerable ability to manipulate perceptions and behavior (p. 186).

Experts within the field of risk management, psychometric research documents, have also been found to suffer similar cognitive limitations. Tversky and Kahneman (1971) questioned a sample of psychologists about their research practices and uncovered how “these scientists seriously underestimated the error and unreliability inherent in small sample sizes” (p. 225). They further found that the scientists: a)-had unreasonably high expectations about the replicability of their results; b)-had undue confidence in early results; and c)-rarely attributed unexpected results to sampling variability. Sampling misjudgments, the authors finally noted, led to flawed research on behalf of these experts and to the conclusion that experts and lay-persons frequently and erroneously over-generalize on the basis of small sample sizes.

(ii)-Implications of Psychological Approach: These findings point to a number of implications regarding how people conceive of and respond to risks. Although human beings frequently over and/or underestimate risks, the qualitative risk characteristics outlined above are important factors people take into consideration when formulating judgments about the dangers of life. Furthermore, and as previously mentioned, it has

been found that both risk ‘experts’ and lay-persons alike suffer from many of the aforementioned cognitive limitations. Risk ‘experts’ often rely on outdated and/or incorrect information, they may form judgments that are difficult to change, even in light of contrary information, and they often appeal to their political and social views when assessing risks (Slovic, 2000). Fischhoff, Slovic & Lichtenstein (2000) found significant differences between lay-persons and experts in their judgments of the risks associated with animal studies, chemical technologies and dose response sensitivity. Even more, it was found that lay-persons were more accurate than experts when predicting the fatalities associated with chemical technologies.

When informed about the limitations of ‘expert’ risk judgments and the errors these people sometimes make, public members quickly lose trust in the institutions that manage risks (Slovic, 2000). Loss of trust becomes a “...critical factor underlying the divisive controversies that surround the management of technological hazards” (Renn, 1992, p. 70). When private citizens lose confidence in the organizations designed to protect the public, this can become a significant variable that influences whether one perceives something to be a risk. Psychometric researchers state that efforts need to be taken by both sides in order to reconcile any differences and minimize the risks associated with life’s dangers. Slovic (2000) sums up this point by referencing how:

Because it is impossible to exclude public opinion in our uniquely participatory democracy, the response of industry and government to this crisis of confidence has been to turn to the young and still primitive field of risk communication in search of methods to bring experts and laypeople into alignment and make conflicts over technological hazards easier to resolve (p. 318).

(iii)-Limitations of Psychological Approach: Psychometric analyses have contributed a wealth of knowledge regarding how humans think of and respond to risks.

However, similar to the above perspectives, this field of risk study is limited in several ways. First, disparities between people in their perceptions of risk “make it hard...to aggregate individual preferences...and find a common denominator for comparing risk perceptions” (Renn, 1992, p. 66). Renn (1992) further references that although the psychometric paradigm has uncovered numerous variables found to affect risk judgments, this literature has failed to explain why these characteristics in particular are considered, while others are not. From a policy standpoint, finally, not only is it difficult to combine all of these differences into more general risk management measures, but if some of these differences are based off cognitive biases, it may “not seem wise to use them as yardsticks for risk reduction” (Renn, 1992, p. 66).

Overview of the Risk Theories

Risk theories vary in their methodology, base unit, predictors of risk perceptions, complexity of measures and even policy implications (Renn, 1992). Each perspective also differs in terms of how human behavior is understood with some theories (technical and economic) viewing human behavior as rationally based, and others (socio-cultural) viewing it as a product of social variables. Despite these differences, all of the perspectives discussed share several commonalities. For instance, each theory shares the similar assumption that risks are a part of life and that humans will respond to them accordingly. Furthermore, each theory believes that most, if not all, human behavior is motivated by risk assessments (Zinn, 2008). Whether the risk is economically, socially or psychologically based, human beings will take efforts to maximize their subjective benefits and minimize subjective threats. Each risk concept and theory, as outlined above, also shares a set of analogous terms including: reality and possibility; peril and hazard,

probability and uncertainty and value (Renn, 1992). Although every theory suffers the limitation of not fully explaining human risk perceptions (Renn, 1992), each still captures certain dimensions of this concept that help to better understand its multifaceted nature.

CHAPTER 4

THE IMPORTANCE OF UNDERSTANDING CORRECTIONAL OFFICER RISK PERCEPTIONS

From the literature discussed thus far, it is evident that human life is marked by a preoccupation with the various dangers and risks that surround us. Whether we are concerned with incoming hurricanes, work-related lawsuits, victimization or death, much of our behavior is dictated by a desire to control our environments and minimize life's uncertainties (O'Malley, 1992). Partly as a result of these observations, various risk management agencies and measures have been introduced such as the Environmental Protection Agency, the Department of Homeland Security, resource officers within our public and private schools and offender classification systems (Golding, 1992). Although these departments and risk-reduction techniques are intended to improve the safety and overall welfare of the wider society, scholars within different disciplines have outlined some of their limitations. That said, this section will provide an overview of some of the literature examining how risks are viewed and controlled within several disciplines, including criminology and corrections more specifically.

Environmental and Public Health

Within the fields of environmental and public health, scholars have developed typologies of the various dangers and risks people face and have further referenced the limitations of these field's attempts to protect humans from life's various threats. Duan (2005), for example, examined the environmental risk perceptions held by a sample of

American and Chinese university students. Social variables such as trust and value in risk management agencies were found to correlate highly with the risk perceptions of each sample. The Chinese sample, moreover, was found to be comparatively more concerned by the risks associated with ozone depletion, carbon monoxide emissions and air pollution. Both samples indicated that their respective governments were failing to take necessary precautions to protect their citizens from the multitude of environmental dangers threatening humanity. In public health, Lee (2007) found amongst a sample of Critical Care Nurses that the biggest risk factors for on-the-job injuries were greater job strain, higher physical workload indexes, more frequent patient handling and lack of social support from superiors. Poor work environments, moreover, were found to significantly predict work-related musculoskeletal injuries. The Critical Care Nurses, noted Lee (2007), stated that greater risk-reduction measures had to be taken by hospital administrators in order to protect these nurses.

Veronesi (2008) found environmental risk factors such as air pollution and transmission of viruses to significantly predict public health concerns like cancer, stroke, emphysema, chronic bronchitis and chronic obstructive pulmonary disease. She also found that these risks and risk factors adversely affected the lives of those inflicted with these diseases, with some reporting divorce, mental breakdowns and losses of job and money. Finally, Ramos (2005) found that amongst public health 'experts', there is very little agreement concerning how asthma-related risk factors are conceptualized and operationalized. She indicates that this lack of methodological consensus may thwart public health's ability to remedy this illness.

Criminology and Corrections

Within the field of criminology, there has been a long history of identifying salient criminogenic risk factors. Criminological theories regard dangers such as socially disorganized communities (Shaw & McKay, 1969), attenuations in informal social control mechanisms (Hirschi, 1969), deviant models of learning (Akers, 1985), ineffective parenting and low levels of self-control (Gottfredson & Hirschi, 1991) as the most significant predictors of such outcomes as broken families and crime. Some of this literature has also found risk factors such as smoking, truancy and mental instability to be positively associated with the risks of criminal involvement (Gottfredson & Hirschi, 1991). However, research shows that these risk factors and dangers are rarely ever the only explanatory agents of criminal behavior (Thornberry, 1986). Much like the limitations of public and environmental health risk assessments, the criminal justice literature has also failed to fully explain the risks associated with aberrant conduct. This has led to growing concern over this field's inability to predict and control the risk factors associated with crime.

Even within the field of corrections, more specifically, there has always been a concern for rehabilitating offenders, which at times meant identifying variables correlated with their unlawful conduct (Craig, 2005). In fact, and as previously referenced (see page 3), one of the original purposes of prisons was to rehabilitate law violators through solitary confinement and spiritual reformation. Since it was originally believed that anti-social behavior emanated from moral deviations, such responses were thought to be central to resolving issues of crime (Craig, 2005). This, in part, meant that prisons at the time were concerned with individual inmates and that strategies were being developed to

thwart their future criminality. However, several correctional scholars have noted that the American penal philosophy has undergone a significant change in recent decades.

Whereas prisons were originally concerned with the successful treatment and rehabilitation of every individual offender through such practices as cognitive behavioral therapy, incapacitation and community-based corrections (Craig, 2005), today, a 'new penology' (Feeley & Simon, 1992) has emerged. This new penology focuses on:

Actuarial considerations of aggregates...It facilitates development of a vision or model of a new type of criminal process that embraces increased reliance on imprisonment and that merges concerns for surveillance and custody...It shifts away from a concern with punishing individuals to managing aggregates of dangerous groups (Feeley & Simon, 1992, abstract).

Feeley and Simon (1992) further emphasize that new penology-based correctional practices no longer are concerned with the moral incorrectness of crime and with techniques that can be used to uncover correlates of delinquent behavior. Instead, through aggregate-based probabilistic calculations of populations, responses to wayward conduct are now more managerial than resolution-based in nature. The new penology, additionally, is more concerned with fiscal considerations in that any strategies introduced to manage crime are geared towards saving taxpayer monies. Furthermore, a number of authors have also noted that under the new penology, how success is determined within the criminal justice system has been radically altered (Feeley & Simon, 1992; Garland, 1996; Craig, 2005). From where officials were previously concerned with eliminating crime and using this as the yardstick of success, the new penology:

Reshapes one's understanding of the functions of the penal sanction...By emphasizing...any...correctional program in terms of aggregate control and system management rather than individual success and failure, the

new penology lowers one's expectations about the criminal sanction...Further...its goal is not to eliminate crime but to make it tolerable through systematic coordination (Feeley & Simon, 1992, p. 455).

Another change brought about by the new penology is the practice of assessing offenders according to their level of risk, which often is based upon either professional/judgmental or actuarial methodologies. From a professional judgmental standpoint, parole boards, judges, academics and other 'experts' within the field of offender risk management and assessment use risk factors such as one's socio-economic status, level of intelligence, prior criminal history and a host of other variables to determine what program/response is most suitable to the successful management of the offender (Austin, 2004). Typically these individuals hold graduate level degrees or are professionals within the criminal justice field and are deemed capable of assessing human behavior. In addition, there are numerous actuarially-based risk assessment instruments including the Level of Service Inventory-Revised (LSI-R); the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS); the Client Management Classification (CMC); the Risk of Reconviction Scale and Criminogenic Needs Inventory; the Community Risk/Needs Management Scale (CRNMS) and Case Needs Identification and Analysis (CNIA); the Rapid Risk Assessment for Sexual Offense Recidivism (RRASOR); and finally, STATIC-99 and Sexual Violence Risk-20 (Austin, 2004).

Through a series of questionnaires investigating further into offender backgrounds and characteristics and a series of tests designed to assess the level of risk of each offender, these risk assessment instruments examine static (non-changing) and dynamic

(mutable) variables associated with offender criminality⁷. Based on the level of risk ascribed to the offender, partially according to the information obtained through these assessments, appropriate programs and classifications are then designated for the individual. Classifications can be either external (placing prisoners within the general population at a certain custody level) or internal (intra-facility decisions about where and with what other prisoners an offender will be placed within prison) in nature (Austin, 2004).

Despite extant literature attributing success to these various risk assessment strategies (Gendreau, Little & Coggin, 1996; Austin, 2004), a growing body of literature highlights several of their limitations (Austin, 2004; Sjostedt & Langstrom, 2001; Gendreau, Coggin & Law, 1997). Specifically, Austin (2004) references how:

All risk assessment systems, whether they rely on professional judgment, actuarial scoring systems or a combination of the two, are subject to error. Factors that may lead to such errors include unpredictable situational or environmental factors (e.g., chance meetings between rival gang members), and the inherent difficulty in predicting events with a low frequency of occurrence such as prison escapes, suicides and homicides (p. 7).

Aside from Austin (2004), other authors add that several experts within correctional risk management not only restrict the scope of risks within prison by narrowly focusing on inmates alone, but that many risk assessment instruments are both unethical and disproportionately target minorities (Floud, 1982; Blackmore & Welsh, 1983; Pratt, 1993). Finally, it has even been indicated that professional judgment is “by far the least accurate risk assessment method...because such judgments are no more than gut reactions that can vary from expert to expert” (Austin, 2004, p. 8).

⁷ Examples of static predictors of risk include age at first arrest, seriousness of current offense and history of violent felony convictions, while dynamic risk predictors include current employment status, marital status, age and any other situational variable that can change rapidly (Austin, 2004).

Other authors have offered additional remarks on the deficiencies of judgmental and actuarial risk assessments. Clear & Berry (1983), for instance, state that:

Violence is vastly over-predicted whether simple behavioral indicators are used or sophisticated multivariate analyses are employed, and whether psychological tests are administered or thorough psychiatric examinations are performed (p. 343).

Glaser (1985) claims that “officials that grant or deny liberty seldom receive systematic feedback on their wisdom” and further adds that academics and “risk judgment experts routinely fail to predict the likelihood of recidivism because they use erroneous predictor variables” (p. 440). Finally, Marzano et al. (2009) added to these sentiments after having found that “like 70% of prisoners who take their own lives in custody...CD (the offender)...had not been deemed ‘at-risk’ of suicide at the time of his attempt” (p. 153).

Given the danger most criminals pose to society, it is important to understand the risk factors associated with their criminality. As some of this literature demonstrates, unfortunately, even experts within the field of risk assessment mistake the likelihood of offender recidivism, and other risks. This has been partially explained by the fact that most correctional administrators and academics do not interact in face-to-face manners with offenders (Austin, 2004; Garcia, 2008; Gonsalves et al. 2012). They do not know their life stories, they are unaware of their behavioral characteristics, and they frequently rely on secondary data to make their risk judgments and predictions about the dangers within prisons. Clearly this is an insufficient way of assessing prison-based risk.

As the “front line bureaucrats” (Lipsky, 2010) of the prison, corrections officers have intimate and personal contact with offenders and inside knowledge regarding the on-goings within penal institutions. Their close contact affords them opportunities to understand the complexities of offenders and even make accurate assessments regarding

their behavior. Gonsalves et al. (2012), in fact, found correctional officials to be correct 97.4 % of time when making predictions of which offenders would commit sexual perpetrations, and when assessing the most important factors predicting this outcome. Even more, correctional officers properly classified 99.1% of offenders into the categories of high, medium and low risk for both sexual perpetration and victimization. Since officers of the penal system face perils such as victimization, disease, harassment and liability law-suits (Lambert et al. 2009), it is important to minimize the risks associated with these dangers and accurately assess the behavior of criminals. Given their unique place within the prison, correctional officers are in a position to provide insightful information concerning not only the risks most offenders pose, but the risks the collective prison environment poses as well. By soliciting direct information regarding the risk perceptions held by a sample of correctional guards, researchers and policy-makers can be in a better position to not only understand the perils that accompany prison work, but even guide in the formation of prison-based risk management policies.

CHAPTER 5

LITERATURE REVIEW OF THE VARIABLES UNDER INVESTIGATION AND PURPOSE OF THE CURRENT STUDY

Noted hereto have been descriptions of prisons as dangerous and unpredictable environments that can pose significant risk of injury or even death to the individuals present within them (Kauffmann, 1989). Most prisons contain mentally unstable offenders who are not receiving adequate medical care (Crawley, 2004), inmates who self-harm (Smith, 2013) and drug addicts who are experiencing withdraw symptoms (Lambert et al. 2002). Still others are home to gang members (Fleisher and Decker, 2001), violent offenders (Park, 1976) and disgruntled inmates who anxiously await their release (Montgomery and Crews, 1998). Each of these offenders carries with them the potential to inflict harm on both themselves and others. Correctional officers are the system agents responsible for not only monitoring the behavior of these individuals, but guaranteeing the general safety of all persons housed within the prison. Such a demanding profession requires officers to quickly assess situations and employ accurate decision-making strategies (Lambert et al. 2002).

These unique features of the correctional institution have been the subject of much scholarly attention over the past several decades. Specifically, researchers have devoted considerable effort to investigating how officer demographics and select workplace dimensions influence officer perceptions of their work and the decisions they make while on the job (Hepburn, 1985; Huckabee, 1992; Britton, 1997; Garcia, 2008;

Higgins, Tewksbury and Denney, 2012). Figure 1 below serves as an orienting framework for the current study as it provides an outline of existing and non-existing literature within the field of corrections. Solid lines represent relationships that have been examined, bold and dashed lines represent relationships that have also been examined, but that vary methodologically from the current study, and finally, dashed lines indicate relationships that have yet to be researched. As this dissertation aims to investigate factors influencing correctional officer risk perceptions and decision-making, this literature must be situated in a manner relevant to these objectives.

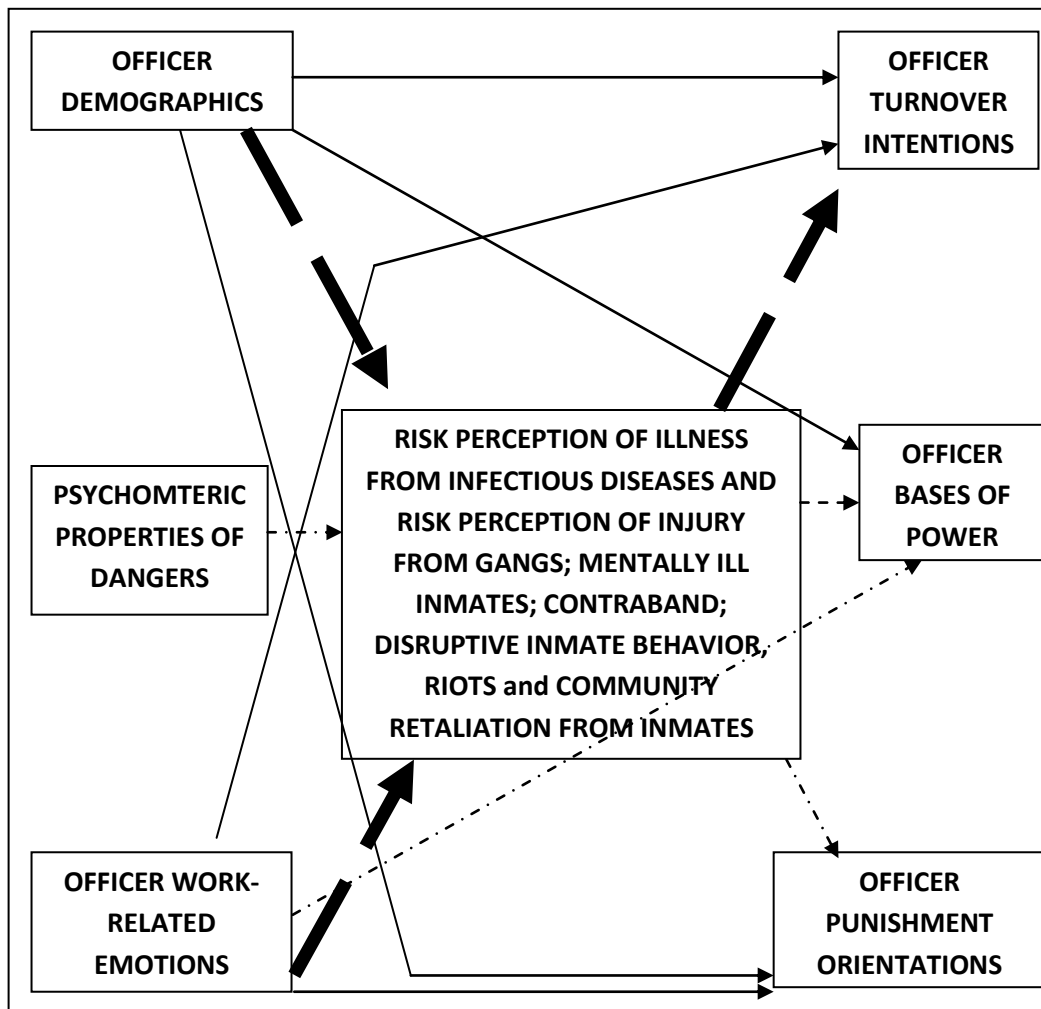


Figure 5.1: Relevant Empirical Relationships both Examined and Unexamined

Therefore, the initial section of this review will provide an account of the empirical literature that has examined the connection between officer demographics, namely, race, gender, age, education and employment tenure, and work-related perceptions and select work-related decisions officers make. Following from there will be an overview of how officer job involvement, work-related stress, co-worker relations and expressed role conflict and ambiguity also impact several of these criterion measures. This literature is discussed in order to demonstrate that these variables frequently play an important role in affecting officer worldviews and the choices they make. Literature within the psychometric paradigm of risk perceptions has uncovered a host of psychologically based variables found to significantly affect human risk perceptions (see pgs. 40-41 regarding references to and the initial discussions of these variables). Most of these evaluations, however, have failed to examine how these predictors operate within individuals employed in high-risk industries, such as corrections. Since the majority of these studies have only utilized convenience samples of Americans and evaluated dangers existing outside correctional contexts, and since these psychometric properties are intrinsic to all human beings, they should therefore be tested on a sample of prison officers.

Officers of the correctional system face numerous dangers while on the job. According to extant literature, some of the more salient include working around inmates with infectious diseases, gang activity, disruptive inmate behavior, contraband presence, mentally ill inmates, riots and community retaliation against officers by inmates (Alaird and Marquart, 2009; Fleisher and Decker, 2001; Park, 1976; Bouchard and Winnicki, 2008; O'Keefe, 2007; Montgomery and Crews, 1992; Kinnard, 2010). An overview of

the literature on each danger will detail their extent and nature, as well as how they influence officer workplace behaviors and opinions. Given the attention they have received within the literature, officers will be asked to evaluate psychometric characteristics of these dangers as well as rate the risk of injury or illness to both themselves and the general prison population as a consequence of each hazard. Not only will predictors of officer risk perceptions from each hazard be explored, but in turn, this study will also examine whether variation in officer decision-making can be explained by their perceptions of risk.

To successfully accomplish their objectives of maintaining order within the prison and regulating offender conduct, correctional officers must make various decisions. Organizational and correctional-based research has found authority figures to utilize generally non-coercive methods, such as power bases, to ensure subordinate compliance with regulations (Smith et al. 2009; Hepburn, 1985; Stojkovic, 1984). This decision-making strategy can be viewed as one an officer will rely upon in order to mediate any risks associated with inmate supervision. Bases of power research is overviewed to provide a baseline understanding of the variables found to influence this decision-making tactic, and in turn, the outcomes officer bases of power affect. Scholarly attention has also been directed towards understanding the punishment orientations of correctional officers (Poole and Regoli, 1980; Whitehead and Lindquist, 1989; Tewksbury and Mustaine, 2008; Lambert et al. 2008). Punishment orientations can be viewed as decision-making strategies given how they dictate the manner in which correctional officers choose to interact with inmates (Klofas, 1986; Whitehead and Lindquist, 1989). Similar to the bases of power literature, this overview will reference predictors of

correctional officer punishment ideologies as well as the outcomes this decision-making technique has been shown to influence.

The third and final decision-making variable to be examined includes officer turnover intentions. Recent reports note a high percentage of officers resigning from their position only a short time following their initial date of hire. Research has shown that officer demographics, negative relations with supervisors, dissatisfaction with pay and high perceptions of job dangerousness each significantly impact officer resignation intentions (Lambert and Paoline, 2012; Patenuade, 2001). Regarding the final predictor, decisions to resign can be construed as an officer's desire to remove him/herself from the injurious or otherwise fatal risks surrounding this type of employment. Most measures of job dangerousness, however, failed to uncover what specific dangers influence this outcome, and why exactly this relationship exists. By having officers evaluate psychometric properties of the above dangers and rate their risk for harm, additional insight into the context of the turnover-risk perception relationship can be unveiled.

Officer Demographics

Officer Demographics and Work-Related Perceptions

The demographic characteristics officers carry into the correctional environment have been shown to shape a number of important outcomes. Cullen et al. (1985), for instance, found that being Black, female and/or more educated significantly and negatively predicted job satisfaction. Each of these demographics were also found to positively and significantly influence work and life stress. Data from the 1988 Prison Social Climate Survey were used by Wright and Saylor (1991) to determine correlates of work related perceptions among a sample of 3,325 Bureau of Prison (BOP) staff. Within

the subsample of officers, although relatively few differences between the genders were observed regarding workplace views, the authors did find that being female negatively and significantly correlated with job satisfaction and personal feelings of effectiveness in dealing with inmates. In a follow-up to this study, Wright and Saylor (1992) found no statistically significant differences between Blacks, Hispanics, non-Hispanics and Whites in either their perceptions of supervisors or job satisfaction. They did find, however, that members of each race significantly differed in evaluations of personal efficacy and work-related stress, with Blacks and Hispanics reporting lower job stress and higher personal efficacy evaluations.

Supplementary examinations of the effects of officer demographics on various workplace perceptions and feelings have produced equivocal findings. Whereas some studies found that being a Black and/or Hispanic officer significantly predicted higher levels of work stress, lower levels of self-esteem and life satisfaction (Lasky, Gordon and Strebalus, 1986; Rosefield, 1981), other studies either found that being White and/or male significantly predicted higher levels of tension (Blau, Light and Chamlin, 1986), or reported no significant associations between stress, race, gender and education (Weinberg et al. 1985; Blau, Light and Chamlin, 1986). Even more, while some studies found older, married and longer tenured employees to report higher levels of job dissatisfaction and stress (Blau, Light and Chamlin, 1986; Lindquist and Whitehead, 1986, for marital status), other investigations uncovered opposite findings with younger officers instead indicating lower levels of life and job satisfaction (Huckabee, 1992).

More recent literature found that regardless of gender, Black correctional officers reported significantly lower evaluations of relationships with supervisors and of job

satisfaction, and significantly higher levels of job stress (Britton, 1997). Applegate and Paoline (1997) found that that being longer tenured significantly decreased job stress levels, but also found that older officers reported significantly greater degrees of job-related stress than their younger counterparts. Lambert, Hogan and Barton's (2002) review of the literature on the correlates of correctional officer job satisfaction found that in some studies higher education levels positively affected this outcome (see Maguire and Pastore, 1994; Grossi and Berg, 1991). Instead in other studies, contrary results were uncovered (Jurik and Halemba, 1984). Furthermore, their review of the literature "suggests no significant relationship between job satisfaction and race" (p. 121). These same conclusions were drawn with respect to the relationships between officer gender, age and job satisfaction. Stinchcomb and Leip (2013) supported these arguments after stating that "it is not personal variables such as age, race, gender or ethnicity that account for job satisfaction" (p. 1209).

Apart from researching how officer demographics influence the above mentioned perceptual outcomes, authors have also unveiled connections between the social characteristics of COs and their perceptions of job dangerousness (Cullen et al. 1985; Kauffmann, 1989; Wright and Saylor, 1991; Crawley, 2004; Garcia, 2008). For example, Cullen et al. (1985) found that regardless of gender, race or age, all correctional officers in their study believed that physical danger was an ever present possibility. Wright and Saylor's (1991) analysis of federal COs found that females were significantly less likely than their male counterparts to perceive inmate assaults, even though both genders expressed equal concern over the vulnerability surrounding female officers employed in male correctional facilities. Garcia's (2008) study of federal correctional officers

uncovered significant bivariate correlations between gender, age, race, ethnicity and perceptions of danger. She further found, using hierarchical linear modeling, that at both the individual and institutional levels, gender, race, ethnicity and age accounted for a significant portion of the variance in correctional officer perceived danger.

Some studies even investigated the socio-demographic predictors of correctional officer risk perceptions. Although Mahaffey and Marcus (1995) uncovered no significant relationship between age, education and officer perceptions of the risk of contracting AIDS while working, Gordon, Moriarty and Grant (2003) found that being Black, female or possessing more years of formal education positively and significantly predicted perceptions of risk of victimization. Some of these findings were echoed by Gordon, Proulx and Grant (2013) who found that being female significantly increased the risk perceptions of being attacked by an inmate. These authors further found that being Black or longer tenured significantly reduced the perceptions that officers would be victimized by inmates. Higher levels of education, finally, were positively correlated with this outcome.

*Officer Demographics and Work-Related Decision-Making*⁸

A number of studies have also found demographic characteristics to significantly account for correctional officer decision-making. Hepburn (1985) found that officers with higher levels of education were significantly more likely to adopt an expert base of power when attempting to ensure inmate compliance with institutional rules. Even officer punishment orientations have been significantly accounted for by select demographic attributes (Whitehead and Lindquist, 1989; Jurik, 1985; Whitehead, Lindquist and Klofas,

⁸ Only limited insight regarding the relationship between demographics and correctional officer decision-making is provided here given how additional information on each decision-making outcome will be provided later in the literature review.

1987; Bazemore, Dicker and Al-Gadheeb, 1994). Social characteristics officers bring into the prison have significantly affected officer employment decisions as well. While some studies found neither race, education, tenure nor gender to significantly account for variations in correctional officer turnover intentions (Lambert et al. 2010b), other investigations actually found these variables to play a significant role in predicting officer resignation decisions (Patenuade, 2001; Udechukwu et al. 2007).

The generally mixed findings uncovered by extant literature regarding the relationship(s) between officer demographics and work-related perceptions and decision-making warrant further inquiries. Researchers still do not have a precise understanding of whether and how race, age, gender, tenure and education impact how officers perceive various phenomena and make decisions. Few studies to date, it must also be recognized, have examined whether demographic differences between officers account for variations in their risk perceptions in particular. The current study will add to this body of knowledge by asking a sample of correctional officers to document the presence and salience of various dangers throughout their work, and rate the risk of harm as a consequence of each. Officers will also be asked to indicate what decision-making strategies they employ in the course of their work. Demographic attributes will be included in the analyses in order to assess their ability to predict these outcomes.

Officer Job-Related Emotions

The demanding conditions under which correctional officers are forced to work have been shown to influence a number of emotional outcomes. Several investigations have found officers to report high levels of stress, strained relationships with co-workers, reduced involvement with the job and even high degrees of role conflict and role

ambiguity. This same research has discovered numerous factors accounting for these emotions, as well as a number of consequences resulting from them. The following discussion will provide an overview of the literature as it relates to these specific emotions.

Predictors of Job Stress

Lazarus and Folkman (1984) define stress as “a particular relationship between the person and the environment that is appraised by the person as taxing resources....and...endangering his/her well-being” (p. 19). As outlined in the demographic section of this literature review, there has been some inconsistency in terms of how demographic characteristics operate to predict correctional officer stress. Some studies have either found officer demographics to significantly predict this outcome (Cullen et al. 1985; Lasky, Gordon and Strebalaus, 1986; Rosefield, 1981), while others have discovered no such relationships (Stinchcomb and Leip, 2013). Authors investigating this issue have instead revealed a number of organizationally-based variables found to significantly predict CO stress. Cullen et al. (1985) found that officers expressing greater role conflict and perceptions of job dangerousness were significantly more likely to score higher on job and life stress measures. The researchers also discovered that officers who felt they were receiving adequate supervisory and familial support were significantly less likely to report job-related stress. Significant and positive bivariate correlations were observed between dissatisfaction with input into decision-making, security level and stress levels among a sample of 147 federal correctional officers (Lasky, Gordon and Srebalus, 1986).

Work overload and lack of emotional support from peers and managerial personnel (Linguist and Whitehead, 1986), worker lack of control (Dembo and Dertke, 1986), perceptions of powerlessness (Gerstein, Topp and Correll, 1987), the nature of interactions with inmates (Cheek and Miller, 1983) and poor communication between corrections officers and administrative personnel have each been shown to have significant associations with correctional officer stress. Paoline, Lambert and Hogan (2006) further found that officers who perceived American Correctional Association (ACA) directives as confusing, as well as officers who perceived a lack of clarity with prison policies and procedures, were significantly more likely to report higher levels of job-related stress. Other work environmental predictors of stress uncovered in this literature include emotional dissonance (Tewksbury and Higgins, 2006a; Tewksbury and Higgins, 2006b), a lack of job variety (Lambert, Cluse-Tolar and Hogan, 2007) and fear of exposure to infectious diseases (Hartley et al. 2013). A recent meta-analysis by Dowden and Tellier (2004) supports many of the above findings.

Outcomes of Job Stress

Numerous consequences have been associated with correctional officer stress. Intensive interviews with correctional officers conducted by Kauffmann (1989) and Crawley (2004) revealed how high levels of stress led many interviewees to resort to alcohol and drugs as coping mechanisms. Spill-over effects into the family were also noticed as many officers would bring their work related problems home. This led to increased levels of tension between domestic partners, and in some cases, officer suicide. Griffin et al. (2009) found higher levels of stress to significantly predict three variations of burnout: depersonalization, emotional and job accomplishment. Both Lambert et al.

(2002) and Hogan et al. (2006) found stress to adversely and significantly impact the level of commitment officers invested in their work. In a rare study that evaluated the influence of stress levels on perceived danger, Garcia (2008) found that among federal correctional officers, higher individual and institutional levels of stress significantly increased danger perceptions. Finally, a wide assortment of studies have also found increased stress to positively and significantly influence correctional officer desires to resign (Udechukwu et al. 2007; Patenuade, 2001; Lambert et al. 2010a; Lambert and Paoline, 2012). These latter findings concerning the role of stress on perceived danger and turnover intentions are particularly important to the present analysis as they reveal significant relationships between these variables.

Predictors and Outcomes of Role Conflict and Role Ambiguity

For several decades, prisons across the United States have shifted between different correctional philosophies including treatment/rehabilitation, retribution, deterrence and incapacitation (Hepburn and Albonetti, 1980; Lambert et al. 2005). Fluctuations in punishment ideologies have been shown to negatively impact correctional officers as they are frequently left questioning their occupational role. Lambert et al. (2005) define role stress as “the degree of incongruity of expectations associated with the role of the employee and the results from work roles” (p. 35). Two variations of role stress that will be included this study’s analyses consist of role conflict and role ambiguity. Lambert et al. (2005) explain role conflict as where “compliance with one set of pressures makes compliance with another set difficult, objectionable or impossible,” and further define role ambiguity as “uncertainty or a lack of information in carrying out

the duties and responsibilities of a given position” (p. 35). Predictors and consequences of each example of role stress are discussed.

Bivariate analyses by Hepburn and Albonetti (1980) uncovered how role conflict is significantly greater in treatment oriented institutions, among treatment orientated staff and among staff expressing greater job dissatisfaction and more punitive attitudes towards inmates. However, subsequent regression analyses revealed how institutional level custodial orientations played a greater part in predicting role conflict than individual level attributes of the officers. Pogrebin (1978) explains that treatment orientated correctional institutions are an antecedent to officer role conflict because here “demands for control...are at odds with officer’s commitment to a treatment ideology” (p. 149). Gerstein, Topp and Correll (1987) found both role conflict and role ambiguity to be positively and significantly predicted by tension with co-workers and poor communication between officers and administrative officials. Allard et al. (2003) found in bivariate analyses that both examples of role stress were significantly correlated with age, gender and emotional exhaustion, with older employees and females expressing more role-related stress. Here as well, linear regression analyses revealed statistically significant associations between greater emotional exhaustion and greater role conflict and ambiguity. Being Black, expressing lower evaluations of supervisory support, job autonomy and instrumental communication were each significant predictors of both role ambiguity and role conflict in Garland, Hogan and Lambert’s (2012) analysis. Finally, Ordinary Least Squares (OLS) regression analyses showed how “non-custody staff and staff with higher tenure reported greater role stress than custody staff and staff with less tenure” (Lambert, Hogan and Tucker, 2009, abstract).

Correctional literature has shown both role conflict and ambiguity to significantly impact several outcomes. For instance, Lambert et al. (2013) found higher levels of role conflict to significantly and negatively affect correctional staff job commitment. Another study by the same authors found statistically significant associations between higher levels of role ambiguity and lower levels of organizational citizenship behaviors of correctional officers (Lambert et al. 2012a). Occupational and general stress measures were each significantly increased by higher levels of both role conflict and ambiguity in Castle and Martin's (2006) study. A host of studies have also found greater degrees of expressed role conflict and role ambiguity to significantly and positively influence correctional officer turnover intentions (Leip and Stinchcomb, 2013; Matz et al. 2013; McLaurine, 2008; Minor et al. 2010; Lambert et al. 2013; Lambert et al. 2012b). Garcia (2008), finally, found that at both individual and institutional levels, her measures of role conflict and general organizational clarity were significant predictors of correctional officer perceived danger. She explained that increases in perceived danger as a result of high role conflict could be due to a lack of information received on the part of officers regarding prison activities and the risks presented by inmates.

Co-Worker Relations and Officer Job Involvement

Within any organization, the relationships co-workers forge with one another can play an important role in affecting the wider organizational climate (Garcia, 2008). This concept has been defined as "kind and supportive relationships among workers" (Gonzalvez-Roma, Peiro, and Tordera, 2002, p. 12), and can be exemplified by co-workers who show concern for others, who try to build work-group cohesion and who foster a sense of belonging for all within the entire organization (Garcia, 2008). Although

a review of the literature uncovered no studies investigating predictors of co-worker relations, a number of examinations were located that connected evaluations of peer support to various outcomes. Zimmer (1986) found that positive co-worker assessments correlated strongly with improved correctional officer self-esteem. Dowden and Tellier's (2004) meta-analysis noted a significant association between decreased co-worker evaluations and increased levels of stress. Castle and Martin (2006), however, failed to replicate these findings. Both Leip and Stinchcomb (2013) and Minor et al. (2010) revealed that higher evaluations of co-workers were significantly associated with reduced correctional officer turnover intentions. Paoline, Lambert and Hogan (2006) found that positive relationships with co-workers significantly reduced officer stress, and significantly improved officer evaluations of job satisfaction. Finally, Garcia (2008) found that in individual level models, but not institutional, strained co-worker relations positively and significantly predicted officer perceptions of danger. This last finding is especially relevant to the present analysis as it demonstrates that the relationships officers develop with their peers can play an important role in affecting not just general officer perceptions, but in particular, perceptions of the danger associated with their job.

In addition to co-worker relations, various studies have also examined the consequences resulting from decreased levels of officer involvement with their job. Job involvement is one's "degree of psychological identification with the job" (Lambert, Hogan and Dial, 2011, p. 160). It has further been explained by Paullay, Alliger and Stone-Romero (1994) as when an employee is "cognitively and emotionally preoccupied with, engaged in and concerned with one's present job" (p. 224). Lower levels of job involvement were found to negatively predict officer job satisfaction, and positively

impact officer turnover intentions and absenteeism (Lambert, Hogan and Altheimer, 2010). Lambert, Hogan and Dial (2011) found decreased officer job involvement to significantly increase job-related stress, turnover intentions and absenteeism, while significantly decreasing officer job satisfaction. Lambert et al.'s (2012b) analysis was the only study retrieved that examined predictors of officer job involvement. In this study, the authors found that officers employed in maximum security facilities, officers expressing higher degrees of role ambiguity and perceptions of job dangerousness were significantly less likely to be involved with their job. Given how perceptions of job dangerousness significantly impacted this outcome, it can be argued that because of decreased desires to be informed and involved with one's job, an officer may be more likely to perceive greater levels of risk within the work environment. Garcia (2008) supports this assumption when stating how "a lack of commitment makes officers more susceptible to dangerous situations" (p. 37). Later analyses will examine this relationship.

Psychometric Predictors of Risk Perceptions

A great deal of attention has been devoted to understanding how human beings formulate perceptions of the risks that surround them. Within the discipline of psychology, and more specifically, psychometrics, there are a collection of studies that have revealed numerous qualitative characteristics of dangers that have been found to influence how we view risks (Slovic, 1987; Renn, 1992; Fischhoff et al. 2000; Slovic et al. 2000). Some of the more notable qualitative and theoretically relevant of these characteristics include: 1)-whether an individual perceives the risks from a danger as voluntarily imposed (voluntariness); 2)-whether one feels the risks from a danger can be controlled (control over risk); 3)-the level of knowledge about the danger and its potential

for risk one possesses (knowledge about risk); 4)-whether one believes the risks from a danger will harm people one at a time (chronic), or whether one believes the risks will harm large numbers of people simultaneously (catastrophic); 5)-how fatal one believes the risks from a danger will be (certainty of fatality); and 6)-whether one believes the risks from a danger can be handled calmly (calm) (Fischhoff et al. 2000). Although there are multiple studies that have evaluated psychometric predictors of risk perceptions (Kahneman and Tversky, 1974; Slovic, 1981; Jungermann, 1986), given their attention to these seven qualitative characteristics in particular, two of the more noteworthy are discussed below.

Fischhoff et al. (2000) asked members of the League of Women Voters to evaluate the risks and benefits associated with 30 different activities including bicycling, consuming food preservatives, riding power motors and spraying cans. Respondents were asked to indicate if any of these activities had beneficial aspects, and if so, to list them. They were also asked to rate their level of risk on a scale of 10 to 200—with higher values indicating greater benefits and fewer risks. After this, respondents were asked to evaluate the following three scenarios: 1)-currently the activity would be acceptable if it were made _____ times riskier; 2)-the activity is currently acceptable; and 3)-currently the activity is too risky and would have to be _____ times safer in order to be considered acceptable. Finally on 7-point scales, survey takers were asked to rate their perceptions of the following psychometric properties associated with these activities: voluntariness, control, knowledge, catastrophic potential, chronic dread, common dread and immediacy. Not only did each of the qualitative characteristics load onto the same factor after principal components factor analysis was applied, but

subsequent regression analyses that included this newly summated scale showed it to be a statistically significant predictor of respondent's risk perceptions.

In another study, Kobbeltvedt et al. (2004) presented to a sample of American military personnel serving in Kosovo a list of the various dangers this work presents. The list included such items as patrolling in the dark, being shot at, having technical problems and seeing damaged buildings. Survey respondents were then asked to rate, from a scale of 1-5, the probability of becoming seriously injured by each hazard. From a scale of 1-7, survey-takers were then asked to rate seven qualitative features including the level of voluntariness, immediacy, dread, chronic/catastrophic potential, knowledge, fatality and control respondents thought surrounded each of the hazards. Principal components factor analysis was performed in order to assess any inter-item correlations between these variables. It was found that fatality, dread, delayed effects, involuntariness, lack of control and catastrophic potential each loaded high on the same factor. Regression analyses found this summated psychometric variable to significantly predict the perceptions of the risk of injury as a result of the various hazards, even after controlling for age, gender and race.

Dangers in the Correctional Environment

Aside from regulating offender conduct and trying to establish a degree of order within the prison, correctional officers must also be responsive to the numerous dangers that surround them. To recall, Reichman (1986) stated that "the concept of risk should not be confused with that of peril; perils are the causes of risk" (p. 51). She further added that risk is "uncertainty of loss, or the probability that loss will occur" and that "dangers are those conditions which contribute to the probability of loss" (p. 50). Stakeholders

interested in understanding the oftentimes perilous nature of correctional officer work have found seven dangers in particular to be of most concern to officers. Those most commonly referenced within academic venues include working alongside inmates with infectious diseases (Alaird and Marquart, 2001), gangs (Fleisher and Decker, 2001), disruptive or violent inmate behavior (Park, 1976; Byrne, Hummer and Taxman, 2008), the presence of contraband (Williams and Fish, 1974; Kalinich, 1980), mentally ill inmates (Lambert et al. 2001) and riots (Montgomery and Crews, 1998). Although seldom referenced as a prominent danger within any empirical literature, mainstream news accounts cite physical retaliation against officers by inmates released into the community as an escalating concern for prison officers (Kinnard, 2010). With these dangers in mind, respondents will be asked to rate how much of a threat each poses to the overall physical well-being of the officers and general prison population. To better understand the magnitude and severity of these hazards, a discussion of each is presented below.

Working Alongside Inmates with Infectious Diseases

Growth in the nation's prison population has been accompanied by an increase in the rate of inmates afflicted with various infectious diseases (e.g., hepatitis B and C, human immunodeficiency virus (HIV) and tuberculosis) (Macalino et al. 2004; Bick, 2007; Alaird, 2009; Alaird and Marquart, 2009). Cross-sectional survey data collected by Ruiz et al. (2002) from a random sample of California prisons revealed that of the 5,730 inmates who received entrance physical examinations during a two month period in 1999: 1)-1.4 percent tested positive for HIV; 2)-3.5 percent tested positive for hepatitis B; 3)-33.0 percent tested positive for hepatitis C and 4)-7 percent tested positive for

tuberculosis. A 2006 report issued by the Bureau of Justice Statistics found that the rate of confirmed acquired immunodeficiency syndrome (AIDS) cases was between three and five times higher for prisoners than for the general population, with 0.55 percent of prisoners and 0.10 percent of the general public having contracted the disease. As of 2008, Gough et al. (2010) noted that 1.7 percent of the total U.S. custody population was infected with HIV and that between 12 and 35 percent had either hepatitis B or C.

Penal institutions are enclosed environments in which occupants (correctional officers and inmates mostly) interact with one another in close proximity and share relatively confined spaces (Kaufmann, 1989). Within these surroundings in particular, as a wealth of research now documents, there is a high probability of individuals contracting any one of the above illnesses (Ruiz et al. 2001; Masoglia, 2008). Officers of the prison system are particularly susceptible to such risks due to their occupational mandates, which require them to routinely perform pat and cell searches, intervene between physical altercations and respond to medical emergencies, accidents and other “situations where they may encounter sharp objects, blood and bodily fluids” (Alaird and Marquart, 2009, p. 441). High risk behaviors engaged in by inmates such as unprotected sex, intravenous drug use and tattooing also render officers vulnerable to the risks associated with working alongside infected prisoners. Some authors have even voiced the concern that unsanitary prison facilities marked by insufficient hand-washing areas, isolation rooms and personal protective equipment, as well as prison overcrowding, delays in medical evaluation and rationed access to cleaning supplies augment the likelihood that persons within prisons will become infected by these diseases (Bick, 2007).

Though relatively few estimates exist on the rate of CO's contracting any of the above illnesses, one study of a nationally representative sample of officers by De Groot and Merchant (2003) did offer some insight into this phenomenon. Their findings suggested that, depending upon an officer's type of exposure, rates of HIV infection among these employees range from .009 percent (for mucous membrane exposures) to 3.0 percent (for penile-anal sexual intercourse). Alarm over contracting or even becoming seriously ill by HIV in particular has been expressed by U.S. corrections officers. Kammerman (1991), for example, found that when officers felt that the HIV positive inmates around whom they were working exhibited signs of being seriously ill, they were more likely to believe that they were at greater risk for contracting the virus. Other studies produced mixed results with some finding that officers who possessed greater HIV/AIDS-related knowledge perceived less risk of contracting the disease (Mahaffey and Marcus, 1995; Alard and Marquart, 2009), while instead other results failed to support such conclusions (Dillon and Allwright, 2005). Additional research into this area suggested that officer risk perceptions of contracting HIV/AIDS while on the job are inversely associated with increases in age and job-related experience (Mahaffey and Marcus, 1995; Dillon and Allwright, 2005). Coupled with the consequences associated with infection by any disease, the relative dearth of research on officer risk perceptions of contracting such illnesses creates a need for scholarly attention into this area. By questioning officers about their risk perceptions of becoming infected with tuberculosis, HIV or hepatitis B or C as a result of working alongside inmates with these illnesses, which research indicates are four of the most prevalent within penal environments (Bick,

2007; Alaird, 2009), this dissertation will expand our knowledge on how officers view their job and what actions they take to protect themselves.

Gangs

Lyman (1989) conceptualizes a prison gang as:

An organization that operates within the prison system as a self-perpetuating criminally oriented entity, consisting of a select group of inmates who have established an organized chain of command and are governed by an established code of conduct. The prison gang will usually operate in secrecy and has its goal to conduct gang activities by controlling their prison environment through intimidation and violence directed toward non-members (p. 48).

The latter part of this definition should be of extreme relevance to most correctional officers, as they sometimes are the prime targets for violence by gang members. Support for this point is offered by Fleisher and Decker (2001) who state that “prison gangs are...prison manager’s biggest nightmare” (p. 2). Camp and Camp (1985) originally estimated that there were approximately 114 gangs in operation across the United States, with over 13,000 members incarcerated at the time of their study. In a more recent analysis, Fleisher and Decker (2001) surveyed prisons in 49 states and found that 33 states had gang members under custody. A report from the Federal Bureau of Investigation’s National Gang Intelligence Center (2011) stresses how gangs are increasing in presence and salience in the Southeastern part of the United States especially, and that they are escalating in violence and criminal sophistication. Their report further noted that as of 2011, there were approximately 1.4 million street, prison and outlaw motorcycle gang members, which comprised more than 33,000 gangs across the U.S.

Prison gangs share many similarities with their counterparts on the outside as usually one person is designated a leader who oversees the other members and their criminal operations. They have been described as violent, secretive, abiding to a creed, motto or constitution that dictates member behavior, and organizations that adopt unique symbols to define membership status (Fleisher and Decker, 2001). Five major prison gangs have been identified by correctional research, which include The Mexican Mafia (La Eme) (Hunt et al. 1993), The Aryan Brotherhood (Orlando-Morningstar, 1997), Black Panther groups such as The Black Liberation Army, The Symbionese Liberation Army and The Weatherman Underground Organization (Hunt et al. 1993), La Nuestra Family (Landre, Miller and Porter, 1997) and finally, The Texas Syndicate (Hunt et al. 1993). These groups are further criminally motivated by a desire to earn money and exploit the often overcrowded and understaffed nature of prisons (Fleisher and Decker, 2001). Although corrections officers have been doing their best to combat prison gang activity, Fleisher and Decker (2001) argued several years ago that courts attenuated the authority of COs to control gangs by affording members additional constitutional protections. Today, many officers and administrative officials continue to lament that these court afforded defenses have emboldened gang members and rendered the CO's job to combat gang activity increasingly dangerous (SCDC, 2013). This dissertation fills a void in the literature that has yet to question officers about their perceptions of the risk of injury associated with prison gang activity.

Disruptive Inmate Behavior

For purposes of this dissertation, disruptive inmate behavior is viewed as violent conduct on behalf of offenders. A specific definition of violent behavior is offered by

Cohen (1976), who conceptualized it as “the use of force (the attacker clobbering someone with a shovel) or an attempt to accomplish something by threat of force (the robber brandishing a gun)” (p. 3). Examples of this type of behavior, especially within penal environments, may include performed or attempted physical and sexual assaults, murders, suicides or rapes (Byrne, Hummer and Taxman, 2008). Prison researchers have found this type of inmate conduct to pose a number of problems for correctional officers. For instance, disruptive inmate behavior has been shown to increase the rate of officer turnover (Patenuade, 2001), the rate of injuries and deaths sustained by officers (Kauffmann, 1989; Crawley, 2004) and even the total number of officer self-destructive behavior(s) such as resorting to drugs and alcohol as coping mechanisms (Kauffmann, 1989; Crawley, 2004).

As a result of these issues, scholars have investigated the extent and nature of this danger across U.S. correctional institutions. Park (1976) found that in all California prisons between 1970 and 1974, the rate of inmate assaults (including inmate-on-inmate and inmate-on-officer) per 100 prison population members increased from 1.36 to 4.30. He attributed this escalation to crowded living conditions, poor institutional designs and the inability of officers and other employees to successfully supervise the lifestyles of inmates and the “rampant cultural-racial incompatibilities of offenders” (p. 91). More recently from 1992 to 1996, Warchol (1998) reported that correctional officers experienced 217.8 nonfatal workplace assaults per 1,000 officers. Although Byrne, Hummer and Taxman (2008) noticed a decline in the national rate of inmate deaths from 3.2 to 2.4 per every 1,000 inmates between 1995 and 2000, they still consider this a major concern for most correctional institutions. Between 1995 and 2000, these same authors

noted an increase from 27.0 to 28.0 in the national rate of inmate-on-inmate assaults per every 1,000 incarcerated offenders. Rates of inmate assaults against staff also increased during this same time period from 14.1 to 15.6 per every 1,000 officers (Byrne, Hummer and Taxman, 2008).

Prison sexual assault has been a topic of considerable importance for many researchers over the past few decades. One study of a maximum security prison located in the Southern United States by Hensley, Koscheski and Tewksbury (2005) uncovered how 18% of inmates reported inmate-on-inmate sexual threats, and 8.5% reported that they had been sexually assaulted by another inmate while incarcerated. In 2006, Beck, Harrison and Adams (2007) documented 3.75 alleged inmate-on-inmate sexual assaults per every 1,000 inmates in public state-run prisons. Younger prisoners and offenders serving longer sentences initiated the majority of these assaults (Beck, Harrison and Adams, 2007). Wolff and Shi (2009), instead, stated that between 1998 and 2008 in American state-run prisons, “estimates of sexual assault during any 6-month period...converged around 2 per 100 inmates, with rates about 10 times that for physical assault” (p. 58).

Variable rates generated on inmate misconduct, largely because of various methodological issues⁹, preclude researchers from fully capturing the extent of this phenomenon. Nevertheless, disruptive inmate behavior of any kind is still of paramount concern to most prison officials and corrections officers. Moreover, Garcia (2008) even noted that maximum security facilities, facilities with a higher percentage of younger offenders and facilities with a higher percentage of Mexican-born offenders are more

⁹ Byrne, Hummer and Taxman (2008) note that differences in variable measurements(s) and conceptualizations, along with how data are ultimately collected and analyzed contribute to the disparate estimates outlined above.

likely to report higher rates of disruptive inmate behavior(s). Hensley, Koscheski and Tewksbury (2003) echoed some of these findings after revealing how maximum security facilities are statistically more likely to report higher levels of inmate sexual assaults than either medium or minimum level facilities. Correctional officers are responsible for controlling any type of disruptive inmate behavior and ensuring that all individuals within the prison are protected. Very little research has questioned officers about their perceptions of the risk of injury associated with this danger. This dissertation fills this gap in the literature.

The Presence of Contraband

Sykes (1958) informs us that because prisoners suffer systematic deprivation, they are incentivized to develop a sub-rosa economic system that alleviates the pains accompanying their current condition. Incarcerated offenders are “deprived of heterosexual relationships, security from assault or exploitation...status...common goods and services...and autonomy” (Kalinich, 1980, p. 15). Despite most prisons containing formal and legitimate economic systems, which include prison industries, work release programs and other licit activities that generate income for inmates (Williams and Fish, 1974), this has proven unsatisfying for many offenders. These insufficiencies, therefore, have led many inmates to form an underworld economy that helps balance the losses they otherwise would be granted had it not been for their imprisonment. However, many of the goods and services supplied are illicitly obtained and distributed. These items have been defined as contraband, with Kalinich (1980) offering a definition and several examples of this term:

Contraband is any substance or material that is not authorized to be in the possession of residents of the prison community...It includes such items

as weapons, tools, instruments or objects that could be used as weapons...fermented alcoholic beverages...dangerous drugs, narcotics or restricted medications...state-owned equipment, tools and supplies...clothing that does not comply with clothing regulations...animals...food items which are not served in the dining room...all hobby-related materials...any items from the prisoner's home outside the prison...all currency...obscene materials like pornography...escape equipment...altered or homemade electronics...weddings rings of a size that may present potential use as a weapon...or any item from the commissary in excess of \$45 (pgs. 2-3).

Kalinich's (1980) study of one maximum security prison in Michigan found that the illicit market for contraband had employed 1,073 of the prison's 2,035 inmates at the time the study was conducted. Inmates raved that this sub-rosa system was affording them autonomy and freedom to move around the prison, while also helping them reclaim a personal sense of self-worth. Nearly every prison across the United States, according to Bouchard and Winnicki (2000), shares the common problem of having contraband circulating by virtue of the underworld inmate economy. Contraband distribution "makes prisoners potentially stronger, compromises the security of an institution and derails...correctional programs" (Bouchard and Winnicki, 2000, p. 47). Moreover, it has even been noted that in order for officers to successfully manage inmates and minimize disruptive outbreaks, they frequently must compromise their ethics. Sykes (1958) states:

To a large extent the guard is dependent on inmates for the satisfactory performance of his duties...A guard cannot rely on the direct application of force to achieve compliance, for he is one man against hundreds...One of the best offers he can make to ensure compliance is ignoring minor offenses or making sure he never places himself in a position to discover infractions of the rules (pgs. 175-76).

Sykes' (1958) perspective is supported by Guenther (1975) and Kalinich and Stojkovic (1985) who inform us how inmates often control the inner-workings of the prison, which leaves officers in a vulnerable state. Biermann (2007) further noted that

many seemingly innocuous contraband items are used by inmates as weapons, including rubber toothbrushes, razor handles, silicon mold and lightweight broom heads. His nationally representative study of 101 U.S. prisons in 2006 found how 1,326 contraband items being used as weapons were confiscated by prison officials, with about 1,100 of those having injured either inmates (203) or officers (37). Biermann (2007) also found in 2006 that the average injury rate resulting from contraband items for officers was .97/1000 workers, and that for offenders it was 1.60/1000 inmates. Finally, he noted that the cost of time lost and medical care for staff as a result of these outcomes was \$1,125,000. Given the problems the inmate contraband system poses to the security of prisons and the well-being of officers, it is important to investigate officer perceptions of this danger, especially as they relate to its potential for injury.

Mentally Ill Inmates

A notable rise in the incarceration rate of persons with mental illnesses has been observed across the United States over the past several decades. Dating back to the 1970's, this phenomenon has taken on such historic proportions that Abramson (1972) even coined the phrase "criminalization of the mentally ill" (p. 101), which referred to the growing number of mentally ill individuals serving time in custody. Ditton (1999) estimated that in both jails and prisons nationwide, 16 percent of prisoners suffered some form of mental illness. More recent estimates found that in 2005, 56 percent of state prisoners, 45 percent of federal prisoners and 64 percent of those in jail reported exhibiting symptoms of at least one mental health problem (James and Glaze, 2006). While there exist a variety of mental illnesses (such as obsessive compulsive disorder and numerous anxiety disorders), three of the more prevalent found within correctional

institutions are schizophrenia, bipolar disorder and major depressive disorder (McLearn and Ryba, 2003). Schizophrenia is characterized by a “breakdown in thought processes and by impaired emotional responses...that...can include delusions, paranoid beliefs and hallucinations” (Carson, 2000, p. 638). Whereas bipolar disorder is symptomatic of experiencing “episodes of elevated or agitated mood” (Dean and Walsh, 2007, p. 407), major depressive disorder is “characterized by pervasive low mood, often accompanied by low self-esteem...and...loss of interest in normally enjoyable activities” (Hirschfeld, 2000, p. 5).

McLearn and Ryba (2003) attribute much of the increase in the imprisonment of mentally ill individuals to the deinstitutionalization movement of the 1970's that saw large numbers of patients released back into the community. Upon their release, many former patients found themselves under the control of the criminal justice system. Significant growth in the mentally ill inmate population has made the Los Angeles County Jail (17,000), New York Rikers Island (13,500) and the Cook County Jail in Chicago (9,000), according to Adams and Ferrandino (2008), the “three largest psychiatric institutions in the country” (p. 913). Unfortunately, it has now become apparent to various scholars and practitioners that correctional facilities are ill-prepared to address the problems introduced by this subgroup of the institutional population. Mentally ill inmates require medical services such as therapy, detoxification and medication, which due predominantly to budget constraints and insufficient resources, cannot be supplied by our nation's prisons (McLearn and Ryba, 2003). When combined, these issues sometimes exacerbate the condition of these inmates.

Some research has now found that prisoners afflicted with mental illnesses are highly vulnerable to physical and sexual assault (Robertson, 2013), a physical threat to both themselves and others around them (McLearen and Ryba, 2003) and more likely to recidivate as compared to those inmates who do not suffer any mental illness (Baillargeon et al. 2009). Although some prisons have begun hiring trained psychiatric professionals and initiating heightened in-take observations to manage and address the problems posed by mentally ill inmates, correctional administrators and officers have voiced concerns over the uncertainty surrounding the behavior of these individuals (Baillargeon et al. 2009). Given this, the current study surveys officers about their perceptions of the risk of injury resulting from working around inmates who suffer mental illnesses.

Riots

A history of the American correctional system reveals that prison riots are of a limited occurrence. From 1774 to 1990, the United States witnessed a total of 300 riots, with 90 percent of those taking place during the mid-to-late part of the 20th century (Martin and Zimmerman, 1990). Inconsistencies surrounding the terminology used to define a prison riot have led to some misunderstandings of this term. In fact, Adams (1992) states that there “is no agreed upon definition of what constitutes a prison riot” (p. 10). He further adds that many definitions of prison riots omit important characteristics of them such as the fact that they are part of a continuum of activities, that they involve dissent, interruption of regime and takeover of authority, that they are temporary, consisting of groups of offenders, and directed towards achieving a change or expressing a grievance. With this, Adams (1992) defines prison riots as:

Part of the continuum of practices and relationships inherent in imprisonment, which involves dissenting and/or protesting activities by individuals or groups of prisoners which interrupt their imprisonment, by means of which they take over all or part of the prison resources and either express one or more grievances or a demand for change, or both (pgs. 13-14).

Arriving at a commonly agreed upon definition is just one of several problems that have impeded researchers from understanding the dynamics of prison riots. Another issue, according to Martin and Zimmerman (1990), is the inadequacy of information about them. With the fact that prison riots occur so sparingly, even existing data on them are typically retrospective in nature. Martin and Zimmerman (1990) add that “prison riots are low-frequency, high salience events, and although they have important operational, political and moral consequences, their infrequency makes them highly idiosyncratic” (p. 713). These issues aside, scholars have attempted to analyze the total circumstances surrounding these events. Montgomery and Crews (1998) identified a number of theories proposed to explain the etiology and existence of prison riots including systems theory; environmental conditions theory; spontaneity (powder keg) theory; conflict theory; relative deprivation theory; time bomb theory; power vacuum theory and grievance theory. Although each theory offers a different explanation regarding the existence of prison riots, they each contain some common elements. Nearly every theory agrees that prison riots are retaliations against inhumane conditions, bad food, brutal staff, and are also associated with economic factors, racial tensions, prison overcrowding, the presence of young, violent offenders and poor building design problems (Boin and Rattray, 2004).

Two of the most notorious instances of inmate rioting in the United States include the 1971 Attica New York Prison Riot and the 1980 New Mexico Prison Riot (Useem, 1985; Useem and Kimball, 1989). In Attica, a spontaneous act of violence by one inmate

against a correctional officer initiated the riot. Over the next couple of days, other inmates became involved in a series of violent behaviors that were instigated by frustration and anger over the crowded nature of the prison, the lack of rehabilitative programs for inmates and inmate perceptions of the unconstitutionality of their imprisonment (Useem, 1985). Useem (1985) adds that tension over the Vietnam War and the ill-prepared nature of the prison staff also contributed to the riot. In the end, state police stormed the facility in order to re-establish control, with over \$20 million in damages resulting from one of the U.S.'s worst episodes of inmate rioting. The 1980 New Mexico Prison Riot also erupted because of grievances over the inhospitable confinement of inmates. Prison staff and administration were as equally ill-prepared as the Attica staff for the events that would ensue (Useem, 1985). Inmates took control of cellblocks, dispersed drugs and weapons, kept correctional officers as hostages, and in total, took the lives of 33 inmates over the course of 3 days of rioting (Useem, 1985). Although prison riots are low probability events, they can quickly become highly consequential. This dissertation is interested in questioning officers about their perceptions of this danger, and specifically, whether they feel prison riots have the potential to inflict injury, and whether these are events requiring attention by prison staff.

Inmates Released Back Into the Community

No results were produced in a search of scientific literature on the risk of injury posed to officers by inmates released back into the community. Despite receiving scant academic attention, personal conversations with corrections officers, prison wardens and administrative officials revealed how, in light of recent events, this danger has received increased attention from corrections personnel. One officer was quoted as saying “We are

housing an inmate here who tried to orchestrate a hit on another officer some time ago and I am fearful of what he might do if let go by the prison system” (personal communication, 6 February, 2014). Successfully executed attacks on officers and even their family members have been reported in mainstream news editorials. For instance, an article by Kinnard (2010) referenced how a South Carolina Corrections Department captain was shot and severely wounded in his home by a former inmate who authorities revealed was hired by an offender under correctional custody at the time of the attack. Cellular telephone communication between both parties facilitated coordination of the shooting.

Kinnard (2010) also reported that a former New Jersey inmate in 2009, once discharged from the prison, followed an officer to his home in order to perpetrate an attack on him. This inmate was apprehended shortly following a second attack on his ex-girlfriend (Kinnard, 2010). Though rare, Kinnard (2010) concludes that these types of attacks do occur and should be taken under serious consideration by prison administration. For this reason, corrections officers will be asked to evaluate their risk of personal injury as a result inmates being released back into the community. Officers will also be asked to rate the risk of injury to both their loved ones and co-workers as a result of this danger.

Correctional Officer Decision-Making

The literature presented thus far illustrates that the working conditions of officers are dangerous and unpredictable. Throughout their job, officers must make various decisions that benefit themselves and the wider prison. Officers must make decisions regarding how to control disruptive inmates, decisions on whether and how to interact

with inmates and decisions regarding their employment with the prison. Correctional-based researchers have categorized many of these decisions under three broad domains: bases of power, punishment orientations and turnover intentions. Here, a base of power decision is viewed as a tactic officers will use to ensure inmate compliance with institutional rules, thereby mediating any risk associated with that offender. A punishment orientation is indicative of how officers feel inmates should be treated by the correctional system. Officer punishment philosophies can affect how they treat inmates, which can vary according to their perceptions of the risk of the inmates. Finally, officer decisions to terminate employment may be manifestations of their desires to remove themselves from the risk(s) accompanying this work. Not only is this dissertation interested in uncovering correlates of officer risk perceptions, but it is equally interested in examining how officers make each of these three decisions. An overview of the literature on each strategy is presented.

Bases of Power

To assist in regulating inmate conduct and maintaining a safer work environment, a number of scholars found that correctional officers utilize various forms of power (Stojkovic, 1984; Hepburn, 1985; Kauffman, 1989). French and Raven (1959) defined social influence as “a change in the belief, attitude or behavior of a person which results from another person” (p. 155) and social power as “the ability of an agent to bring about such a change using available resources” (p. 156). They further document five different social forms of power within organizational settings including: a)-referent power (the ability to administer to another a sense of personal acceptance and approval); b)-expert power (ability to administer to another knowledge and expertise); c)-reward power

(ability to grant to another things of desire or remove or decrease things another does not desire); d)-coercive power (ability to force someone to do things s/he does not want to do); and e)-legitimate power (ability to administer to someone feelings of obligation or the notion of responsibility). Finally, they note that reward power often is most successful amongst these others in terms of lowering resistance and increasing social cohesion between parties involved in power transactions.

Stojkovic (1984) added to this line of research after investigating how coercive, reward, legitimate and referent bases of power were used by correctional officers within a maximum security prison. He found that because ticket-writing (a form of coercive power) was not perceived as a deterrent by inmates, and subsequently, did not produce inmate compliance, officers successfully resorted to legitimate and reward power as alternatives. He also found that because inmates knew COs were frustrated by the ambiguous regulations they were forced to follow, officer use of legitimate power proved effective in terms of establishing harmonious relationships between inmates and officers. Similar to Stojkovic (1984), Hepburn (1985) also found among a sample of correctional officers employed in four U.S. states that legitimate power was ranked highest amongst referent, expert, reward and coercive regarding its ability to “get prisoners to do what they are told” (p. 154). Statistically significant variables predicting legitimate power preferences included higher levels of education, job experience, and job satisfaction and lower levels of role strain. Kauffman (1989), finally, added authority, persuasion, inducement, manipulation, force and coercion as other bases of social power utilized by officers of the correctional system. Her qualitative interviews of Massachusetts COs uncovered how inducement and manipulation were preferred to these other forms of

power because of their superior ability to ensure inmate compliance with rules and regulations.

Literature examining officer bases of power preferences has uncovered a host of significant predictors of this decision-making strategy. However, no research to date has evaluated the relationship(s) between officer workplace emotions and risk perceptions from workplace dangers and the power bases upon which they rely. A power base is a method used to regulate offender conduct, thereby minimizing associated risks. This dissertation is interested in not only testing whether and how officer demographics and emotions affect this outcome, but also whether risk perceptions of harm play a role as well.

Punishment Orientations

Researchers have speculated that a correctional officer's punishment orientation plays a significant role in determining how s/he chooses to interact with inmates. These interactions, in turn, can weigh heavily on the total atmosphere within the prison (Jurik, 1985; Whitehead, Lindquist and Klofas, 1987; Whitehead and Lindquist, 1989; Bazemore, Dicker and Al-Gadheeb, 1994). Many of these authors have further referenced how the successful management and even rehabilitation of inmates is largely premised upon the social exchanges between inmates and officers. Klofas and Toch (1982) developed a 17-item questionnaire to glean insight into the punishment ideologies of corrections officers. A replication of their scale by Whitehead and Lindquist (1987) revealed a four-order factor of punishment ideologies: counseling roles; concern with corruption of authority; social distance and punitive orientation. A great deal of work has been devoted to

understanding the nature of these orientations, their predictors and the variables these ideologies affect.

Although some studies showed correctional officers to be highly punitive in their exchanges with inmates (Haney, Banks and Zimbardo, 1973), later studies uncovered opposite results in that most officers are actually interested in expanding the human service role of their profession (Johnson, 1987; Cullen, Gilbert and Cullen, 1983). Whitehead and Lindquist's (1987) analysis did not find gender to significantly predict officer punishment orientations. They did find, however, that Blacks and Whites scored significantly different in two of four punishment ideologies, with Blacks scoring higher on social distance and lower on punitive orientation than Whites. The authors also found that higher scores on the counseling orientation scale significantly and negatively predicted accomplishment burnout, while higher scores on the punitive orientation scale significantly and negatively predicted depersonalization burnout.

Survey data collected by Jurik (1985) revealed no statistically significant effect of either education or gender on correctional officer views towards inmates. She did find though that minority officers held more positive perceptions of inmates and concluded that punishment ideologies are probably more a product of organizational-level variables than individual characteristics of officers. Whitehead and Lindquist (1989) found that being White predicted in a negative direction social distance and in a positive direction punitive orientations. They further found that older officers at the time of their entry into the position were statistically less likely to hold greater social distances with inmates than their younger counterparts. Several other investigations also found officer demographics to significantly predict their punishment orientations (Cullen et al. 1989; Bazmeore,

Dicker and Al-Gadheeb, 1994; Jackson and Ammen, 1996; Lariviere, 2001; Tewksbury and Mustaine, 2008).

Other variables found to influence officer punishment orientations include job satisfaction, seniority, role conflict, shift hours and the number of hours officers spent with inmates (Klofas, 1986; Cullen et al. 1989; Van Voorhis et al. 1991; Farkas, 1999; Lambert, Alheimer, Hogan and Barton-Bellessa, 2011; Laswell, 2010). Punishment orientations of officers have also been found to affect their advocacy for inmate treatment programs, turnover intentions, burnout, job satisfaction, the amount of disciplinary infractions officers file against inmates, job security and stress (Poole and Regoli, 1980; Freeman, 1994; Liou, 1995; Lambert et al. 2008).

The officer punishment orientation literature demonstrates that the perceptions officers hold of inmates greatly influence how they choose to treat incarcerated offenders. This research has also found punishment ideologies to be significantly accounted for by a number of variables. The current study adds to this body of knowledge by examining the role of demographics, which has yet to be established, in predicting officer punishment orientations. An investigation into the role of officer workplace emotions in affecting this outcome will also be undertaken. Most importantly, since no study has evaluated the link between officer risk perceptions and punishment philosophies, it is important to examine whether such a connection actually exists. Officers who perceive inmates or general prison conditions as high risk, may be more inclined to adopt harsher and more punitive punishment philosophies regarding inmate treatment. This may be explained by the fact that more punitive responses, such as sending inmates to solitary confinement, are risk obviation techniques that serve to protect the officer.

Turnover Intentions

Price and Mueller (1981) define the concept of turnover as the severing of employment between an employee and his/her organization, and divide it into two categories: involuntary and voluntary. While involuntary turnover takes place when an employer removes an employee from the organization, voluntary turnover (i.e., resigning) instead is the conscious decision on behalf of the employee to terminate said employment (Lambert et al. 2010a). A growing body of research has found that a high percentage of correctional officers resign from their position only a short time following their initial date of hire. Across the United States between 2000 and 2008, according to the Management and Training Corporation Institute (2011), 16.2 percent of all COs resigned within only one year of their initial employment. In 2004, the state of Vermont suffered some of the highest CO turnover rates with over 35 percent of full-time and 77 percent of part-time officers resigning after only one year of employment (VTDC, 2005). Patenaude (2001) found that from 1998 to 2001, 35 percent of Arkansas correctional officers resigned annually. The South Carolina Department of Corrections in 2009, finally, documented a correctional officer turnover rate of 34 percent (SCDC, 2009).

Multiple consequences have been associated with high correctional officer turnover. For example, the state of Vermont expended approximately \$6,000 in 2004 to train and hire each individual corrections officer; however because of high officer turnover that same year, the state's Department of Corrections was forced to spend an additional \$500,000 to hire and train new recruits (VTDC, 2005). Their 2005 annual report cited additional problems resulting from high CO turnover including "mandatory overtime and order-ins...for remaining officers, a higher inmate to correctional officer

ratio and working with a revolving door of inexperienced officers” (VTDC, 2005, p. 1). Minor et al. (2010) add that increased levels of staff attrition can contribute to negative public relations with legislators and private citizens and “stereotype correctional work as a job of last resort to be performed only until better employment opportunities become available” (p. 59).

Various studies have investigated the reasons why so many officers terminate their employment. Lommell (2004) found among a national sample of correctional officers that demanding hours and shift work, low national unemployment rates that offer other job possibilities, inadequate pay and benefits, stress and wrong initial employee selection were some of the most important factors influencing high resignation rates. Patenuade (2001) also found that perceptions of low pay and employee benefits, stress, poor training and professional development each contributed to high CO turnover rates in Arkansas. Demographic variables such as gender, age, tenure, educational level and race have also been found to significantly influence correctional officer turnover intentions (Lambert et al. 2011a). Other reasons accounting for high CO resignation rates include low levels of job commitment and job satisfaction, poor co-worker relationships, a lack of recognition and fair treatment from managerial personnel and high perceptions of job dangerousness (Lambert et al. 2011a; Lambert & Paoline, 2012; Matz et al. 2013).

Although several studies have found high danger perceptions to positively impact turnover intentions, the indicators used to measure danger perceptions failed to uncover more detailed understandings of this relationship. Put differently, most measures included scale items such as “I think my job is dangerous,” or “I work a dangerous job.” These measures only tentatively grasp how an officer perceives danger and why this

relationship even exists. In this study, officers will be asked to evaluate psychometric characteristics of dangers and how they influence their perceptions of the risk of harm associated with each one. Turnover intentions will then be regressed on officer risk perceptions of each danger in order to unveil more about this relationship. The roles of officer demographics and workplace emotions in predicting this outcome will also be considered.

Purpose of the Current Study

Contribution to the Correctional Officer Risk Perception Literature

Currently scarce attention has been devoted to investigating correctional officer risk perceptions, and in particular, their perceptions of the risk(s) resulting from various workplace dangers. This is an important oversight as some research has shown high danger perceptions to correlate with officer drug and alcohol use (Kauffman, 1989; Crawley, 2004); turnover intentions (Matz et al. 2013) and stress (Cullen et al. 1985). Moreover, and as outlined in Chapter 4, existing correctional-based risk assessment instruments suffer considerable deficiencies, especially in their abilities to predict offender recidivism (Austin, 2004). These instruments have been criticized for failing to account for contextual factors that influence deviant behavior and for basing generalizations off small sample sizes. They are further hampered by their narrow focus on the risk of offender recidivism alone (Austin, 2004). Gathering correctional officer insight regarding the presence and salience of workplace dangers and their potential to inflict harm on both correctional officers and the wider prison population can augment prison safety. Correctional officer input regarding these issues can also improve upon the limitations of extant correctional-based risk assessment measures.

A long line of research within the psychometric paradigm of risk perceptions has demonstrated how experts within the field of risk management are frequently correct when predicting risks (Slovic, 1987; Fischhoff et al. 2000). One study by Slovic et al. (2000) even asserted that “perceived risk can be predicted by intimate knowledge...and understanding...of the activity or danger under investigation” (p. 143). Correctional officers have been viewed as experts of the correctional environment and its constituent elements (Lipsky, 2010), and have even shown to be highly accurate when making predictions of which inmates are most likely to commit crimes (Gonsalvez et al. 2012). With all this said, officers will be asked to evaluate the risk of harm to both themselves and the general prison population as a result of seven dangers correctional literature has found to be of primary concern: working alongside inmates with infectious diseases, gang activity; disruptive inmate behavior; the presence of contraband; mentally ill inmates, riots and retaliation from inmates released back into the community.

Apart from gleaning insight into what correctional officers perceive as risky within their work environment, this dissertation is also interested in examining the predictors of their risk perceptions. Specifically, this study aims to test the role of officer demographics, workplace emotions officers experience and psychometric characteristics of dangers in predicting officer risk perceptions. Even though some authors have researched how demographics influence officer danger and risk perceptions (Cullen et al. 1985; Garcia, 2008), this literature is limited in several ways. First, given their generally mixed findings, researchers still do not have a precise understanding of how demographics influence this outcome. Second, no study has questioned officers about

their risk perceptions of harm from specific workplace dangers. Third, some of the danger perception measures used were biased.

For example, although Garcia (2008) is to be commended for her efforts to better understand officer danger perceptions, the secondary data measures she used to capture this phenomenon were biased. Her dependent variable consisted of a summated scale of officer danger perceptions that comprised responses to 5 items. The last two items read “In the past 6 months, how often have inmates used physical force against staff members,” and “Have you been physically assaulted in any way by an inmate in the last 6 months?” Although Garcia (2008) stated that these last measures were included in the scale to capture instances of where officers were put in danger, and whether these instances bothered them, they do not measure perceptions of events that could take place. Rather, they are indications of events that have already transpired, which when included in her summated scale, bias our understanding of officer perceptions of potential future events. This dissertation, instead, is interested in only asking officers about their perceptions of whether certain risk events will actually take place, and not whether they already have.

Similar to the literature on demographics and officer danger and risk perceptions, research that has evaluated the role of officer workplace emotions on these outcomes suffers some shortcomings. Aside from the Garcia (2008) study, no other authors have examined how job-related stress, officer job involvement, relations with co-workers and expressed role conflict and role ambiguity impact correctional officer risk perceptions. It is important that researchers garner a more complete understanding of the potential influence such organizationally-based factors have on officer risk perceptions. Also, these

variables have yet to be tested on officer risk perceptions resulting from the specific workplace dangers outlined above.

Numerous theories have been offered to explain how human beings formulate perceptions of the risk(s) that surround them (Douglas, 1966; Renn, 1992; Slovic, 1987). For purposes of this dissertation, variables uncovered from the psychometric theory of human risk perceptions will be examined. Qualitative characteristics of dangers that have been found to significantly impact risk assessments include the level of knowledge one possesses regarding a danger and its risks (knowledge), the perception of control one has over a danger (control), whether one perceives a danger and its risks as voluntarily imposed or not (voluntariness), whether one believes the risks from a danger will harm many people at once (catastrophic) or few people over an extended period (chronic), how fatal one believes the risks from a danger will be (certainty of fatality), whether one believes the risks from a danger can be handled calmly (calm), and how anxious the potential risks from a danger makes one feel (anxious) (Fischhoff et al. 2000; Kobbeltvedt et al. 2004). Although these seven psychometric characteristics of dangers have been examined thoroughly within the risk perception literature, very few studies to date have evaluated them using a sample of workers employed in high risk industries. This study will add to the psychometric literature by having officers assess psychometric traits of the above dangers in order to assess their predictive capabilities.

Contribution to the Correctional Officer Decision-Making Literature

Hepburn's (1985) analysis was the only study retrieved that evaluated demographic predictors of officer bases of power preferences. This dissertation will add to this literature by examining not only whether select officer demographics impact this

outcome, but whether job-related emotions experienced by COs also play a role in predicting power bases. Even more, results from later analyses will shed light on whether a relationship exists between officer risk perceptions and their power reliance. Extensive effort has been undertaken to evaluate how officer demographics and work-related emotions predict officer punishment orientations (Jurik, 1985; Cullen et al. 1989; Tewksbury and Mustaine, 2008). Mixed findings revealed by these examinations, however, indicate that additional research is required in order to better understand the nature of these relationships. This dissertation will add to this body of knowledge by regressing officer punishment orientations on officer demographic features and their perceptions of their job-related stress, relationships with co-workers, role conflict and ambiguity and job involvement. Since no study to date has researched whether correctional officer risk perceptions affect their punishment ideologies, these findings will also contribute to this literature.

As with many of the other relationships discussed thus far, the impact officer demographics have on their turnover intentions has been undetermined (Lambert et al. 2011b; Matz et al. 2013; Minor et al. 2010). Results from this dissertation will help us better understand the role of officer social features on this outcome. This dissertation will also expand our knowledge regarding how officer perceptions of job stress, role conflict and ambiguity, job involvement and co-worker relations influence their turnover intentions. Although some studies have evaluated how danger perceptions affect turnover intentions (Lambert et al. 2011a), no study has yet assessed whether risk perceptions from workplace dangers influence officer desires to quit. This is an important

undertaking because it will allow for a more detailed comprehension of how perceptions of workplace dangers and their potential for risk correlate with turnover intentions.

CHAPTER 6

THE PRESENT STUDY: STATEMENT OF THE MODELS, KEY RESEARCH QUESTIONS AND HYPOTHESES, METHODS AND DATA ANALYTIC TECHNIQUES

Figures 2 through 5 below provide a visual description of the relationships to be examined in this dissertation. The proposed models investigate: 1)-correctional officer perceptions concerning the presence and salience of workplace dangers and their potential to inflict harm on both themselves and the general prison population; 2)-what factors influence those risk perceptions and 3)-what factors affect correctional officer bases of power, punishment orientations and turnover intentions. Following model outlines are the key hypotheses and questions to be addressed in this study.

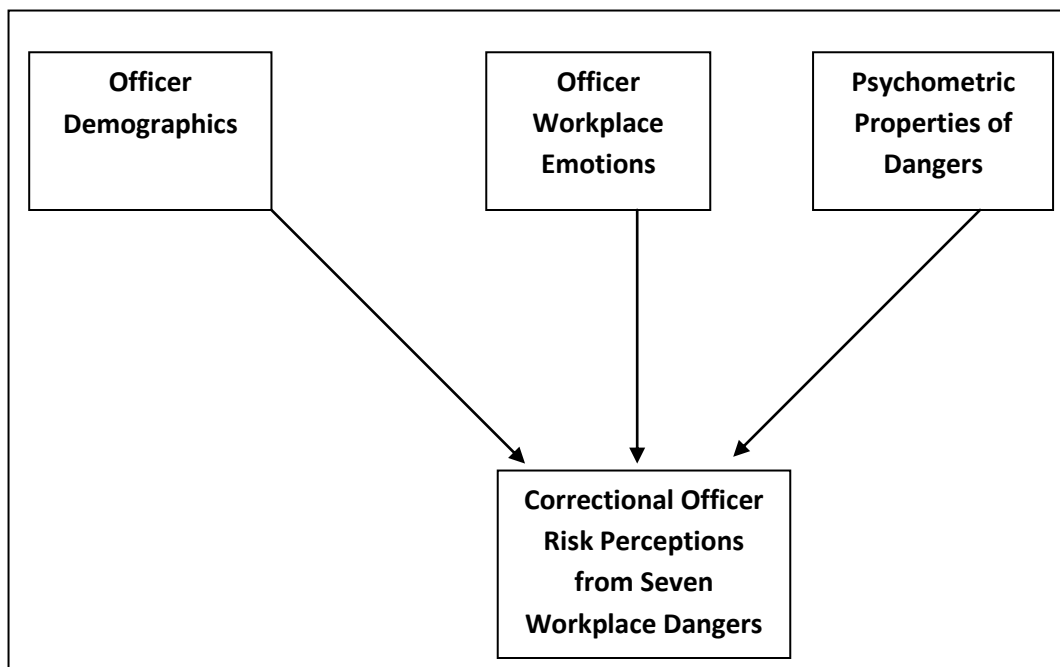


Figure 6.2: Model Predicting Correctional Officer Risk Perceptions

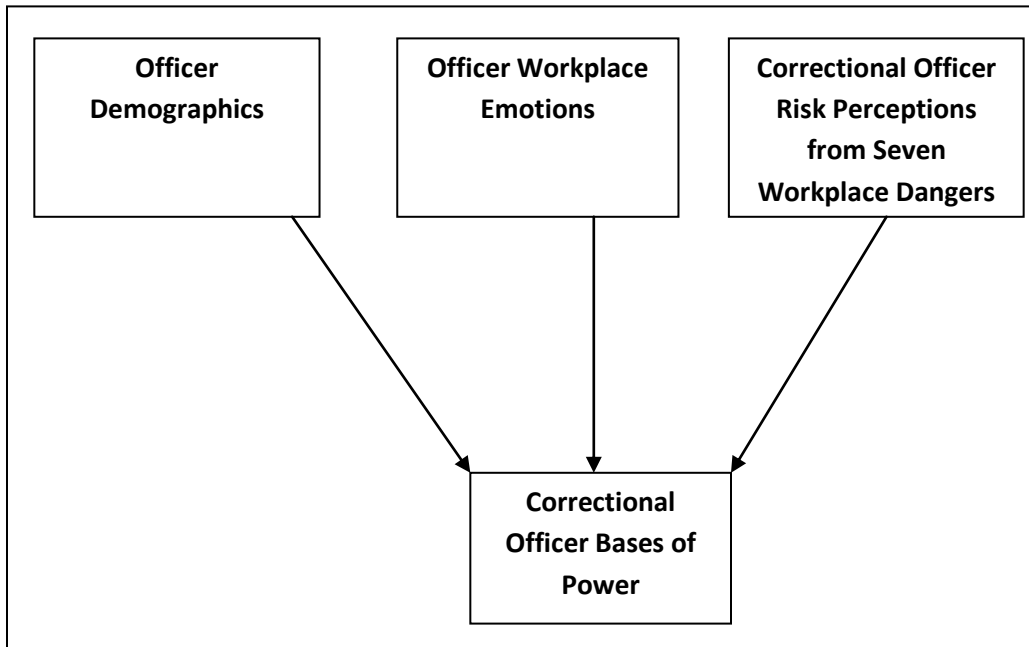


Figure 6.3: Model Predicting Correctional Officer Bases of Power

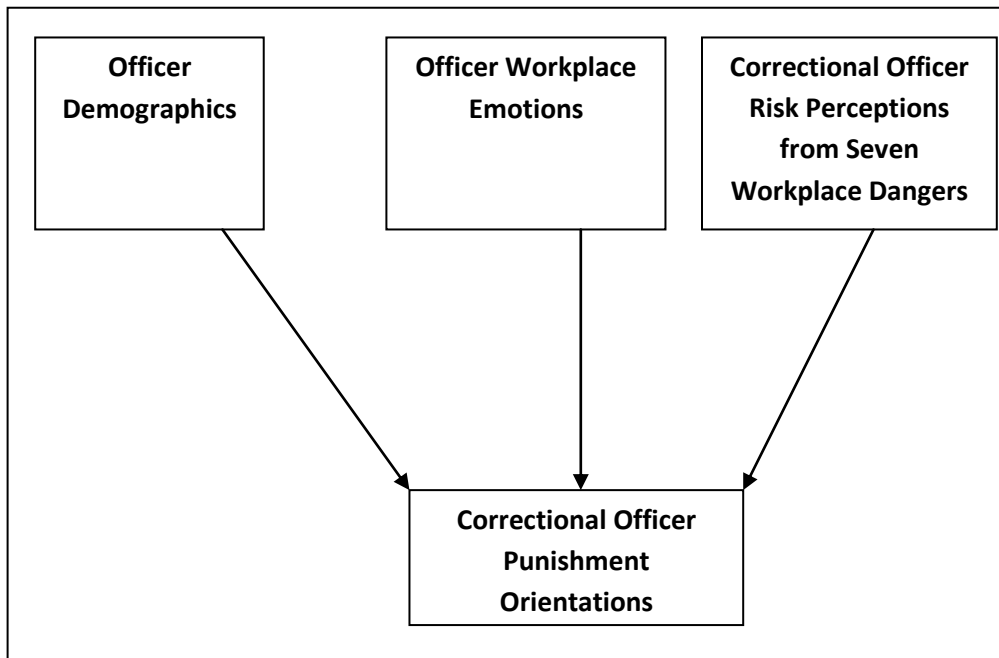


Figure 6.4: Model Predicting Correctional Officer Punishment Orientations

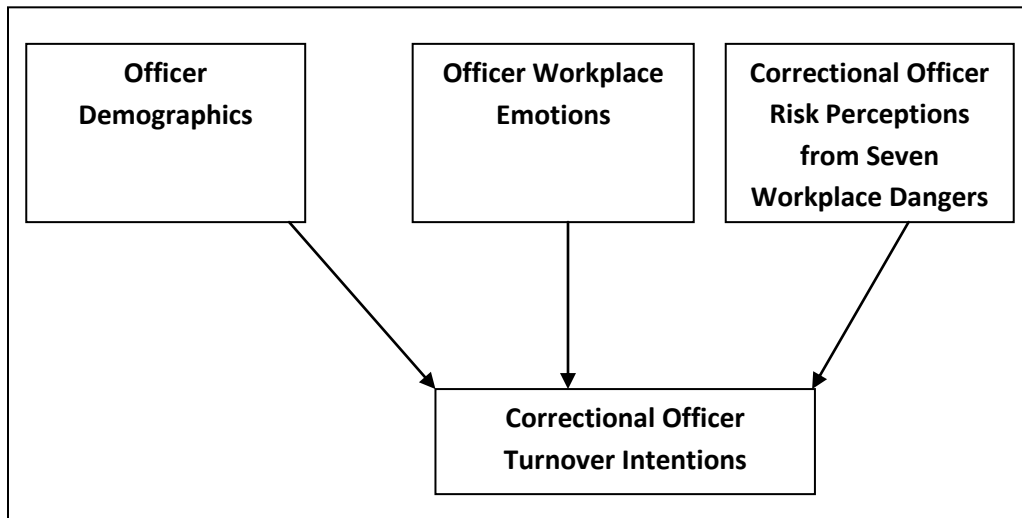


Figure 6.5: Model Predicting Correctional Officer Turnover Intentions

Statement of Key Research Hypotheses

The first objective of this dissertation is to investigate correlates of correctional officer risk perceptions. Here, attention will be devoted to examining how correctional officer demographics, work-related emotions and psychometric characteristics of dangers influence this outcome. Supported in part by past investigations, the following are hypotheses expressing relationships between officer demographics and their risk perceptions from seven workplace dangers.

1)-Female officers will perceive greater risk of harm from workplace dangers than male officers. Gracia (2008) and Cullen et al. (1989) are among a host of authors finding support for this conclusion.

2)-Officers with higher levels of education will perceive more risk of harm from workplace dangers than their less educated counterparts. Compared to officers possessing less education, more educated officers in Gordon, Proulx and Grant's (2013) study were significantly more likely to perceive risk of victimization from inmates.

3)-Non-White officers, compared to White officers, will perceive greater risk of harm from workplace dangers. This hypothesis is supported by a

number of studies (e.g., Gordon, Moriarty and Grant (2003); Cullen et al. (1989)).

4)-Older than average officers will perceive greater risk of harm from workplace hazards than their younger counterparts. Garcia (2008) found support for this hypothesis and explains that older officers, due to their experience, may understand better the dynamics of the prison environment, which will translate into attenuated risk assessments.

5)-Longer tenured officers, compared to their less experienced counterparts, will perceive less risk of harm from workplace hazards. Garcia (2008) explains that more experienced officers may have clearer expectations of what to expect at work, which will negatively influence their risk perceptions.

Subsequent hypotheses pertain to the influence of work-related emotions on officer risk perceptions.

6)-Greater stress will positively influence officer risk perceptions from workplace dangers. Prison officers expressing more stress may be less aware of their work environment and execute poor decision-making, which will lead to greater risk assessments (Garcia, 2008).

7)-Officers who are more involved with their job, compared to those who are less involved, will be more aware and informed of their job demands, which will lead to lower risk perceptions from workplace dangers (Garcia, 2008).

8)-Higher expressions of role conflict and ambiguity will correlate positively with risk perceptions from workplace dangers. This hypothesis was supported Garcia (2008) who explained that officers expressing less organizational clarity are less knowledgeable and informed about their job and about how to manage the dangers surrounding them.

9)-Officers expressing stronger co-worker relations will be less likely to perceive risk from workplace hazards. Garcia (2008) found support for this conclusion, and explained that these officers, compared to those with weaker co-worker bonds, feel less isolated and vulnerable to prison dangers.

The following hypotheses relate to the influence of psychometric characteristics of dangers on CO risk perceptions.

10)-Officers who are voluntarily exposed to workplace dangers will perceive less risk because of reduced feelings of vulnerability (Fischhoff et al., 2000).

11)-Officers who feel they have more control over workplace dangers will perceive less risk because of reduced feelings of vulnerability (Fischhoff et al., 2000).

12)-Officers possessing more knowledge about the risks associated with workplace dangers will perceive less risk because of their possession of information regarding how to anticipate consequences (Fischhoff et al., 2000).

13)-Officers who feel they can handle risks from workplace hazards in a calm manner will have decreased risk perceptions since they perhaps have advanced knowledge about how to anticipate consequences (Fischhoff et al., 2000).

14)-Officers who feel that risks from workplace dangers will harm many people simultaneously will hold increased risk assessments because of their belief that destruction can be inflicted on a mass-scale (Fischhoff et al., 2000).

15)-Officers who feel that risks from workplace hazards will have a fatal effect will perceive greater risk because of their associating risks with numerous casualties (Fischhoff et al., 2000).

16)-Officers expressing greater anxiousness over the risks associated with workplace dangers will perceive greater risk because of their heightened preoccupations and emotional responses (Fischhoff et al., 2000).

Another objective of this dissertation is to examine correlates of correctional officer decision-making. Attention will be devoted to the influence demographics, officer workplace emotions and risk perceptions have on this outcome. For some of the relationships under investigation, there is sufficient literature to support hypothesis-testing. However for others, research questions are presented due to a dearth of research supporting any such conclusions. Research questions and hypotheses regarding

relationships between officer demographics and bases of power, punishment orientations and turnover intentions are presented below.

17)-Will non-White and White differ from each other in their bases of power?

18)-Will officers with more years of formal education differ in their bases of power from officers with fewer years of formal education?

19)-Will older officers differ in their bases of power from younger officers?

20)-Will officers with longer employment tenure differ in their bases of power from officers with shorter employment tenure?

21)-Will males and females differ from each other in their bases of power?

22)-Non-White officers will hold more supportive and less punitive views of inmates than White officers. Whitehead and Lindquist (1987) and Jurik (1985) found evidence in support of this hypothesis.

23)-More educated officers, compared to their less educated counterparts, will hold less punitive and more supportive opinions of inmates (Haney, Banks and Zimbardo, 1973).

24)-Older officers will possess more favorable and less punitive opinions of inmates than younger officers (Bazmeore, Dicker and Al-Gadheeb, 1994).

25)-More experienced officers, compared to their less experienced counterparts, will hold more favorable and less punitive opinions of inmates (Bazmeore, Dicker and Al-Gadheeb, 1994).

26)-Males will hold less favorable and more punitive punishment philosophies towards inmates than females (Klofas, 1986).

27)-Non-White officers will have significantly greater turnover intentions than White officers (Lambert et al. 2010b).

28)-More educated officers will be significantly more likely to express voluntary resignation intentions than less educated officers (Ferdik, Smith and Applegate, 2013).

29)-Older officers will be significantly less likely to desire to terminate employment than younger officers (Ferdik, Smith and Applegate, 2013; Lambert et al. 2010a).

30)-Officers with more tenure will be significantly less likely to express turnover intentions than less tenured officers (Ferdik, Smith and Applegate, 2013; Lambert et al. 2010a).

31)-Female officers will be significantly more likely to express turnover intentions than male officers (Lambert et al. 2010a).

The following are research questions and hypotheses regarding the influence of officer workplace emotions on their work-based decision-making. As was done above, research questions are presented for those relationships where there is insufficient literature to justify hypothesis-testing.

32)-Will officers experiencing more job-related stress differ in their bases of power from officers experiencing less job-related stress?

33)-Will officers experiencing strained co-worker relations differ in the bases of power from officers experiencing positive co-worker relations?

34)-Will officers expressing higher role conflict or role ambiguity differ in their bases of power from officers expressing lower role conflict or role ambiguity?

35)-Will officers who are less involved with their job differ in their bases of power from officers who are more involved with their job?

36)-Officers expressing greater job-related stress will hold more punitive and less favorable orientations towards inmates (Van Voorhis et al. 1991; Farkas, 1999; Lambert, Altheimer, Hogan and Barton-Bellessa, 2011; Laswell, 2010).

37)-Officers with stronger co-worker relations will hold more favorable and less punitive punishment orientations towards inmates (Van Voorhis et al. 1991; Farkas, 1999; Lambert, Altheimer, Hogan and Barton-Bellessa, 2011; Laswell, 2010).

38)-Officers expressing greater role conflict and ambiguity will hold less favorable and more punitive punishment orientations towards inmates

(Van Voorhis et al. 1991; Farkas, 1999; Lambert, Altheimer, Hogan and Barton-Bellessa, 2011; Laswell, 2010).

39)-Increased job involvement will negatively predict punitive orientations and positively predict favorable inmate perceptions (Van Voorhis et al. 1991; Farkas, 1999; Lambert, Altheimer, Hogan and Barton-Bellessa, 2011; Laswell, 2010).

40)-Higher stress levels will correlate positively with officer turnover intentions (Lambert et al. 2010b).

41)-Strained co-worker relations will correlate positively with officer turnover intentions (Ferdik, Smith and Applegate, 2013; Lambert et al. 2010a).

42)-Higher expressions of role conflict and ambiguity will predict in a positive direction officer turnover intentions (Ferdik, Smith and Applegate, 2013; Lambert et al. 2010b).

43)-Decreased job involvement will correlate positively with officer turnover intentions (Ferdik, Smith and Applegate, 2013; Lambert et al. 2010b).

Finally, the remaining hypotheses concern the influence of officer risk perceptions on their bases of power, punishment orientations and turnover intentions?

44)-Heightened risk perceptions from workplace dangers will positively influence more coercive power bases and negatively predict less coercive power bases. Hepburn (1985) explains that this will occur because coercive tactics are more punitive and may serve as risk mediation techniques.

45)-Greater risk perceptions from workplace dangers will be positively associated with more punitive punishment orientations and be negatively associated with more rehabilitative orientations (Cullen et al. 1985).

46)-Increased expressions of risk from workplace dangers will positively predict officer turnover intentions (Ferdik, Smith and Applegate, 2013).

Methods

Data

South Carolina Department of Corrections (SCDC) administrative officials met with the principal investigator twice over a two month period. These meetings served three purposes: 1)-Obtain permission to distribute to a statewide population of maximum security corrections officers a survey inquiring about their work-related risk perceptions and decision-making; 2)-Pilot test the survey instrument on the administrative officials and 3)-Coordinate data collection procedures. Subsequent to project approval¹⁰, administrative officials completed original versions of the instrument and suggested minor alterations to question wording, formatting and length¹¹. A finalized version of the questionnaire was made electronically accessible to all maximum security correctional officers employed throughout the state's eight facilities¹². Accompanying every survey was a cover letter outlining the identity of the investigator, the purpose of the research, the voluntary and confidential nature of the investigation and that at no time would individual survey responses be released to any third party. Also addressed in the cover letter were how respondents were to complete only one survey and that no incentive was being offered for their participation (see Appendix A for survey instrument and cover letter).

All eight prison facilities during the data collection period were visited by the principal investigator in order to maximize response rates (Dillman, Smyth and Christian,

¹⁰ The Institutional Review Board at the University of South Carolina approved the project in December, 2013.

¹¹ Five doctoral level students at the University of South Carolina also completed the survey and offered additional recommendations for instrument improvement.

¹² An electronic survey account was purchased using the services of QuestionPro.com. The survey was made available between January 22nd, 2014 and February 22nd, 2014. SCDC administrative officials uploaded the survey to computers at all eight maximum security facilities via their intranet service, which permitted officers the opportunity to complete the survey during their shift.

2009). During these visits, officers were apprised of the identity and institutional affiliation of the researcher, project tenets, that their participation was voluntary, confidential and that survey completion would require between 15 and 20 minutes of their time. It was also explained that their collective responses would be used to augment prison safety and improve their general working conditions. Correctional officers were additionally informed that they could complete the survey at either workplace computer stations, or at any internet-connected computer outside work (given its electronic availability). To further increase response rates, finally, weekly reminder e-mails were submitted to prison wardens. Wardens later explained that during the data collection period, they reminded all COs at every roll call meeting to complete only one survey, while also reinforcing to them the voluntary and confidential nature of the study.

Breakdowns of total and institutional-level response rates are provided in Table 6.2 below. Overall, of the 1,076 maximum security officers employed throughout the state at the time of the study, 559 successfully completed the survey, producing a response rate of 51.9 percent¹³. Percentages of successfully completed surveys by institution ranged from a high of 88.2 percent (Lee) to a low of 16.4 percent (Leath). Table 6.3 outlines respondent demographics and coding schemes for several of the variables used in later multivariate regression models.

¹³ Most correctional researchers indicate that any response rate obtained from correctional populations (i.e., correctional officers, inmates or supervisors) that at least approaches 50 percent is acceptable (Lambert & Hogan, 2009; Lambert et al. 2010).

Table 6.2: Response Rates by Institution*

| Institutions | Total Officers | Total Respondents | Response Rate |
|----------------|----------------|-------------------|---------------|
| Broad River | 167 | 100 | 59.8% |
| Camille/Graham | 96 | 22 | 22.9% |
| Kirkland | 213 | 49 | 23.0% |
| Leath | 55 | 9 | 16.4% |
| Lee | 152 | 134 | 88.2% |
| Lieber | 156 | 103 | 66.0% |
| McCormick | 102 | 33 | 32.4% |
| Perry | 135 | 106 | 78.5% |
| Other | --- | 3 | --- |
| Total | 1,076 | 559 | 51.9% |

*Note: Updated records as of January, 2014 regarding the total number of officers per institution were provided by the Research and Development team of the South Carolina Department of Corrections

Table 6.3: Respondent Characteristics

| Variables | Code | N | Percent |
|-------------------|------------------------|-----|---------|
| Race ^a | 0 = White | 191 | 34.2% |
| | 1 = Non-White | 363 | 64.9% |
| Gender | 0 = Male | 332 | 59.4% |
| | 1 = Female | 222 | 39.7% |
| Age | 1 = 18-23 | 39 | 7.0% |
| | 2 = 24-29 | 122 | 21.8% |
| | 3 = 30-35 | 92 | 16.5% |
| | 4 = 36-41 | 63 | 11.3% |
| | 5 = 42-47 | 73 | 13.1% |
| | 6 = 48-53 | 85 | 15.2% |
| | 7 = 54 or older | 78 | 14.0% |
| Education | 1 = Less than H.S. | 2 | 0.4% |
| | 2 = H.S./GED | 164 | 29.3% |
| | 3 = Some College | 207 | 37.0% |
| | 4 = 2 Year/Associate's | 93 | 16.6% |
| | 5 = 4 Year/Bachelor's | 64 | 11.4% |
| | 6 = Master's or above | 16 | 2.9% |
| Employment Tenure | 1 = Less than one year | 70 | 12.5% |
| | 2 = 1-2 Years | 105 | 18.8% |
| | 3 = 3-6 Years | 151 | 27.0% |
| | 4 = 7-10 Years | 87 | 15.6% |
| | 5 = 11-15 Years | 46 | 8.2% |
| | 6 = 16-20 Years | 44 | 7.9% |
| | 7 = 21-25 Years | 27 | 4.8% |
| | 8 = 26-30 Years | 16 | 2.9% |
| | 9 = 31 or more years | 3 | 0.5% |

| | | | |
|---------------|-----------------|-----|-------|
| Officer Shift | 0 = Day Shift | 320 | 57.2% |
| | 1 = Night Shift | 225 | 40.3% |

Note: N corresponds to the total number falling within each category. ^a Only three respondents indicated a race other than White or African American, so the decision to collapse these three respondents into the Non-White category was taken.

Survey Construction and Measures

Identification of variables influencing correctional officer risk perceptions and decision-making served the central purpose of this investigation. Related to the first outcome of officer risk perceptions, measures of empirically relevant predictors were included in the survey. Among them were correctional officer demographics, officer workplace emotions and psychometric characteristics of dangers. Predictors of correctional officer work-based decision-making (i.e., bases of power, punishment orientations and turnover intentions) included, once again, officer demographics and workplace emotions, as well as two separate composite scales of officer risk perceptions. One of these composite risk perception scales measured officer risk perceptions of harm to themselves from seven workplace dangers, while the other measured officer risk perceptions of harm to others (i.e., co-workers) from the same workplace dangers. Most all conceptual variables composed of multiple items underwent principal axis factor analysis using promax rotation in order to assess measurement validity¹⁴. This approach has been widely adopted within the behavioral and social sciences due largely to its attention to measurement error since it uses more conservative score reliability estimates (Lambert et al. 2007; Reisig et al. 2007). Cronbach's alpha was used to assess the internal consistency of the items measuring latent factors (Hair et al., 2010). Below is an

¹⁴ Hair et al. (2010) explain that for studies with sample sizes of at least 350, an adequate factor loading cutoff score for items measuring constructs is .30. With a sample size of 559, this study satisfies this requirement and includes in multivariate analyses only those items that loaded at a .30 level or higher. Most items actually loaded between .50 and .80.

overview of the coding and measurement schemes for variables examined in this study, with Table 6.4 providing a breakdown of their descriptive statistics.

Officer Risk Perceptions. It will be recalled that Rohrman and Renn (2000) conceptualized a risk perception as “the possibility that human actions, situations or events might lead to outcomes that affect aspects of what humans value” (p. 14). Measures of correctional officer risk perceptions were borrowed and amended from Kobbeltvedt et al. (2004) and Fischhoff et al. (2000). Survey takers were asked to rate their chances of becoming harmed by seven dangers commonly encountered within correctional milieus. Specifically, for each of the dangers of gang activity, disruptive inmate behavior, the presence of contraband, working alongside mentally ill inmates, prison riots and retaliation from inmates released back into the community, officers were asked to “Rate the chances of you becoming seriously injured by this danger,” with response options ranging from 1 = Very Low to 5 = Very High. For the seventh and final danger, that of working alongside inmates with infectious diseases, officers were asked to rate their chances of contracting a disease as a result of this danger. Here again, response options ranged from 1 = Very Low to 5 = Very High.

Applying the same rating scales and evaluating the same dangers, officers were then asked to “rate the chances of other people within the prison” either contracting an infectious disease or becoming seriously injured as a consequence of each respective danger. A summated variable that collectively measured risk perceptions from all dangers was created separately for personal and general risk ratings (Kobbeltvedt et al. 2004). Both scales displayed strong internal consistency, with higher values denoting greater risk perceptions ($\alpha = .871$ (for personal risk ratings); $\alpha = .861$ (for general risk ratings)).

Officer Bases of Power. French and Raven (1959) define social influence as “a change in the belief, attitude or behavior of a person which results from another person” (p. 155) and social power as “the ability of an agent to bring about such a change using available resources” (p. 156). They further document five different social forms of power within organizational settings including: a)-referent power (the ability to administer to another a sense of personal acceptance and approval); b)-expert power (ability to administer to another knowledge and expertise); c)-reward power (ability to grant to another things of desire or remove or decrease things another does not desire); d)-coercive power (ability to force someone to do things s/he does not want to do); and e)-legitimate power (ability to administer to someone feelings of obligation or the notion of responsibility). Items used to operationalize officer bases of power were borrowed and amended from Steiner et al. (2012). On scales ranging from Strongly Agree = 4 to Strongly Disagree = 1, with higher values denoting a stronger base of power reliance, respondents were asked to rate their level of agreement with the following statements:

1. I get inmates to do what I ask because I can give them special help or benefits (reward power).
2. I get inmates to do what I ask because they fear sanctions (coercive power).
3. I get inmates to do what I ask because they believe I have the authority to tell them what to do (legitimate power).
4. I get inmates to do what I ask because they respect me (referent power).
5. I get inmates to do what I ask because they think I know what is best for them (expert power).

Officer Punishment Orientations. As previously outlined, a replication of the Klofas and Toch (1982) 17-item questionnaire evaluating officer punishment orientations was undertaken by Whitehead and Lindquist (1989). Their analysis revealed a four-order factor of punishment ideologies including counseling roles, concern with corruption of

authority, social distance and punitive orientation, with measures of each borrowed and amended from Whitehead and Lindquist (1989). With respect to counseling roles, four separate indicators were used to measure this concept. Individual items were rated on scales ranging from Strongly Agree = 1 to Strongly Disagree = 4 and included: 1)- Rehabilitation programs should be left to mental health professionals; 2)-Counseling is a job for counselors, not officers; 3)-If an officer wants to do counseling, s/he should change jobs; and 4)-Rehabilitation programs are a waste of time and money. Lower values represented less favorable CO attitudes towards counseling and rehabilitation, with these items displaying moderately strong internal consistency ($\alpha = .789$).

Concern for corruption of authority was captured with: 1)-A good principle is to not get close to inmates; 2)-A personal relationship with inmates invites corruption; 3)-You can't trust inmates; 4)-You must keep conversations with inmates short and businesslike; and 5)-If officers are lenient with inmates, they will take advantage of us. Each item was rated on a scale ranging from Strongly Agree = 4 to Strongly Disagree = 1, where higher values denoted greater concern for authoritative corruption. These items displayed modestly strong internal consistency ($\alpha = .741$). Social distance items comprised: 1)-An officer should work hard to earn an inmate's trust; 2)-It is important for officers to have compassion; and 3)-Sometimes officers should be advocates for inmates. Response scales ranged from Strongly Agree = 1 to Strongly Disagree = 4, with higher values indicative of greater social distance. Adequate internal consistency was displayed between the items ($\alpha = .641$). Punitive orientation measures included: 1)-There would be much less crime if prisons were less comfortable; 2)-Improving prison conditions for inmates makes matters worse for officers; and 3)-A military regime is the best way of

running a prison. Here response scales also ranged from Strongly Agree = 4 to Strongly Disagree = 1, with greater values representative of more punitive attitudes. These items displayed moderately strong internal consistency ($\alpha = .794$). Finally, every item used to measure the different orientations was summed to create an additive scale.

Officer Turnover Intentions. Lambert et al. (2010) explain a voluntary turnover intention as the conscious decision on behalf of an employee to terminate employment within an organization. Turnover intention measures included: 1)-I frequently think about quitting my job; 2)-Do you desire to voluntarily quit your job; and 3)-In the last six months, have you thought about quitting your job, and were borrowed and amended from Lambert et al. (2010). For the first item, officers were asked to rate their level of agreement on a scale ranging from Strongly Agree = 4 to Strongly Disagree = 1. The other two items were measured dichotomously with a value of 0 ascribed to No responses and a value of 1 to Yes responses. This variable was operationalized as an additive scale with greater values indicating greater turnover intentions. These items displayed somewhat strong internal consistency ($\alpha = .769$).

Officer Stress. Stress has been defined as “a particular relationship between the person and the environment that is appraised by the person as taxing resources....and...endangering his/her well-being” (Lazarus and Folkman, 1984, p. 19). Survey items borrowed from Lambert et al. (2007) were used to measure this concept, and included: 1)-A lot of time my job makes me frustrated; 2)-I am usually under much pressure when at work; 3)-When at work, I often feel tense or uptight; 4)-I am usually calm and at ease when at work (reverse coded); and 5)-There are many aspects of my job that upset me. Response values ranged from Strongly Agree = 4 to Strongly Disagree = 1,

with higher values representing greater stress. Officer stress was operationalized as an additive scale, with strong internal consistency observed between the items ($\alpha = .875$).

Officer Job Involvement. As previously outlined, Paullay, Alliger and Stone-Romero (1994) described job involvement as when an employee “is cognitively preoccupied with, engaged in, and concerned with one’s present job” (p. 224). Borrowed from Lambert et al. (2011) and included as measures of this construct were the following items: 1)-I live, eat and breathe my job; 2)-The major satisfaction in my life comes from work; and 3)-The most important things that happen to me in my life occur at work. Officers responded to these items on scales ranging from Strongly Agree = 4 to Strongly Disagree = 1, with higher response values representing a greater degree of officer involvement with the job. Job involvement was operationalized as an additive scale, with moderate to strong internal consistency displayed between the statements ($\alpha = .771$).

Officer Role Conflict and Role Ambiguity. Lambert et al. (2005) define role stress as “the degree of incongruity of expectations associated with the role of the employee and the results from work roles” (p. 35). Two variations of role stress included this study’s analyses consist of role conflict and role ambiguity (see pgs. 64-65 for conceptualizations of each construct). Items used to measure each are drawn from the correctional officer stress literature (Lambert et al. 2005), and for role conflict, include: 1)-I regularly receive conflicting requests from two or more people when at work; 2)-When a problem comes up, people rarely agree on how it should be handled; 3)-I sometimes have to bend rules to get things done; and 4)-I often have to do things without adequate resources and materials. Role conflict measures were responded to on scales ranging from Strongly Agree = 4 to Strongly Disagree = 1, with higher values representative of greater role

conflict. Role ambiguity measures consisted of: 1)-I clearly know what my work duties are (reverse coded); 2)-The rules we have to follow are clear (reverse coded); 3)-I am unclear who reports to me or to whom I report; and 4)-I do not always understand what is expected of me at work. Values for the responses ranged from Strongly Agree = 4 to Strongly Disagree = 1, with greater values indicative of greater role ambiguity.

Collectively, items for each concept displayed between moderate and strong internal consistency ($\alpha = .739$ (for role conflict); and $\alpha = .752$ (for role ambiguity)), with items summed under each role construct to create an additive scale.

Co-Worker Support. This concept has been defined as “kind and supportive relationships among workers” (Gonzalvez-Roma, Peiro, and Tordera, 2002, p. 12), and can be exemplified by co-workers who show concern for others, who try to build work-group cohesion and who foster a sense of belonging for all within the entire organization (Garcia, 2008). The four-item index used to measure co-worker support, borrowed from Garcia (2008), included: *During the past six months, how often have you experienced:* 1)-A feeling that your work-related opinions are valued by your co-workers; 2)-A feeling that your opinions are misunderstood by your co-workers (reverse coded); 3)-A feeling that you work well with your co-workers; and 4)-A feeling that there is open communication between you and your co-workers. Survey takers could answer each item on a scale that ranged from Very Rarely = 1 to All-the-Time = 6, with higher response values illustrative of strong co-worker bonds. Similar to the other scales, between moderate and strong internal consistency was observed among these items ($\alpha = .790$), which were summed to create an additive scale.

Psychometric Characteristics of Dangers. Numerous psychologically-based variables found to significantly impact human risk assessments have been uncovered within the psychometric paradigm of risk perceptions (Slovic et al. 2000; Fischhoff et al. 2000; Kobbeltvedt et al. 2004). These variables have typically been viewed as qualitative attributes of dangers that can have profound influences on human judgments of risk. Participants were asked to rate on 5-point scales seven psychometric characteristics of each of the dangers outlined above. Ratings for every psychometric variable were summed across all dangers in order to create a composite measure, with alpha reliability values for each summated variable provided below. Each psychometric attribute, adopted and amended from Kobbeltvedt et al. (2004) and Fischhoff et al. (2000), and its associated wording in the survey instrument, are also described.

1. Voluntariness: Please rate how much of a say you have in facing this danger, with 1 meaning having no say at all and 5 meaning having a lot of say ($\alpha = .832$).
2. Control: If exposed to this danger, please rate to what extent you can control the risk of injury, with 1 meaning having no control and 5 meaning have high control ($\alpha = .793$).
3. Chronic-Catastrophic: Please rate whether this danger injures a few people one at a time, or many people at once, with 1 meaning a few one at a time, and 5 meaning many people at once ($\alpha = .841$).
4. Knowledge: Please rate your level of knowledge about the risk of injury from this danger, with 1 meaning having no knowledge and 5 meaning having a lot of knowledge ($\alpha = .857$).
5. Calm: Please rate how calmly you can deal with the risk of injury from this danger, with 1 meaning not calmly at all and 5 meaning very calmly ($\alpha = .853$).
6. Fatal: Please rate how fatal the risk of injury from this danger can be, with 1 meaning not fatal at all and 5 meaning very fatal ($\alpha = .682$).

7. Anxious: Please rate how anxious the risk of injury from this danger makes you feel, with 1 meaning not at all anxious and 5 meaning very anxious ($\alpha = .890$).

Several authors within the psychometric paradigm of risk perceptions subjected these ratings to principal components factor analysis with varimax rotation to see if they could be condensed into a smaller set of dimensions (Slovic et al. 2000; Fischhoff et al. 2000; Kobbeltvedt et al. 2004). Given high inter-correlations (see Table 7.6) and in accordance with this literature, the seven ratings underwent this procedure, which produced two different factors each consisting of items that loaded at a .70 level or higher. The individual ratings were summed under each respective factor to create an additive scale, with the first factor consisting of the voluntariness, control, knowledge and calm ratings (*Comprehension*), while the other was comprised of the chronic-catastrophic, fatal and anxious ratings (*Dread*) (Kobbeltvedt et al. 2004). Strong internal consistency was displayed between the items comprising each variable ($\alpha = .864$ for the *Comprehension* variable) and ($\alpha = .863$ for the *Dread* variable). These additive scales are included in later regression analyses predicting officer personal and general risk perceptions.

Officer Demographics. Multivariate regression models also included a number of empirically relevant demographic features of officers (Cullen et al. 1989). These were officer race (0 = White, 1 = Non-White); age (1 = 18-23, 2 = 24-29, 3 = 30-35, 4 = 36-41, 5 = 42-47, 6 = 48-53, and 7 = 54 or older); tenure (1 = Less than one year, 2 = 1-2 Years, 3 = 3-6 Years, 4 = 7-10 Years, 5 = 11-15 Years, 6 = 16-20 Years, 7 = 21-25 Years, 8 = 26-30 Years, and 9 = 31 or more years); gender (0 = male, 1 = female); and finally,

education (1 = Less than H.S., 2 = High School/GED, 3 = Some College, 4 = 2-Year College/Associate's, 5 = 4-Year College/Bachelor's, 6 = Other).

Controls. Two control variables were included in analyses to guard against non-spuriousness. Control variables consisted of officer shift (0 = Day Shift, 1 = Night Shift) and institution of employment (0 = non-Kirkland facility, 1 = Kirkland facility). Non-Kirkland institutions were selected as the reference category given how Kirkland houses the state's severely mentally ill population of offenders, and because it processes all convicted criminals throughout the state of South Carolina (SCDC, 2010).

Table 6.4: Descriptive statistics for variables used in analysis

| Variables | Min | Max | Mean | S.D. |
|-------------------------|------------|------------|-------------|-------------|
| Personal Risk | 7 | 35 | 26.76 | 6.68 |
| Perceptions | | | | |
| Disease | 1 | 5 | 3.39 | 1.32 |
| Gang Activity | 1 | 5 | 3.65 | 1.27 |
| Disruptive Inmates | 1 | 5 | 3.59 | 1.20 |
| Mentally Ill | 1 | 5 | 3.61 | 1.25 |
| Contraband Presence | 1 | 5 | 3.70 | 1.26 |
| Riots | 1 | 5 | 4.54 | 1.20 |
| Community Retaliation | 1 | 5 | 3.00 | 1.16 |
| General Risk | 7 | 35 | 26.60 | 6.19 |
| Perceptions | | | | |
| Disease | 1 | 5 | 3.53 | 1.25 |
| Gang Activity | 1 | 5 | 3.82 | 1.16 |
| Disruptive Inmates | 1 | 5 | 3.72 | 1.13 |
| Mentally Ill | 1 | 5 | 3.69 | 1.16 |
| Contraband Presence | 1 | 5 | 3.78 | 1.21 |
| Riots | 1 | 5 | 4.53 | 1.15 |
| Community Retaliation | 1 | 5 | 2.98 | 1.10 |
| Reward Power | 1 | 4 | 1.58 | 0.68 |
| Coercive Power | 1 | 4 | 2.11 | 0.83 |
| Legitimate Power | 1 | 4 | 2.69 | 0.77 |
| Referent Power | 1 | 4 | 3.21 | 0.67 |
| Expert Power | 1 | 4 | 2.41 | 0.81 |

| | | | | |
|---|---|----|-------|------|
| Counseling Roles | 4 | 16 | 10.56 | 2.57 |
| Rehabilitation programs should be left to mental health professionals | 1 | 4 | 2.42 | 0.84 |
| Counseling is a job for counselors, not officers | 1 | 4 | 2.56 | 0.86 |
| If an officer wants to do counseling, s/he should change jobs | 1 | 4 | 2.61 | 0.83 |
| Rehabilitation programs are a waste of time and money | 1 | 4 | 2.99 | 0.75 |
| Concern with Corruption | 5 | 20 | 16.14 | 2.71 |
| A good principle is to not get close to inmates | 1 | 4 | 3.22 | 0.77 |
| Relations with inmates invites corruption | 1 | 4 | 3.50 | 0.72 |
| You can't trust inmates | 1 | 4 | 3.00 | 0.90 |
| You must keep conversations with inmates short and businesslike | 1 | 4 | 3.26 | 0.73 |
| If officers are lenient with inmates, they'll take advantage of us | 1 | 4 | 3.18 | 0.75 |
| Social Distance | 3 | 12 | 7.31 | 1.66 |
| An officer should work hard to earn an inmate's trust | 1 | 4 | 2.27 | 0.78 |
| It is important for officer's to have compassion | 1 | 4 | 2.72 | 0.70 |
| Sometimes officers should be advocates for inmates | 1 | 4 | 2.33 | 0.72 |
| Punitive Orientation | 3 | 12 | 7.41 | 2.31 |
| There would be much | 1 | 4 | 2.67 | 1.00 |

| | | | | |
|--|---|----|-------|------|
| less crime if prisons were less comfortable | | | | |
| Improving prison conditions makes matters worse for officers | 1 | 4 | 2.31 | 0.84 |
| A military regime is the best way of running a prison | 1 | 4 | 2.43 | 0.91 |
| Turnover Intentions | 1 | 6 | 3.33 | 1.73 |
| I frequently think about quitting my job at this prison | 1 | 4 | 2.47 | 0.99 |
| Do you desire to quit your job? | 0 | 1 | 0.32 | 0.47 |
| In the last 6 months, have you thought about quitting your job? | 0 | 1 | 0.54 | 0.50 |
| Co-Worker Support | 4 | 24 | 15.50 | 4.10 |
| A feeling that work-related opinions are valued by co-workers | 1 | 6 | 3.17 | 1.29 |
| A feeling that opinions are misunderstood by co-workers | 1 | 6 | 4.17 | 1.20 |
| A feeling that you work well with co-workers | 1 | 6 | 4.31 | 1.32 |
| A feeling that there is open communication between you and your co-workers | 1 | 6 | 3.86 | 1.42 |
| Job Involvement | 3 | 12 | 5.94 | 1.72 |
| I live and breathe my job | 1 | 4 | 2.12 | 0.76 |
| The major satisfaction in my life comes from work | 1 | 4 | 2.01 | 0.71 |
| The most important things that happen in | 1 | 4 | 1.77 | 0.60 |

my life occur at work

| | | | | |
|---|---|----|-------|------|
| Role Conflict | 4 | 16 | 10.19 | 2.51 |
| I receive conflicting requests from 2 or more people at work | 1 | 4 | 2.55 | 0.82 |
| When a problem comes up at work, people rarely agree on how to resolve it | 1 | 4 | 2.58 | 0.84 |
| I have to bend rules to get things done | 1 | 4 | 2.20 | 0.82 |
| I have to do things without adequate resources and materials | 1 | 4 | 2.84 | 0.87 |
| Role Ambiguity | 4 | 16 | 7.75 | 2.45 |
| I clearly know what my work duties are | 1 | 4 | 1.72 | 0.76 |
| The rules we have to follow are clear | 1 | 4 | 2.00 | 0.83 |
| I am unclear who reports to me | 1 | 4 | 1.94 | 0.81 |
| I do not always understand what is expected of me at work | 1 | 4 | 2.10 | 0.84 |
| Officer Stress | 5 | 20 | 13.05 | 3.38 |
| A lot of times my job makes me frustrated | 1 | 4 | 2.84 | 0.88 |
| I am usually under much pressure when at work | 1 | 4 | 2.61 | 0.85 |
| When at work, I often feel tense or uptight | 1 | 4 | 2.48 | 0.81 |
| I am usually calm and at ease when at work | 1 | 4 | 2.43 | 0.80 |
| There are many aspects of my job that upset me | 1 | 4 | 2.65 | 0.83 |
| Voluntariness | 7 | 35 | 18.12 | 6.43 |
| Diseases | 1 | 5 | 2.48 | 1.35 |
| Gang Activity | 1 | 5 | 2.58 | 1.27 |
| Disruptive Inmates | 1 | 5 | 2.70 | 1.22 |

| | | | | |
|-----------------------------|---|----|-------|------|
| Mentally Ill | 1 | 5 | 2.60 | 1.23 |
| Contraband Presence | 1 | 5 | 2.78 | 1.31 |
| Riots | 1 | 5 | 2.48 | 1.35 |
| Community Retaliation | 1 | 5 | 2.61 | 1.36 |
| Control | 7 | 35 | 20.02 | 5.61 |
| Diseases | 1 | 5 | 2.99 | 1.17 |
| Gang Activity | 1 | 5 | 2.82 | 1.22 |
| Disruptive Inmates | 1 | 5 | 2.89 | 1.13 |
| Mentally Ill | 1 | 5 | 2.90 | 1.16 |
| Contraband Presence | 1 | 5 | 2.93 | 1.21 |
| Riots | 1 | 5 | 2.55 | 1.26 |
| Community Retaliation | 1 | 5 | 2.94 | 1.26 |
| Chronic-Catastrophic | 7 | 35 | 22.73 | 5.98 |
| Diseases | 1 | 5 | 2.84 | 1.26 |
| Gang Activity | 1 | 5 | 3.31 | 1.21 |
| Disruptive Inmates | 1 | 5 | 3.23 | 1.13 |
| Mentally Ill | 1 | 5 | 3.13 | 1.18 |
| Contraband Presence | 1 | 5 | 3.37 | 1.17 |
| Riots | 1 | 5 | 3.93 | 1.10 |
| Community Retaliation | 1 | 5 | 2.84 | 1.29 |
| Knowledge | 7 | 35 | 23.19 | 6.31 |
| Diseases | 1 | 5 | 3.55 | 1.21 |
| Gang Activity | 1 | 5 | 3.36 | 1.24 |
| Disruptive Inmates | 1 | 5 | 3.37 | 1.16 |
| Mentally Ill | 1 | 5 | 3.23 | 1.22 |
| Contraband Presence | 1 | 5 | 3.40 | 1.19 |
| Riots | 1 | 5 | 3.20 | 1.26 |
| Community Retaliation | 1 | 5 | 3.16 | 1.27 |
| Calm | 7 | 35 | 21.42 | 6.17 |
| Diseases | 1 | 5 | 3.01 | 1.26 |
| Gang Activity | 1 | 5 | 3.10 | 1.18 |
| Disruptive Inmates | 1 | 5 | 3.16 | 1.13 |
| Mentally Ill | 1 | 5 | 3.10 | 1.16 |
| Contraband Presence | 1 | 5 | 3.20 | 1.19 |
| Riots | 1 | 5 | 2.82 | 1.22 |
| Community Retaliation | 1 | 5 | 3.15 | 1.26 |
| Fatal | 7 | 35 | 25.20 | 6.28 |
| Diseases | 1 | 5 | 3.55 | 1.21 |
| Gang Activity | 1 | 5 | 3.73 | 1.15 |
| Disruptive Inmates | 1 | 5 | 3.60 | 1.15 |
| Mentally Ill | 1 | 5 | 3.57 | 1.17 |
| Contraband Presence | 1 | 5 | 3.60 | 1.24 |
| Riots | 1 | 5 | 3.92 | 1.18 |
| Community Retaliation | 1 | 5 | 3.30 | 1.32 |

| | | | | |
|--------------------------|----|-----|-------|-------|
| Anxious | 7 | 35 | 22.50 | 6.34 |
| Diseases | 1 | 5 | 3.24 | 1.23 |
| Gang Activity | 1 | 5 | 3.30 | 1.20 |
| Disruptive Inmates | 1 | 5 | 3.25 | 1.18 |
| Mentally Ill | 1 | 5 | 3.17 | 1.20 |
| Contraband Presence | 1 | 5 | 3.19 | 1.24 |
| Riots | 1 | 5 | 3.46 | 1.24 |
| Community Retaliation | 1 | 5 | 2.85 | 1.29 |
| Comprehension | 28 | 140 | 82.69 | 20.97 |
| Dread | 21 | 105 | 70.44 | 16.97 |

Note: S.D. = Standard Deviation.

Analytic Strategy

Various statistical analyses were undertaken to determine the predictors of correctional officer risk perceptions and decision-making. First, multivariate regression equations using Ordinary Least Squares (OLS) were estimated for continuous outcome variables where tests of statistical assumptions were also conducted (Hair et al. 2010; Leech et al. 2009). Regarding first the assumption of normality, the distribution of each outcome analyzed through OLS (e.g., personal risk perceptions, general risk perceptions, officer turnover intentions and each of the four officer punishment orientations) was graphed on a histogram. With the exception of both risk perception measures and the rehabilitation orientation variable, none of these dependent variables approximated normality, with each exhibiting some degree of skewness. Natural logarithmic transformations failed to normalize these variables. Despite having several non-normally distributed dependent variables, Hair et al. (2010) indicate that bias associated with non-normal outcomes is typically contained within studies of 50 or fewer cases. Instead for investigations with sample sizes larger than 200 (for this study $N = 559$), “the impact of non-normality effectively diminishes” (Hair et al. 2010, p. 77).

Examination of scatterplots graphing the relationships between explanatory and outcome variables revealed few concerns regarding non-linearity. All combinations exhibited linear relationships which were also represented in residual analyses (Hair et al. 2010). Equality of variance for each OLS outcome was examined via a Levene test, where a failure to reject the H_0 suggests that variances are homogenous (Hair et al. 2010). For each of the dependent variables, the null hypothesis was retained, providing evidence that there are no statistically significant mean differences in variances across the outcomes. Furthermore, normal probability plots and histograms were generated to explore the distribution of the residuals (Hair et al. 2010). Histograms revealed a normal distribution of residuals across all outcomes, while the data points aligned with the line of least squares in the probability plots. These graphical displays suggest constant variance for the outcome variables.

Hierarchical multiple regression was employed to assess the influence of officer demographics, workplace emotions and psychometric properties of dangers in predicting officer personal and general risk perceptions (Leech et al. 2008). This technique is used when researchers enter variables in a series of blocks or groups. The approach “enables researchers to see if each new group of variables adds anything to the prediction produced by previous blocks of variables...and is appropriate to use when the researcher has a priori ideas about how predictors go together” (Leech et al. 2008, p. 108). Therefore, all demographic predictors were entered into the first block, all officer workplace emotions into the second, with the third block containing the *Comprehension* and *Dread* variables. Variable ordering was purposely done in this manner given the well-established nature of psychometric variables in explaining variation in risk

perceptions. Given how this investigation is also interested in assessing how well demographics and workplace emotions influence risk perceptions, it was important to examine their role independent of psychometrics. Models 1, 2 and 3 in Table 7.5 provide the results for the personal risk ratings, while Models 1, 2 and 3 in Table 7.6 provide the results for the general risk ratings.

Similar hierarchical regression procedures were adopted when assessing variation in two of the correctional officer decision-making outcomes—officer turnover intentions and punishment orientations. Here, however, the summated measures of officer personal and general risk perceptions replaced the psychometric variables as predictors in the models. Due to concerns over multi-collinearity between these risk perception measures, which shall be elaborated upon in more detail below, and for various empirical reasons, different models are used to explore predictors of officer turnover intentions and punishment orientations. Models 1 through 5 in Table 7.16 provide output for turnover intentions, while Models 1 through 4 in Tables 7.12 to 7.15 provide estimations of the orientation variables. For the punishment orientations, it was important to first assess how some groups of variables, specifically demographics and workplace emotions, independently influenced these outcomes, while then assessing their predictive power when combined with risk perceptions. This was done given how research has shown that risk perceptions often have significant influences on certain decision-making techniques (Slovic et al. 2000). Instead regarding turnover intentions, since officer workplace emotions have traditionally displayed significant influences on officer desires to resign (Lambert et al. 2010a) and since these specific variations of officer risk perceptions have

yet to be examined in the literature, it was essential to evaluate their predictive role when analyzed first in models exclusive of workplace emotions.

The remaining decision-making outcomes (reward, coercive, legitimate, referent and expert power bases), given their ordinal level of measurement, required a different regression technique. Variations of the ordered logistic regression were utilized to assess the role of officer demographics, workplace emotions and personal and general risk perceptions in predicting officer power bases. For three of these bases—reward, referent and legitimate—tests of the proportional odds assumption indicated that the coefficients across all response categories were the same, and thus ordered logistic regression could be safely executed (Hoffmann, 2004; Williams, 2006; Long, 1997). However for the remaining two power bases, a chi-square statistic produced by the Brant test was significant, which required the estimation of a generalized ordered logistic regression model (Williams, 2006). This model relaxes the proportional odds assumption and allows “the effects of the relevant independent variables to vary over the cut points or thresholds of the dependent variable” (Kaminski et al. 2013, p. 13).

Regarding one of these bases, coercive power violated the proportional odds assumption at $p < .01$, with the general risk perception variable and officer stress each failing to meet the assumption at $p < .05$. Expert power also violated the test of the proportional odds at $p < .01$, with stress failing to meet the assumption at $p < .01$. Output from each power base model is provided in Tables 7.7 through 7.11, with similar variable ordering techniques as those described for punishment orientations applied to these models as well. Proportional odds ratios are used to describe the relationships between explanatory and outcome measures, but for the those variables that violated the parallel

slopes assumption in the coercive and expert power models, odds ratios across each cut point are provided in Tables 7.10 and 7.11. Finally, to protect against bias associated with heteroskedastic errors in the power bases analyses, estimations were run using robust standard errors (Hoffmann, 2004).

On a final note and as referenced, another analytical issue deserving attention concerns that of multi-collinearity. According to both Hair et al. (2010) and Leech et al. (2008), for sample sizes exceeding 300, multi-collinearity becomes a concern when variance inflation factors (VIFs) exceed 10 and when tolerance levels descend below .10. Across most all models estimated in this study, VIFs ranged from a low of 1.042 to a high of 3.615, with tolerance levels ranging between .389 and .972. Collinearity, however, did become a concern in any model estimating officer decision-making that simultaneously incorporated both the general and personal risk perception predictors (VIFs for these variables exceeded 10 and tolerance levels nearly dropped below .10). To sidestep any bias associated with having highly collinear variables in regression models, each predictor was examined independent of one another. Results from these analyses are displayed in the subsequent chapter. Finally, all data were entered into and analyzed using STATA version 11.2.

CHAPTER 7

RESULTS

Descriptive Analyses

Output from Table 6.4 above presents some interesting results. First, average values for both the personal and general risk perception outcomes were 26.76 and 26.60, respectively. These relatively high values demonstrate that officers perceived a high degree of harmful risk within their work environment. Second, these descriptive results showed how officers rated riots, relative to the other dangers, as posing the greatest injurious risk with a mean rating of 4.54 under Personal Risk Perceptions and 4.53 under General Risk Perceptions. Conversely, community retaliation, compared to the other dangers, was rated as posing the least risk of injury with a Personal Risk Perception rating of 3.00 and a General Risk Perception rating of 2.98. Relatively small standard deviation values that ranged from 1.10 to 1.32 indicate little variability between officers concerning their perceptions of harmful risk from their work environment. With regard to bases of power, the average rating of Reward Power was 1.58, which suggests reduced officer reliance on this power base when compared to the remaining four. Instead with a mean rating of 3.21, officers expressed greater reliance on Referent Power as a way to ensure inmate compliance with institutional rules.

A relatively high mean rating of 16.14 for the Concern for Corruption of Authority orientation demonstrates a high degree of preoccupation among officers regarding the corruptible potential of offenders. Descriptive findings further revealed

relatively modest perceptions concerning whether officers should distance themselves from inmates (mean of 7.31), whether they should adopt a rehabilitative stance towards offenders (mean of 10.56) and whether inmates are deserving of more punitive treatment (mean of 7.41). Officers also expressed relatively moderate voluntary resignation intentions (mean of 3.33). While modest ratings were observed across many of these criterion measures, officers reported strong co-worker evaluations (mean of 15.50) and stress levels (mean of 13.05). Finally, these figures indicate moderate to relatively weak degrees of officer job involvement (mean of 5.94), role conflict (mean of 10.19) and role ambiguity (mean of 7.75).

In order to determine the predictors of correctional officer risk perceptions and work-based decision-making, a series of multivariate regression equations was estimated. Recall that for all continuous variables, hierarchical multiple regression was employed and for each of the bases of power variables, variations of the ordered logistic regression technique were utilized. A discussion of the output for the risk perception models is initially presented, followed then by a discussion of the output for each of the decision-making outcomes.

Models predicting correctional officer personal risk perceptions

Model 1 in Table 7.5 below displays the results of the first hierarchical regression equation that estimated the influence of officer demographics on personal risk perceptions. Only officer Race surfaced as a significant predictor of this outcome, with non-White officers perceiving significantly more risk of injury from workplace dangers than their White counterparts ($b = 1.43, p < .05$). This finding is consistent with hypothesized expectations and with results uncovered by Gordon, Proulx and Grant (2013). Non-significant associations between the remaining officer demographics and

their risk perceptions were unearthed in this first hierarchical estimation. Finally, this model accounted for a modest 2.0 percent of the variance in officer personal risk perceptions.

Output from the second model in Table 7.5 presents the results of officer workplace emotions in predicting their personal risk perceptions, net of demographics. Several findings here are worthy of mention. First, there was a significant increase in the percentage of explained variance in officer risk perceptions from Model 1 to Model 2, with this second estimation accounting for 23.0 percent of outcome variance (compared to just 2.0 percent in the previous model). Second, and among the demographic predictors, once again only officer Race exhibited a significant relationship with personal risk perceptions ($b = 1.37, p < .05$). Regarding the effects of workplace emotions, officers reporting favorable Co-worker relations were statistically less likely to perceive risk of injury from their profession, as compared to officers holding weaker bonds to their fellow officers ($b = -0.17, p < .10$). Though consistent with hypothesized expectations and findings from Garcia's (2008) examination, this effect was significant at only the $p < .10$ level.

While neither Role Conflict nor Role Ambiguity significantly predicted officer personal risk perceptions, Job Involvement was significantly and negatively associated with this outcome. Specifically, officers who reported greater involvement with their job were statistically less likely to perceive risk of injury from workplace hazards ($b = -0.53, p < .01$). Officer Stress, finally, exhibited a highly significant and positive correlation with personal risk perceptions, with officers reporting higher levels of stress significantly more likely to perceive risk of injury from the workplace ($b = 0.54, p < .001$). These last two

findings are in agreement with formulated hypotheses, as well as results produced by Garcia (2008).

Model 3 contains findings concerning the influence of every officer risk perception predictor examined in this study. As with previous models, several noteworthy results were unveiled. Not only was there a substantial increment in the percentage of explained variance in officer personal risk perceptions from Model 2 to 3 (23.0 percent from Model 2 to 64.0 percent in Model 3), but there was also a significant F change between the models (169.23, $p < .001$). With respect to the influence of individual predictors, while the effects of officer Race were now rendered statistically non-significant, Tenure instead surfaced as a positive and statistically significant predictor of officer personal risk perceptions ($b = 0.34$, $p < .05$). This finding indicates that officers with additional years of job-related experience were significantly more likely to report heightened job-contingent risk perceptions. Contrary to hypothesized assumptions, the variable Role Ambiguity displayed a negative relationship with officer personal risk perceptions ($b = -0.20$), although its effect was significant at only the $p < .10$ level. Interpretation of this unexpected finding is reserved for the discussion portion presented later. All remaining emotional variables exhibited non-significant connections to officer personal risk perceptions.

Two final predictors were entered into the third block of the hierarchical equation estimating officer risk perceptions, which included the separate summated psychometric scales. Consistent with a wealth of prior literature, the Comprehension variable, although significant at only the $p < .10$ level, predicted in the negative direction officer personal risk perceptions ($b = -0.02$, $p < .10$) (Slovic et al. 2000; Fischhoff et al. 2000; Kobbeltvedt et

al. 2004). This suggests that officers who possess knowledge of the risks of injury from workplace dangers, and who perceive such risks as controllable, voluntarily imposed and calmly manageable, were statistically less likely to perceive injurious risk than their counterparts who rated these psychometric attributes in the opposite manner. Arguably the most influential and powerful predictor of correctional officer personal risk perceptions was the Dread factor, which comprised assessments of the catastrophic and fatal potential of dangers, as well as how anxious their associated risks made respondents ($b = 0.30, p < .001$). Higher ratings on each of these psychometric characteristics were positively and significantly associated with heightened officer risk judgments, meaning that the more catastrophic and fatal the consequences, and the more officers felt anxious about workplace dangers, the more likely they were to perceive risk. This result compliments a host of studies within the broader psychometric paradigm of risk perceptions (Fischhoff et al. 2000; Slovic et al. 2000; Kobbeltvedt et al. 2004).

Table 7.5: OLS analyses of the predictors of correctional officer personal risk perceptions

| Variables | Model 1 | | Model 2 | | Model 3 | |
|---------------------------|--------------------|---------|--------------------|---------|--------------------|---------|
| | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio |
| Race | 1.43 (0.43) | 1.73* | 1.37 (0.46) | 1.80* | 0.02 (0.52) | 0.03 |
| Gender | -0.31 (0.55) | -0.36 | -0.05 (0.47) | -0.07 | -0.63 (0.43) | -1.20 |
| Age | -0.19 (0.24) | -0.80 | -0.09 (0.22) | -0.40 | -0.10 (0.15) | -0.63 |
| Education | -0.54 (0.37) | -1.45 | -0.53 (0.34) | -1.57 | 0.01 (0.23) | 0.05 |
| Tenure | 0.13 (0.25) | 0.51 | 0.05 (0.23) | 0.20 | 0.34 (0.16) | 2.17* |
| Shift | 0.30 (0.48) | 0.39 | 0.45 (0.70) | 0.63 | -0.07 (0.48) | -0.14 |
| Employment Institution | -2.08 (1.30) | -1.61 | -2.30 (1.18) | -1.934† | -1.48 (0.71) | -1.83† |

| | | | | | | |
|-----------------|-----------------|----------|-----------------|----------|-----------------|----------|
| Co-worker | --- | --- | -0.17 (0.10) | -1.58† | 0.03 (0.07) | 0.35 |
| Job Involvement | --- | --- | -0.53 (0.20) | -2.53** | -0.08 (0.14) | -0.55 |
| Role Conflict | --- | --- | 0.27 (0.20) | 1.30 | 0.18 (0.14) | 1.25 |
| Role Ambiguity | --- | --- | -0.16 (0.17) | -0.92 | -0.20 (0.12) | -1.67† |
| Stress | --- | --- | 0.54 (0.13) | 3.91*** | 0.10 (0.10) | 0.99 |
| Comprehension | --- | --- | --- | --- | -0.02 (0.01) | -1.88† |
| Dread | --- | --- | --- | --- | 0.30 (0.02) | 18.34*** |
| Constant | 28.37 (1.96) | 14.51*** | 25.34 (3.96) | 6.402*** | 4.702 (3.34) | 1.41 |
| R ² | | 0.02 | | 0.23 | | 0.64 |
| F | | 1.10 | | 7.61*** | | 39.42*** |
| N | | 481 | | 434 | | 321 |

Note: b = unstandardized regression coefficient; s.e. = standard error; † = $p \leq .10$, * = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$.

Models predicting correctional officer general risk perceptions

Estimates of the influence of officer demographic characteristics on their general risk perceptions are included in Model 1 of Table 7.6 below. As with the first hierarchical equation predicting officer personal risk perceptions in Table 7.5, Race in this model is the only significant predictor of this outcome ($b = 1.25$, $p < .05$). This indicates that non-White officers, compared to White officers, are statistically more likely to perceive injurious risk from dangers encountered within correctional contexts. Only a modest 2.0 percent of the variance in officer general risk perceptions is explained by the predictors in this model.

Model 2 of Table 7.6 displays the results of workplace emotions in predicting officer general risk perceptions, net of their demographic attributes. Here, Race again

surfaces as an important predictor, this time at an even greater significance level ($b = 1.49, p < .01$). With the exception of Co-worker relations, each of the remaining officer emotions significantly predicts their risk perceptions of injury to others within the correctional environment. The hypothesis that greater Job Involvement, for instance, will lead to reduced general risk perceptions is supported by these data ($b = -0.63, p < .001$), with officers who care more about their profession perceiving statistically less risk than their less involved co-workers. Greater expressions of Role Conflict, also in agreement with hypothesized directions, significantly and positively influences officer general risk perceptions ($b = 0.27, p < .05$), suggesting that officers experiencing conflicting occupational roles feel more susceptible to correctional dangers and their associated risks. Increased Officer Stress positively and significantly impacts general risk perceptions ($b = 0.46, p < .001$), which suggests that higher stress also renders officers increasingly vulnerable to the perils of their profession. Not only are each of these predictors consistent with stated hypotheses, but they are generally supportive of findings uncovered in extant literature (Garcia, 2008).

Consistent with its directional influence revealed in Models 2 and 3 of Table 7.5, Role Ambiguity again exhibited a negative and statistically significant relationship with officer general risk perceptions ($b = -0.28, p < .05$). Once again this finding ran counter to hypothesized judgments and awaits future research for clarification. Among the two control variables, Employment Institution negatively predicted officer general risk assessments ($b = -2.33, p < .05$), with Kirkland officers, in comparison to other SCDC maximum security officers, statistically less likely to perceive injurious risk to others

within their work environment. Predictor variables included in this model explained 24.0 percent of outcome variance.

Officer general risk perceptions were regressed on all remaining predictor variables under examination in this study, with Model 3 containing these findings. It is worth mentioning, first, that the percentage of explained variance between Models 2 and 3 rose significantly from 24.0 percent to 69.0 percent. Additional variables included in this equation produced a significant F change between Models 2 and 3 as well (214.01, $p < .001$), thus substantially improving the overall explanatory power of the model. Regarding demographics, none of the social features of officers exhibited significant connections with general risk assessments. Among the workplace emotions, neither Co-worker nor Stress ratings significantly predicted officer general risk perceptions. Higher degrees of Job Involvement, as expected and net of the influence of the remaining variables in this model, significantly and negatively correlated with officer perceptions of injury to others within their work environment ($b = -0.28, p < .05$). A similar directional relationship uncovered above, once again, was found between Role Ambiguity and officer General Risk Perceptions ($b = -0.31, p < .001$).

Final results from Model 3 provide additional evidence of the explanatory power of psychometric variables in explaining variation in human judgments of risk. Comprehension, for instance, which shall be recalled consists of the voluntariness, knowledge, control and calm psychometric ratings, negatively and significantly predicted officer general perceptions of risk ($b = -0.02, p < .05$). Dread, which again consisted of the fatal, chronic-catastrophic and anxious ratings, was a highly significant and positive predictor of this risk perception outcome ($b = 0.29, p < .001$). Not only did these two

variables significantly influence officer general risk perceptions, but it must be acknowledged that alone these two measures accounted for a substantial percentage of explained outcome variance.

Apart from investigating predictors of correctional officer personal and general risk perceptions, this dissertation is equally interested in assessing variation in officer work-based decision-making. Of particular interest is investigating predictors of officer power bases, punishment ideologies and turnover intentions. Similar to the risk perception models above, each of these decision-making strategies will be regressed on officer demographics and workplace emotions. Officer personal and general risk perceptions will also be included as predictors in each model estimating officer decision-making. Results from these analyses are presented in the subsequent section.

Table 7.6: OLS analyses of the predictors of correctional officer general risk perceptions

| Variables | Model 1 | | Model 2 | | Model 3 | |
|------------------------|--------------------|---------|--------------------|----------|--------------------|---------|
| | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio |
| Race | 1.25 (0.43) | 2.00* | 1.49 (0.51) | 2.45** | -0.23 (0.35) | -0.51 |
| Gender | -0.29 (0.41) | -0.47 | -0.27 (0.49) | -0.45 | -0.46 (0.45) | -1.02 |
| Age | -0.26 (0.17) | -1.57 | -0.01 (0.17) | -0.07 | 0.09 (0.12) | 0.73 |
| Education | -0.24 (0.26) | -0.92 | -0.39 (0.26) | -1.51 | -0.01 (0.19) | -0.05 |
| Tenure | 0.22 (0.18) | 1.22 | 0.02 (0.18) | 0.14 | 0.19 (0.13) | 1.41 |
| Shift | 0.05 (0.57) | 0.08 | 0.07 (0.45) | 0.14 | -0.30 (0.41) | -0.71 |
| Employment Institution | -1.73 (0.89) | -1.74† | -2.33 (0.88) | -2.37* | -1.14 (0.68) | -1.68† |
| Co-worker | --- | --- | -0.09 (0.08) | -1.10 | 0.05 (0.06) | 0.79 |
| Job | --- | --- | -0.63 | -3.77*** | -0.28 | -2.24* |

| | | | | | | |
|----------------|-----------------|----------|-----------------|---------|-----------------|----------|
| Involvement | | | (0.17) | | (0.12) | |
| Role Conflict | --- | --- | 0.27 (0.16) | 1.74* | 0.27 (0.12) | 2.23* |
| Role Ambiguity | --- | --- | -0.28 (0.13) | -2.11* | -0.31 (0.10) | -3.11*** |
| Stress | --- | --- | 0.46 (0.11) | 4.27*** | 0.01 (0.08) | 0.10 |
| Comprehension | --- | --- | --- | --- | -0.02 (0.01) | -1.99* |
| Dread | --- | --- | --- | --- | 0.29 (0.01) | 20.27*** |
| Constant | 28.05 (1.46) | 19.22*** | 27.10 (3.01) | 9.02*** | 8.59 (2.80) | 3.06*** |
| R ² | | 0.02 | | 0.24 | | 0.69 |
| F | | 0.64 | | 8.11*** | | 48.13*** |
| N | | 481 | | 433 | | 320 |

Note: *b* = unstandardized regression coefficient; s.e. = standard error; † = $p \leq .10$, * = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$.

Models predicting officer reward power reliance

Equations estimating correctional officer reward power reliance are contained within Models 1 through 4 of Table 7.7 below. Demographic predictors alone are first entered into Model 1, workplace emotions are then entered in the second model, while officer personal and general risk judgments are then incorporated in the third and fourth models, respectively. Recall that these two predictors are examined apart from one another to reduce bias associated with having collinear variables in the same regression model (Hair et al. 2010). From Model 1, we see that nearly all demographic covariates significantly predict officer Reward Power reliance. For instance, officers possessing additional years of formal education, compared to their less educated counterparts, were significantly more likely to rely upon this decision-making strategy ($OR = 1.20, p < .05$). Compared to less experienced officers, there was an increase in the odds of strongly agreeing (versus other response categories) with reward power tactics for longer-tenured

officers ($OR = 1.16, p < .01$). Although both were significant at only the $p < .10$ level, Officer Race ($OR = 1.41$) and Gender ($OR = 0.73$) also predicted Reward Power, however their directional effects were opposite of one another. A modest 3.0 percent of outcome variation can be attributed to these predictors; however, interpretation of McFadden's pseudo R^2 must be approached with caution as this estimate departs a great deal from the R^2 values observed in general linear models (Hoffmann, 2004).

Officer Education ($OR = 1.27, p < .01$) and Tenure ($OR = 1.18, p < .01$) maintain their level of statistically significant influence in Model 2 estimations. Among the workplace emotion predictors, there was a decrease in the odds of overall agreement with Reward Power for those respondents who rated favorably their Co-worker relations ($OR = 0.94, p < .05$). Greater Job Involvement, conversely, was associated with a higher agreement rating on this outcome ($OR = 1.39, p < .001$). Many of these aforementioned variables maintained their significant influences across the third and fourth models. However in Model 3, we see reduced agreement in Reward Power use for those officers perceiving higher personal risk within their work environment ($OR = 0.97$), with this effect significant at only the $p < .10$ level though. Higher General Risk Perceptions were also significantly associated with a reduction in the odds of agreement with Reward Power ($OR = 0.96, p < .05$). Tentatively assumed, 8.0 percent of outcome variance is explained by the predictors included in these final two estimations.

Table 7.7: Ordered logistic regression analyses of the predictors of officer reward power reliance

| Variables | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
|-----------|------------------------|--------|------------------------|--------|------------------------|--------|------------------------|--------|
| | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat |
| Race | 1.41 (0.27) | 1.78† | 1.45 (0.31) | 1.70† | 1.54 (0.34) | 1.98* | 1.57 (0.34) | 2.05* |
| Gender | 0.73 (0.13) | -1.70† | 0.72 (0.15) | -1.56 | 0.64 (0.14) | -2.07* | 0.62 (0.13) | -2.22* |

| | | | | | | | | |
|--------------------------------|----------------|---------|----------------|----------|----------------|----------|----------------|----------|
| Age | 0.95 (0.05) | -1.00 | 0.94 (0.06) | -1.08 | 0.95 (0.06) | -0.86 | 0.94 (0.06) | -1.06 |
| Education | 1.20 (0.09) | 2.29* | 1.27 (0.11) | 2.63** | 1.25 (0.12) | 2.37* | 1.24 (0.12) | 2.30* |
| Tenure | 1.16 (0.07) | 2.76** | 1.18 (0.07) | 2.50** | 1.15 (0.08) | 2.08* | 1.15 (0.08) | 2.15* |
| Shift | 1.40 (0.25) | 1.99* | 1.37 (0.27) | 1.60 | 1.40 (0.28) | 1.67† | 1.40 (0.28) | 1.73† |
| Employment Institution | 0.46 (0.15) | -2.78** | 0.51 (0.20) | -1.75† | 0.54 (0.23) | -1.44 | 0.50 (0.21) | -1.73† |
| Co-worker | --- | --- | 0.94 (0.03) | -1.99* | 0.93 (0.03) | -2.38* | 0.93 (0.03) | -2.21* |
| Job Involvement | --- | --- | 1.39 (0.10) | 4.39*** | 1.34 (0.11) | 4.12*** | 1.38 (0.10) | 4.09*** |
| Role Conflict | --- | --- | 1.05 (0.07) | 0.78 | 1.04 (0.07) | 0.59 | 1.03 (0.07) | 0.45 |
| Role Ambiguity | --- | --- | 1.10 (0.06) | 1.80† | 1.10 (0.06) | 1.75† | 1.11 (0.06) | 1.99* |
| Stress | --- | --- | 0.97 (0.04) | -0.75 | 0.99 (0.04) | -0.33 | 0.99 (0.04) | -0.18 |
| Personal Risk Perception | --- | --- | --- | --- | 0.97 (0.02) | -1.73† | --- | --- |
| General Risk Perceptions | --- | --- | --- | --- | --- | --- | 0.96 (0.02) | -2.21* |
| Pseudo R ² | | 0.03 | | 0.07 | | 0.08 | | 0.08 |
| Wald Chi2 | | 21.92** | | 48.45*** | | 50.53*** | | 55.14*** |
| N | | 513 | | 458 | | 431 | | 430 |

Note: OR represents the proportional odds ratio; robust s.e. = robust standard error estimates; z-stat = test statistic used to assess level of statistical significance of individual predictors; Pseudo R² = McFadden's pseudo R-squared; Wald Chi2 = Wald chi-square test of overall model fit; † = p≤.10, * = p≤.05, ** = p≤.01, *** = p≤.001.

Models predicting officer referent power reliance

Referent Power reliance estimates can be found in Models 1 through 4 of Table 7.8. Social features of officers are first entered into Model 1, workplace emotions are entered into the second model, with personal and general risk perceptions independently entered into the third and fourth regression equations. None of the demographic variables entered into the first model approached the $p < .05$ level of statistical significance in predicting officer Referent Power ratings. Among the predictors significant at the $p < .10$ level, however, were Officer Age ($OR = 0.91$), Education ($OR = 1.17$) and Tenure ($OR = 1.10$), with older officers less likely to favor use of this decision-making strategy, and more educated and longer-tenured officers instead expressing greater agreement. With the exception of Age, these relationships remain constant in Model 2, yet Officer Race now exhibits a significant connection to Referent Power ($OR = 1.54, p < .05$). Compared to white officers, the odds of strongly agreeing in referent power are 1.54 times greater among non-white officers. Roughly similar relationships continue to be displayed across Models 3 and 4, with neither Personal nor General Risk assessments significantly contributing to the equations. Between 2.0 and 4.0 percent of outcome variance is tenuously explained when moving from Models 1 to 4.

Table 7.8: Ordered logistic regression analyses of the predictors of officer referent power reliance

| Variables | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
|-----------|------------------------|--------|------------------------|--------|------------------------|--------|------------------------|--------|
| | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat |
| Race | 1.39 (0.29) | 1.59 | 1.54 (0.35) | 1.99* | 1.70 (0.40) | 2.28* | 1.60 (0.37) | 2.03* |
| Gender | 1.33 (0.27) | 1.39 | 1.47 (0.32) | 1.77† | 1.46 (0.33) | 1.69† | 1.51 (0.34) | 1.84† |
| Age | 0.91 (0.05) | -1.66† | 0.93 (0.06) | -1.24 | 0.89 (0.06) | -1.79† | 0.92 (0.06) | -1.36 |
| Education | 1.17 | 1.87† | 1.18 | 1.75† | 1.19 | 1.83† | 1.19 | 1.76† |

| | | | | | | | | |
|---------------------------|----------------|--------|----------------|-------|-----------------|-------|----------------|-------|
| | (0.09) | | (0.11) | | (0.12) | | (0.12) | |
| Tenure | 1.10 (0.06) | 1.74† | 1.11 (0.07) | 1.71† | 1.16 (0.07) | 2.33* | 1.14 (0.07) | 2.04* |
| Shift | 0.72 (0.13) | -1.86† | 0.74 (0.15) | -1.51 | 0.79 (0.16) | -1.18 | 0.75 (0.15) | -1.43 |
| Employment Institution | 0.90 (0.32) | -0.29 | 0.77 (0.28) | -0.71 | 0.66 (0.27) | -1.07 | 0.74 (0.29) | -0.78 |
| Co-worker | --- | --- | 1.01 (0.03) | 0.57 | 1.01 (0.03) | 0.47 | 1.02 (0.03) | 0.67 |
| Job Involvement | --- | --- | 1.07 (0.08) | 0.92 | 1.06 (0.09) | 0.67 | 1.08 (0.09) | 0.96 |
| Role Conflict | --- | --- | 1.10 (0.07) | 1.36 | 1.10 (0.08) | 1.42 | 1.12 (0.08) | 1.70† |
| Role Ambiguity | --- | --- | 0.94 (0.05) | -1.14 | 0.95 (0.05) | -0.99 | 0.94 (0.05) | -1.10 |
| Stress | --- | --- | 0.99 (0.04) | -0.02 | 0.99 (0.04) | -0.11 | 0.99 (0.04) | -0.25 |
| Personal Risk Perceptions | --- | --- | --- | --- | -0.98 (0.01) | -1.33 | --- | --- |
| General Risk Perceptions | --- | --- | --- | --- | --- | --- | 1.00 (0.02) | 0.02 |
| Pseudo R ² | 0.02 | | 0.03 | | 0.04 | | 0.04 | |
| Wald Chi2 | 21.17** | | 25.52** | | 27.02** | | 27.30** | |
| N | 514 | | 457 | | 430 | | 429 | |

Note: OR represents the proportional odds ratio; robust s.e. = robust standard error estimates; z-stat = test statistic used to assess level of statistical significance of individual predictors; Pseudo R² = McFadden's pseudo R-squared; Wald Chi2 = Wald chi-square test of overall model fit; † = p ≤ .10, * = p ≤ .05, ** = p ≤ .01, *** = p ≤ .001.

Models predicting officer legitimate power reliance

Legitimate Power ratings are regressed on officer demographics, workplace emotions and personal and general risk assessments in Models 1 through 4 of Table 7.9.

Again, demographic estimates alone are contained within the first model, workplace emotions are in the second, and personal and general risk perception estimates can be

found in the third and fourth models, respectively. Two demographic predictors surface as statistically significant in the first ordered logistic regression equation. Each unit increment in Age was associated with a 1.16 odds increase in legitimate power reliance. This effect is significant at the $p < .01$ level. Finally, there was an 18.0 percent increase in the odds that more educated officers, compared to their less educated counterparts, would favor the Legitimate Power decision-making variable ($OR = 1.18, p < .05$).

Model 2 displays the findings of the influence of workplace emotions on this outcome, with none of these predictors reaching statistical significance. While Education descends to a $p < .10$ level of significance, Age maintains its highly significant connection to Legitimate Power ($OR = 1.17, p < .01$). Comparable findings to Model 2 are revealed in the third estimation, with officer Personal Risk Perceptions failing to significantly account for Legitimate Power. Higher General Risk evaluations in Model 4 are instead associated with an increase in the odds of strongly agreeing (versus other response categories) that inmates behave because they believe officers have authority ($OR = 1.03, p < .10$). Percentages of explained variance range between 2.0 and 4.0 across the models, yet again these estimates must be interpreted with caution.

Table 7.9: Ordered logistic regression analyses of the predictors of officer legitimate power reliance

| Variables | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
|-----------|------------------------|--------|------------------------|--------|------------------------|--------|------------------------|--------|
| | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat |
| Race | 1.04 (0.22) | 0.18 | 1.08 (0.24) | 0.37 | 1.02 (0.23) | 0.09 | 1.02 (0.23) | 0.09 |
| Gender | 0.87 (0.18) | -0.67 | 0.81 (0.17) | -0.99 | 0.81 (0.18) | -0.93 | 0.80 (0.18) | -1.00 |
| Age | 1.16 (0.06) | 2.81** | 1.17 (0.07) | 2.71** | 1.16 (0.07) | 2.66** | 1.18 (0.07) | 2.57** |
| Education | 1.18 (0.09) | 2.09* | 1.16 (0.09) | 1.76† | 1.23 (0.11) | 2.32* | 1.19 (0.11) | 1.97* |

| | | | | | | | | |
|---------------------------------|----------------|--------|----------------|--------|----------------|---------|----------------|---------|
| Tenure | 0.96 (0.05) | -0.73 | 0.96 (0.06) | -0.73 | 0.96 (0.06) | -0.66 | 0.96 (0.06) | -0.70 |
| Shift | 0.68 (0.12) | -2.25* | 0.67 (0.12) | -2.14* | 0.62 (0.12) | -2.76** | 0.61 (0.12) | -2.57** |
| Employment Institution | 1.09 (0.37) | 0.26 | 1.07 (0.39) | 0.18 | 0.98 (0.37) | -0.05 | 0.96 (0.35) | -0.10 |
| Co-worker | --- | --- | 1.04 (0.03) | 1.25 | 1.04 (0.03) | 1.32 | 1.05 (0.03) | 1.40 |
| Job Involvement | --- | --- | 0.99 (0.07) | -0.03 | 0.99 (0.07) | -0.02 | 1.02 (0.07) | 0.25 |
| Role Conflict | --- | --- | 0.97 (0.06) | -0.52 | 0.95 (0.06) | -0.80 | 0.95 (0.06) | -0.71 |
| Role Ambiguity | --- | --- | 0.94 (0.05) | -1.17 | 0.95 (0.06) | -0.77 | 0.96 (0.06) | -0.75 |
| Stress | --- | --- | 1.03 (0.04) | 0.69 | 1.01 (0.04) | 0.25 | 1.02 (0.04) | 0.49 |
| Personal Risk Perceptions | --- | --- | --- | --- | 1.03 (0.02) | 1.56 | --- | --- |
| General Risk Perceptions | --- | --- | --- | --- | --- | --- | 1.03 (0.02) | 1.81† |
| Pseudo R ² | 0.02 | | 0.02 | | 0.04 | | 0.03 | |
| Wald Chi2 | 20.01** | | 26.72** | | 38.47*** | | 30.59** | |
| N | 511 | | 456 | | 430 | | 428 | |

Note: OR represents the proportional odds ratio; robust s.e. = robust standard error estimates; z-stat = test statistic used to assess level of statistical significance of individual predictors; Pseudo R² = McFadden's pseudo R-squared; Wald Chi2 = Wald chi-square test of overall model fit; † = p≤.10, * = p≤.05, ** = p≤.01, *** = p≤.001.

Models predicting officer coercive power reliance

As previously referenced, both Officer Stress and General Risk Perceptions in several of the Coercive Power models failed to meet the proportional odds assumption, thus leading the entire model to be in violation. In response, a series of generalized

ordered logistic regression analyses were run (Williams, 2006). Similar variable ordering decisions as those described above were adopted for these estimations as well. Across all four models, demographic features of officers failed to significantly influence officer Coercive Power ratings. Only Role Conflict in the second model exhibited a statistically significant association with this power base, with higher expressions of this variable increasing by 1.20 the odds of strong agreement that inmates fear sanctions ($OR = 1.20$, $p < .001$). For officers reporting higher stress levels, the odds of strongly agreeing, agreeing and disagreeing versus strongly disagreeing in coercive power were about 0.87 times lower ($OR = 0.87$, $p < .001$). This ultimately suggests that officers reporting higher stress are significantly less likely to adopt coercive power techniques.

Both Role Conflict ($OR = 1.18$, $p < .001$) and Stress ($OR = 0.92$, $p < .05$) maintain their level of statistical significance in Model 3, while instead officer Personal Risk Perceptions fail to reach significance. While again Role Conflict ($OR = 1.17$, $p < .01$) and Stress ($OR = 0.92$, $p < .05$) significantly predict Coercive Power in Model 4, General Risk Perceptions, consistent with previous assumptions, positively predicts higher response category placement for this outcome ($OR = 1.21$, $p < .001$). Cautiously assumed, between 1.0 and 4.0 percent of the Coercive Power variance is explained within these models.

Table 7.10: Generalized ordered logistic regression analyses of the predictors of officer coercive power reliance

| Variables | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
|-----------|------------------------|--------|------------------------|--------|------------------------|--------|------------------------|--------|
| | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat |
| Race | 0.78 (0.15) | -1.31 | 0.73 (0.15) | -1.50 | 0.71 (0.16) | -1.55 | 0.75 (0.17) | -1.27 |
| Gender | 0.91 (0.17) | -0.50 | 1.14 (0.24) | 0.62 | 1.13 (0.25) | 0.55 | 1.12 (0.24) | 0.50 |
| Age | 0.95 (0.05) | -0.94 | 0.94 (0.05) | -1.05 | 0.95 (0.05) | -0.96 | 0.94 (0.05) | -1.09 |

| | | | | | | | | |
|---------------------------------|----------------|-------|----------------|----------|----------------|---------|----------------|---------|
| Education | 1.10 (0.09) | 0.90 | 1.04 (0.10) | 0.43 | 1.07 (0.11) | 0.62 | 1.07 (0.11) | 0.60 |
| Tenure | 0.99 (0.05) | -0.03 | 1.03 (0.06) | 0.51 | 1.01 (0.06) | 0.23 | 1.03 (0.06) | 0.43 |
| Shift | 1.04 (0.17) | 0.22 | 1.06 (0.19) | 0.30 | 1.06 (0.20) | 0.29 | 1.15 (0.21) | 0.78 |
| Employment Institution | 0.72 (0.23) | -1.03 | 0.78 (0.28) | -0.68 | 0.85 (0.32) | -0.42 | 0.75 (0.29) | -0.75 |
| Co-worker | --- | --- | 0.96 (0.03) | -1.35 | 0.96 (0.03) | -1.42 | 0.97 (0.03) | -1.23 |
| Job Involvement | --- | --- | 1.10 (0.07) | 1.40 | 1.10 (0.08) | 1.29 | 1.07 (0.07) | 1.04 |
| Role Conflict | --- | --- | 1.20 (0.07) | 3.21*** | 1.18 (0.07) | 2.99*** | 1.17 (0.07) | 2.81** |
| Role Ambiguity | --- | --- | 0.99 (0.05) | -0.09 | 1.00 (0.06) | 0.06 | 0.99 (0.05) | -0.10 |
| Stress | --- | --- | --- | --- | 0.92 (0.04) | -2.07* | 0.92 (0.04) | -2.06* |
| (1) S.D. | --- | --- | 0.87 (0.04) | -3.35*** | --- | --- | --- | --- |
| (2) D | --- | --- | 0.98 (0.04) | -0.35 | --- | --- | --- | --- |
| (3) A | --- | --- | 1.07 (0.11) | 0.71 | --- | --- | --- | --- |
| Personal Risk Perceptions | --- | --- | --- | --- | 1.02 (0.02) | 1.49 | --- | --- |
| General Risk Perceptions | --- | --- | --- | --- | --- | --- | --- | --- |
| (1) S.D. | --- | --- | --- | --- | --- | --- | 0.98 (0.02) | -0.51 |
| (2) D | --- | --- | --- | --- | --- | --- | 1.03 (0.03) | 1.56 |
| (3) A | --- | --- | --- | --- | --- | --- | 1.21 (0.06) | 3.67*** |
| Pseudo R ² | | 0.01 | | 0.04 | | 0.03 | | 0.04 |

| | | | | |
|-----------|------|----------|---------|---------|
| Wald Chi2 | 7.15 | 36.48*** | 31.35** | 32.15** |
| N | 510 | 455 | 428 | 427 |

Note: OR represents the proportional odds ratio; robust s.e. = robust standard error estimates; z-stat = test statistic used to assess level of statistical significance of individual predictors; Pseudo R² = McFadden's pseudo R-squared; Wald Chi2 = Wald chi-square test of overall model fit; † = p≤.10, * = p≤.05, ** = p≤.01, *** = p≤.001. For Stress and General Risk Perceptions, Strongly Agree is the reference category.

Models predicting officer expert power reliance

Expert Power estimates, due to violations of the proportional odds assumption, also required the estimation of generalized ordered logistic regression models (Williams, 2006). Here, officer Stress significantly contributed to violations of this statistical requirement. Four different equations were run, with variable ordering schemes similar to those adopted in previous power models. In Model 1, we see that only Officer Age significantly predicted Expert Power reliance, with older officers more likely to strongly agree with this power base ($OR = 1.12, p < .05$). Age sustains its effect in Model 2 ($OR = 1.12, p < .05$), where now we see how greater Job Involvement increases by 30.0 percent the odds of strongly agreeing in Expert Power ($OR = 1.30, p < .001$). Compared to officers reporting less stress, the odds of higher category placement on Expert Power are about 15.0 percent lower for respondents reporting higher stress levels ($OR = 0.85, p < .01$).

Moving to Model 3, both Job Involvement and Stress maintain similar significant associations, while Personal Risk Perceptions also significantly impact officer Expert Power reliance. Higher personal judgments of injurious risk decrease the odds of strongly agreeing in Expert Power by a factor of 0.93 ($p < .01$). Officer Age, Job Involvement and Stress continue to display significant connections to Expert Power in Model 4, with now General Risk Perceptions predicting lower response category placement on this decision-making outcome. Specifically, officers who judge high injurious risk for others within the prison are 0.94 times less likely to strongly agree in expert power reliance ($OR = 0.94$,

$p < .01$). Between 1.0 and 7.0 percent of variance explanation is tenuously accredited to these explanatory variables.

Table 7.11: Generalized ordered logistic regression analyses of the predictors of officer expert power reliance

| Variables | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
|---------------------------|------------------------|--------|------------------------|---------|------------------------|---------|------------------------|---------|
| | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat | OR robust (s.e.) | z-stat |
| Race | 1.18 (0.23) | 0.87 | 1.33 (0.26) | 1.45 | 1.41 (0.28) | 1.74† | 1.40 (0.28) | 1.69† |
| Gender | 1.34 (0.25) | 1.58 | 1.42 (0.28) | 1.78† | 1.44 (0.29) | 1.79† | 1.41 (0.28) | 1.69† |
| Age | 1.12 (0.06) | 2.24* | 1.12 (0.07) | 2.02* | 1.13 (0.06) | 1.82† | 1.13 (0.06) | 2.10* |
| Education | 1.04 (0.08) | 0.54 | 1.07 (0.09) | 0.79 | 1.09 (0.10) | 0.98 | 1.08 (0.09) | 0.90 |
| Tenure | 1.02 (0.05) | 0.48 | 1.03 (0.06) | 0.56 | 1.05 (0.06) | 0.76 | 1.04 (0.06) | 0.62 |
| Shift | 0.77 (0.13) | -1.53 | 0.73 (0.13) | -1.74† | 0.76 (0.14) | -1.48 | 0.70 (0.13) | -1.90† |
| Employment Institution | 1.20 (0.36) | 0.61 | 1.33 (0.43) | 0.89 | 1.21 (0.41) | 0.57 | 1.21 (0.40) | 0.58 |
| Co-worker | --- | --- | 0.99 (0.03) | -0.11 | 0.98 (0.03) | -0.68 | 0.98 (0.03) | -0.54 |
| Job Involvement | --- | --- | 1.30 (0.10) | 3.45*** | 1.29 (0.09) | 3.33*** | 1.30 (0.10) | 3.39*** |
| Role Conflict | --- | --- | 1.00 (0.06) | 0.05 | 1.00 (0.06) | 0.04 | 1.03 (0.06) | 0.52 |
| Role Ambiguity | --- | --- | 1.01 (0.05) | 0.27 | 1.00 (0.05) | 0.09 | 0.99 (0.05) | -0.24 |
| Stress | --- | --- | --- | --- | --- | --- | --- | --- |
| (1) S.D. | --- | --- | 0.85 (0.05) | -2.86** | 0.86 (0.05) | -2.61** | 0.84 (0.05) | -2.85** |
| (2) D | --- | --- | 1.04 (0.04) | 1.05 | 1.07 (0.05) | 1.48 | 1.06 (0.04) | 1.38 |

| | | | | | | | | |
|---------------------------|--------|----------|----------------|----------|----------------|----------|----------------|----------|
| (3) A | --- | --- | 1.13 (0.07) | 1.86† | 1.16 (0.08) | 2.27* | 1.14 (0.08) | 1.99* |
| Personal Risk Perceptions | --- | --- | --- | --- | 0.93 (0.01) | -3.01** | --- | --- |
| General Risk Perceptions | --- | --- | --- | --- | --- | --- | 0.94 (0.02) | -2.86** |
| Pseudo R ² | 0.01 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Wald Chi2 | 16.58* | 59.36*** | 64.13*** | 63.04*** | 64.13*** | 64.13*** | 63.04*** | 63.04*** |
| N | 509 | 455 | 428 | 427 | 428 | 428 | 427 | 427 |

Note: OR represents the proportional odds ratio; robust s.e. = robust standard error estimates; z-stat = test statistic used to assess level of statistical significance of individual predictors; Pseudo R² = McFadden's pseudo R-squared; Wald Chi2 = Wald chi-square test of overall model fit; † = p≤.10, * = p≤.05, ** = p≤.01, *** = p≤.001. For Stress, Strongly Agree is the reference category.

Models predicting the officer rehabilitation orientation

Models 1 through 4 in Table 7.12 display the effects of the predictors of correctional officer Rehabilitation Orientations. Model 1 contains the estimations of officer demographics, Model 2 then incorporates the officer workplace emotion predictors, while Models 3 and 4 then include the personal and general risk perception measures, independent of one another. From Model 1 it is shown that only Office Tenure exhibited a statistically significant relationship with officer rehabilitation orientations. Specifically, officers possessing additional years of job experience are statistically more likely to favor a rehabilitative stance towards incarcerated offenders ($b = 0.15, p < .05$), as compared to less tenured COs. This finding is consistent with hypothesized assumptions, with the overall model explaining only a modest 2.0 percent of the variance in this outcome.

With the exception of Officer Tenure ($b = 0.15$), which was only significant at a $p < .10$ level, none of the remaining officer demographic features in Model 2 significantly influenced officer rehabilitation orientations. Of the officer workplace emotion

predictors, only Officer Stress failed to reach a statistically significant level of influence on the rehabilitative stance of officers. Favorable co-worker relations, in concert with hypothesized presumptions, instead predicted in the positive direction this particular punishment ideology ($b = 0.07, p < .05$). Also consistent with hypothesized expectations, yet significant at only a $p < .10$ level, greater degrees of Job Involvement were positively associated with officer rehabilitative stances ($b = 0.10$). Both higher expressions of Role Conflict ($b = -0.11$) and Role Ambiguity ($b = -0.19, p < .001$), each consistent with hypotheses, negatively and significantly influenced officer rehabilitative orientations, with the former significant at only the $p < .10$ level though. Several of these findings are in agreement with those uncovered in a host of past investigations on the topic (Jurik, 1985; Whitehead and Lindquist, 1989). A substantial increment in the percentage of explained variance, finally, is observed between Models 1 and 2, with the latter accounting for 15.0 percent of outcome variation.

Following the inclusion of the personal risk perception measure in Model 3, Officer Tenure maintains its $p < .10$ level of significant influence on this orientation ($b = 0.14$). While both Job Involvement and Role Conflict descend to a non-significant level of influence, stronger Co-worker bonds ($b = 0.07, p < .05$) and Role Ambiguity ($b = -0.21, p < .001$) each continue to significantly impact this self-reported decision-making stance, yet in opposite directions of one another. Arguably the most noteworthy finding surfacing from this hierarchical estimation regards the influence of officer personal risk perceptions. Higher judgments of personal harmful risk, as expected, significantly predict in the negative direction whether an officer will be rehabilitative towards prisoners ($b = -0.04, p < .05$). Inclusion of this variable increased the percentage of explained variance

from Model 2 to Model 3 by a modest 1.0 percent, however. When included independently of personal risk perceptions in Model 4, officer general risk perceptions failed to significantly predict officer rehabilitative orientations.

Table 7.12: OLS analyses of the predictors of the correctional officer rehabilitation orientation

| Variables | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
|---------------------------------|--------------------|---------|--------------------|----------|--------------------|----------|--------------------|----------|
| | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio |
| Race | 0.14 (0.25) | 0.53 | 0.01 (0.26) | 0.03 | 0.11 (0.27) | 0.42 | 0.10 (0.27) | 0.36 |
| Gender | 0.22 (0.24) | 0.87 | 0.21 (0.26) | 0.82 | 0.18 (0.27) | 0.67 | 0.12 (0.27) | 0.43 |
| Age | 0.04 (0.07) | 0.57 | 0.01 (0.07) | 0.11 | 0.01 (0.07) | 0.13 | 0.23 (0.08) | 0.32 |
| Education | 0.06 (0.10) | 0.60 | 0.09 (0.11) | 0.81 | 0.05 (0.12) | 0.43 | 0.08 (0.12) | 0.67 |
| Tenure | 0.15 (0.07) | 2.01* | 0.15 (0.07) | 1.91† | 0.14 (0.08) | 1.78† | 0.12 (0.08) | 1.57 |
| Shift | -2.46 (0.23) | -1.05 | -0.17 (0.24) | -0.71 | -0.18 (0.24) | -0.75 | -0.13 (0.25) | -0.52 |
| Employment Institution | 0.10 (0.41) | 0.26 | -0.03 (0.41) | -0.08 | -0.16 (0.45) | -0.36 | -0.14 (0.44) | -0.32 |
| Co- worker | --- | --- | 0.07 (0.03) | 2.25* | 0.07 (0.04) | 2.04* | 0.07 (0.04) | 2.04* |
| Job involvement | --- | --- | 0.10 (0.07) | 1.97† | 0.10 (0.08) | 1.27 | 0.09 (0.08) | 1.12 |
| Role Conflict | --- | --- | -0.11 (0.07) | -1.80† | -0.06 (0.07) | -0.90 | -0.10 (0.07) | -1.66† |
| Role Ambiguity | --- | --- | -0.19 (0.05) | -3.25*** | -0.21 (0.06) | -3.52*** | -0.20 (0.06) | -3.30*** |
| Stress | --- | --- | -0.03 (0.05) | -0.55 | 0.01 (0.05) | 0.04 | -0.01 (0.05) | -0.24 |
| Personal Risk Perceptions | --- | --- | --- | --- | -0.04 (0.02) | -2.04* | --- | --- |
| General | --- | --- | --- | --- | --- | --- | -0.03 | -1.15 |

| | | | | | | | | |
|------------------|----------------|----------|-----------------|---------|-----------------|---------|-----------------|---------|
| Risk Perceptions | | | | | | | (0.02) | |
| Constant | 9.46 (0.60) | 15.69*** | 10.84 (1.31) | 8.24*** | 11.46 (1.45) | 7.89*** | 11.70 (1.48) | 7.88*** |
| R ² | | 0.02 | | 0.15 | | 0.16 | | 0.15 |
| F | | 1.76† | | 6.45*** | | 7.52*** | | 6.28*** |
| N | | 504 | | 452 | | 428 | | 427 |

Note: b = unstandardized regression coefficient; s.e. = standard error; † = $p \leq .10$, * = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$.

Models predicting the officer social distance orientation

Similar to previous models examining officer risk perceptions and decision-making, Table 7.13 contains different estimations of the officer Social Distance orientation. Model 1 includes only officer demographics, Model 2 regresses this orientation on officer workplace emotions, net of demographics, while Models 3 and 4, again to avoid bias with multi-collinearity, include independent of one another officer personal and general risk assessments. The first Model contains several discussion-worthy results. First, demographics alone account for 6.0 percent of the variance in Social Distance ratings. Second, being a non-White officer, versus being a White officer, significantly and positively influences social distance between officers and inmates ($b = 0.50, p < .01$). Not only is this finding contrary to formulated hypotheses, but the effect is somewhat large. Ultimately this indicates that non-White officers are statistically more likely to be untrustworthy and unsupportive of incarcerated offenders. Compared to their younger counterparts, older officers are statistically less likely to distance themselves from inmates ($b = -0.14, p < .01$), a finding in line with hypothesized expectations.

When included in Model 2 estimations, only one officer workplace emotion variable significantly impacts Social Distance orientations. Greater Job Involvement, as assumed, is negatively and significantly associated with this decision-making stance

towards inmates ($b = -0.24, p < .001$). Race ($b = 0.44, p < .01$) and officer Age ($b = -0.14, p < .01$) each maintain their significant connection to Social Distance ratings, while among the controls, Employment Institution ($b = -0.61, p < .05$) also exhibits a significant association with this outcome. This indicates that Kirkland officers are less likely to distance themselves from inmates, as compared to other SCDC maximum security officers. Explanatory variables included in Model 2 accounted for 13.0 percent of the variance in Social Distance ratings.

Once again in the third hierarchical regression estimation, Race ($b = 0.37, p < .05$), officer Age ($b = -0.14, p < .01$) and Job Involvement ($b = -0.22, p < .001$) display statistically significant relationships with officer Social Distance ratings. An interesting finding developing from this model is how correctional officer personal risk perceptions are significantly and positively associated with Social Distance ($b = 0.04, p < .01$). These data then suggest that officers holding heightened risk judgments are statistically more likely to increase their distrust of and distance from inmates than their counterparts perceiving less risk. General risk perceptions ($b = 0.04, p < .01$), finally, also exhibits a statistically significant and positive connection to this punishment orientation. These final two models accounted for 15.0 and 16.0 percent of the variance in officer Social Distance ratings, respectively.

Table 7.13: OLS analyses of the predictors of the correctional officer social distance orientation

| Variables | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
|-----------|--------------------|---------|--------------------|---------|--------------------|---------|--------------------|----------|
| | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio |
| Race | 0.50 (0.17) | 2.84** | 0.44 (0.17) | 2.58** | 0.37 (0.17) | 2.11* | 0.37 (0.17) | 2.14* |
| Gender | 0.10 (0.18) | 0.60 | 0.33 (0.17) | 0.19 | 0.05 (0.17) | 0.30 | 0.05 (0.17) | 0.32 |
| Age | -0.14 (0.04) | -3.00** | -0.14 (0.04) | -3.00** | -0.14 (0.04) | -2.94** | -0.16 (0.04) | -3.42*** |

| | | | | | | | | |
|---------------------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
| Education | -0.11 (0.07) | -1.50 | -0.14 (0.07) | -1.89† | -0.13 (0.07) | -1.77† | -0.12 (0.07) | -1.58 |
| Tenure | 0.01 (0.05) | 0.06 | 0.02 (0.05) | 0.36 | 0.02 (0.05) | 0.34 | 0.03 (0.05) | 0.70 |
| Shift | -0.12 (0.16) | -0.74 | -0.08 (0.15) | -0.50 | -0.09 (0.15) | -0.60 | -0.06 (0.16) | -0.40 |
| Employment Institution | -0.54 (0.29) | -1.85† | -0.61 (0.28) | -2.16* | -0.51 (0.28) | -1.81† | -0.56 (0.28) | -2.00* |
| Co- worker | --- | --- | -0.01 (0.02) | -0.41 | -0.01 (0.02) | -0.22 | -0.01 (0.02) | -0.17 |
| Job Involvement | --- | --- | -0.24 (0.04) | -4.99*** | -0.22 (0.04) | -4.71*** | -0.23 (0.04) | -4.73*** |
| Role Conflict | --- | --- | -0.05 (0.05) | -0.99 | -0.05 (0.04) | -1.17 | -0.06 (0.04) | -1.25 |
| Role Ambiguity | --- | --- | 0.04 (0.03) | 0.90 | 0.04 (0.03) | 1.10 | 0.05 (0.03) | 1.32 |
| Stress | --- | --- | 0.03 (0.03) | 0.93 | 0.01 (0.03) | 0.23 | 0.01 (0.03) | 0.25 |
| Personal Risk Perceptions | --- | --- | --- | --- | 0.04 (0.01) | 2.94** | --- | --- |
| General Risk Perceptions | --- | --- | --- | --- | --- | --- | 0.04 (0.01) | 2.70** |
| Constant | 9.00 (0.42) | 21.15*** | 10.55 (0.87) | 12.15*** | 9.67 (0.91) | 10.62*** | 9.60 (0.93) | 10.28*** |
| R ² | | 0.06 | | 0.13 | | 0.15 | | 0.16 |
| F | | 4.45*** | | 5.54*** | | 5.67*** | | 5.90*** |
| N | | 503 | | 449 | | 424 | | 423 |

Note: *b* = unstandardized regression coefficient; s.e. = standard error; † = $p \leq .10$, * = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$.

Models predicting the officer punitive orientation

Estimations of the influence of officer demographics alone on their punitive ideologies are contained within Model 1 of Table 7.14, with Model 2 then incorporating

the five officer workplace emotion predictors. Punitive orientations are then regressed on demographics, emotions and officer personal risk perceptions in Model 3, with Model 4 substituting personal with general risk perceptions. Output from Model 1 shows how Race is significantly related to decreased punitive orientations towards inmates ($b = -0.49, p < .05$). This relationship supports expected hypotheses and demonstrates how non-White officers, compared to their White counterparts, are statistically less likely to favor harsher punishments for incarcerated offenders. A similar directional relationship is observed between punishment ideologies and officer Age ($b = -0.22, p < .001$), with older correctional guards statistically less likely to agree that inmate treatment should be rapacious in nature. None of the remaining demographic predictors significantly influenced officer punitive orientations, with Model 1 explaining 7.0 percent of the variation in this punishment ideology. These findings, finally, are consistent with those found by Jurik (1985).

Neither Job Involvement nor Role Conflict significantly relate to officer punitive orientations in the second model. However, while officers who rate favorably their co-worker relations are statistically less likely to be punitive in their treatment of prisoners ($b = -0.15, p < .05$), officers reporting greater stress are instead more likely to adopt a punitive stance ($b = 0.09, p < .05$). Although significant at only the $p < .10$ level, greater Role Ambiguity also predicts in the positive direction officer punitive orientations ($b = 0.08$). Consistent with Model 1 output, Race ($b = -0.48, p < .05$) and officer Age ($b = -0.18, p < .01$) continue to be negatively associated with punitive orientations. Inclusion of the officer workplace emotion predictors more than doubles the percentage of explained

variance between Models 1 and 2, with the latter now accounting for 15.0 percent of outcome variation.

Officer Race ($b = -0.54, p < .05$) and Age ($b = -0.19, p < .01$) continue to display negative connections to punitive orientations in Model 3, while now Co-worker ratings fail to significantly predict this outcome. Instead Role Ambiguity surfaces as a significant influence on punitive orientations, this time at the $p < .05$ level of significance ($b = 0.11$). Support for the hypothesis that greater personal risk perceptions will increase the punitive stance of correctional officers is found in Model 3, with these variables statistically and significantly related to one another ($b = 0.06, p < .001$). This particular finding suggests that officers who feel vulnerable to correctional dangers and their associated risks are more likely to treat inmates in harsher manners. Officer Race, Age, Co-worker relations and Role Ambiguity continue to significantly predict punitive orientations in the fourth and final model. Correctional officer general risk perceptions, however, fail to reach a statistically significant level of influence on punitive ideologies. Between 15.0 and 16.0 percent of outcome variation is explained within these final two hierarchical estimations.

Table 7.14: OLS analyses of the predictors of the correctional officer punitive orientation

| Variables | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
|-----------|--------------------|----------|--------------------|---------|--------------------|---------|--------------------|---------|
| | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio |
| Race | -0.49 (0.22) | -2.17* | -0.48 (0.23) | -1.99* | -0.54 (0.24) | -2.24* | -0.47 (0.24) | -1.99* |
| Gender | -0.01 (0.22) | -0.04 | 0.08 (0.22) | 0.35 | 0.18 (0.24) | 0.74 | 0.20 (0.24) | 0.82 |
| Age | -0.22 (0.06) | -3.55*** | -0.18 (0.06) | -2.70** | -0.19 (0.07) | -2.82** | -0.17 (0.07) | -2.70** |
| Education | -0.09 (0.09) | -0.92 | -0.05 (0.09) | -0.47 | -0.07 (0.10) | -0.66 | -0.11 (0.10) | -1.04 |
| Tenure | -0.08 (0.06) | -1.19 | -0.11 (0.06) | -1.71† | -0.10 (0.07) | -1.43 | -0.11 (0.07) | -1.59 |
| Shift | 0.14 | 0.70 | 0.05 | 0.22 | 0.03 | 0.15 | 0.05 | 0.24 |

| | | | | | | | | |
|---------------------------|-----------------|----------|-----------------|---------|-----------------|---------|-----------------|---------|
| | (0.20) | | (0.21) | | (0.22) | | (0.22) | |
| Employment Institution | -0.12 (0.35) | -0.35 | -0.01 (0.37) | -0.02 | 0.18 (0.39) | 0.44 | 0.16 (0.39) | 0.41 |
| Co-worker | --- | --- | -0.15 (0.03) | -1.99* | -0.05 (0.03) | -1.46 | -0.06 (0.03) | -1.99* |
| Job Involvement | --- | --- | -0.01 (0.06) | -0.20 | -0.01 (0.06) | -0.15 | 0.00 (0.07) | 0.02 |
| Role Conflict | --- | --- | 0.07 (0.06) | 1.19 | 0.03 (0.06) | 0.51 | 0.04 (0.06) | 0.56 |
| Role Ambiguity | --- | --- | 0.08 (0.05) | 1.79† | 0.11 (0.05) | 2.01* | 0.10 (0.05) | 2.04* |
| Stress | --- | --- | 0.09 (0.04) | 2.12* | 0.07 (0.04) | 1.70† | 0.07 (0.04) | 1.69† |
| Personal Risk Perceptions | --- | --- | --- | --- | 0.06 (0.01) | 3.08*** | --- | --- |
| General Risk Perceptions | --- | --- | --- | --- | --- | --- | 0.03 (0.02) | 1.47 |
| Constant | 9.25 (0.53) | 17.57*** | 7.38 (1.16) | 6.37*** | 6.50 (1.28) | 5.08*** | 6.92 (1.31) | 5.25*** |
| R ² | | 0.07 | | 0.15 | | 0.16 | | 0.15 |
| F | | 5.16*** | | 6.51*** | | 6.99*** | | 5.52*** |
| N | | 508 | | 455 | | 429 | | 428 |

Note: *b* = unstandardized regression coefficient; s.e. = standard error; † = $p \leq .10$, * = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$.

Models predicting the officer corruption concern orientation

Four different hierarchical regression equations were again used to investigate predictors of the final correctional officer punishment orientation—Concern for Corruption of Authority—with these findings provided in Table 7.15. Only demographic predictors are included in the first model, officer workplace emotions are then entered into the second model, with personal and general risk assessments entered into Models 3

and 4, once again independent of one another. As expected, increases in Age significantly reduce any preoccupations correctional officers have regarding the corruptive potential of inmates ($b = -0.21, p < .001$). Although Officer Tenure also exhibited a negative correlation with Corruption Concern ($b = -0.13$), this effect was significant at only the $p < .10$ level. Overall, this model accounted for a modest 5.0 percent of the variance in Concern for Corruption of Authority ratings.

While older officers continue to differ significantly from younger officers in their concern for corruption of authority ($b = -0.17, p < .05$), this variable's significance has been substantially reduced from the first to the second model. Among the officer workplace emotions, officers who are more involved with their job are statistically less likely to be concerned with authoritative corruption ($b = -0.17, p < .01$), as compared to less involved correctional officers. Although the Job Involvement effect is consistent with hypothesized expectations, higher Role Ambiguity expressions predict in the negative direction concerns over whether inmates will take advantage of and corrupt correctional guards ($b = -0.16, p < .01$). Not only is this effect contrary to hypotheses, but it is not consistent with previous literature investigating this relationship (Van Voohris et al. 1991). Future research to help further explain the dimensions of this association is warranted. Finally, officers experiencing greater job-related stress, as expected, are more likely to perceive inmates as potential agents of corruption and thus try to avoid establishing relationships with them ($b = 0.14, p < .001$). The coefficient of determination for this model is a modest 11.0 percent.

Officer Age ($b = -0.18, p < .05$), Job Involvement ($b = -0.16, p < .05$), Role Ambiguity expressions ($b = -0.13, p < .05$) and Stress ($b = 0.12, p < .001$) each preserve

their level of statistically significant influence on officer Concern for Corruption of Authority in the third model. These findings provide additional evidence of the explanatory power of select officer demographics and workplace emotions in predicting this particular officer punishment orientation (Whitehead and Lindquist, 1989; Farkas, 1999). Confirmation of the assumption that higher risk perceptions would increase officer concern for corruption is uncovered in this third model ($b = 0.08, p < .001$). Ultimately this relationship indicates that for those officers who judge their work environment as a significant contributor to personal injury, they are statistically more likely to be skeptical of the motivations underlying inmate behavior. This may eventually transition into them taking actions to further distance themselves emotionally from incarcerated persons. Another 3.0 percent of outcome variation explanation was provided following the inclusion of the officer personal risk perception measure, with Model 3 now accounting for 14.0 percent of Concern for Corruption of Authority variance. Finally, similar relationships continue to be observed between Models 3 and 4, yet now with officer general risk perceptions also displaying a positive and statistically significant connection to officer concerns over corruption ($b = 0.07, p < .001$). Percentages of explained variance remain constant between these final two estimations.

Table 7.15: OLS analyses of the predictors of the correctional officer corruption concern orientation

| Variables | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
|-----------|--------------------|----------|--------------------|---------|--------------------|---------|--------------------|-------------------|
| | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio |
| Race | -0.01 (0.26) | -0.03 | 0.18 (0.27) | 0.66 | 0.07 (0.27) | 0.26 | 0.08 (0.27) | 0.29 |
| Gender | 0.28 (0.25) | 1.13 | 0.39 (0.26) | 1.49 | 0.43 (0.27) | 1.60 | 0.47 (0.27) | 1.76 ^f |
| Age | -0.21 (0.07) | -3.00*** | -0.17 (0.07) | -2.23* | -0.18 (0.08) | -2.31* | -0.20 (0.07) | -2.60** |
| Education | -0.06 (0.11) | -0.58 | 0.01 (0.11) | 0.06 | 0.08 (0.12) | 0.66 | 0.06 (0.12) | 0.51 |

| | | | | | | | | |
|---------------------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
| Tenure | -0.13 (0.07) | -1.72† | -0.14 (0.08) | -1.81† | -0.12 (0.08) | -1.52 | -0.10 (0.08) | -1.29 |
| Shift | 0.16 (0.24) | 0.70 | 0.22 (0.24) | 0.92 | 0.18 (0.25) | 0.72 | 0.18 (0.25) | 0.73 |
| Employment Institution | 0.12 (0.41) | 0.28 | -0.30 (0.42) | -0.70 | -0.17 (0.45) | -0.38 | -0.17 (0.44) | -0.38 |
| Co- worker | --- | --- | 0.01 (0.03) | 0.39 | 0.03 (0.03) | 0.73 | 0.03 (0.03) | 0.76 |
| Job Involvement | --- | --- | -0.17 (0.07) | -2.79** | -0.16 (0.07) | -2.18* | -0.15 (0.07) | -1.99* |
| Role Conflict | --- | --- | 0.04 (0.07) | 0.61 | 0.00 (0.07) | 0.03 | 0.02 (0.07) | 0.25 |
| Role Ambiguity | --- | --- | -0.16 (0.06) | -2.72** | -0.13 (0.06) | -2.10* | -0.12 (0.05) | -2.02* |
| Stress | --- | --- | 0.14 (0.05) | 3.04*** | 0.12 (0.04) | 3.08*** | 0.12 (0.04) | 2.70** |
| Personal Risk Perceptions | --- | --- | --- | --- | 0.08 (0.02) | 3.07*** | --- | --- |
| General Risk Perceptions | --- | --- | --- | --- | --- | --- | 0.07 (0.02) | 3.03*** |
| Constant | 17.37 (0.61) | 28.70*** | 17.00 (1.32) | 12.92*** | 15.57 (1.44) | 10.76*** | 14.50 (1.48) | 10.14*** |
| R ² | | 0.05 | | 0.11 | | 0.14 | | 0.14 |
| F | | 3.78*** | | 4.61*** | | 5.02*** | | 5.04*** |
| N | | 500 | | 446 | | 420 | | 419 |

Note: *b* = unstandardized regression coefficient; s.e. = standard error; † = $p \leq .10$, * = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$.

Models predicting officer turnover intentions

Voluntary resignation intention was the final decision-making outcome explored within this investigation. As with previous models, different hierarchical estimations of this variable were analyzed and Table 7.16 overviews these results. Model 1 includes

only the influence of officer demographics, with Models 2 and 3 then incorporating officer personal and general risk perceptions, each independent of one another. Model 4 then includes the emotional predictors in conjunction with personal risk perceptions, while Model 5 then includes general risk perceptions. Only Officer Age ($b = -0.21$, $p < .001$) significantly predicts resignation intentions, with older officers statistically less likely to voluntarily terminate employment from their respective institution—a finding very much in line with past explorations of this topic (Ferdik, Smith and Applegate, 2013; Lambert et al. 2010a). A modest 6.0 percent of outcome variance is explained by demographics alone.

This study's hypothesis that heightened risk perceptions would correlate positively with officer desires to voluntarily quit was confirmed, with Model 2 estimations displaying these results ($b = 0.07$, $p < .001$). Correctional guards who believe that constituent elements of their workplace will produce injurious outcomes are statistically more likely to express desires to remove themselves from such perilous environments. In Model 2, Officer Age ($b = -0.19$, $p < .001$) continues to negatively impact voluntary resignation intentions, with no other predictors surfacing as significant. Over 11.0 percent of outcome variance is explained by the predictors of Model 2. Similar demographic relationships continue to be observed in Model 3, with here instead officer general risk perceptions also significantly predicting in the positive officer desires to terminate employment ($b = 0.07$, $p < .001$). Twelve percent of outcome variance is explained in Model 3. Although perceptions of job dangerousness have traditionally exhibited significant associations with CO resignation intentions (Cullen et al. 1989; Wright and Saylor, 1991), this study is the first to examine whether officer personal and

general perceptions of injurious risk from specific workplace dangers influence this outcome.

Several findings arose from Model 4 estimations that are worthy of mention. First, non-White officers, compared to White officers, are statistically more likely to desire to resign from their correctional post ($b = 0.27$), yet this effect was only significant at the $p < .10$ level. Also displaying a significant connection, and as assumed, is Officer Education, with officers possessing more formal years of schooling statistically more likely to voluntarily resign ($b = 0.13, p < .05$). Highly significant associations were observed between most of the workplace emotions and turnover intentions. For instance, both greater Job Involvement ($b = -0.23, p < .001$) and Co-worker bonds ($b = -0.78, p < .001$) negatively predicted this decision-making outcome. Higher stress ratings, instead, were positively associated with officer desires to resign ($b = 0.15, p < .001$). Connections between greater Role Conflict ($b = 0.05$) and Role Ambiguity ($b = 0.05$), each at the $p < .10$ level of significance, and officer turnover intentions were also found in these analyses. Officer personal risk perception effects, instead, were now completely mediated by the entrance of these workplace emotions, with this variable even falling out of statistical significance. Outcome variance was markedly improved between Models 3 and 4, with 46.0 percent of turnover intention variance accredited to these explanatory variables.

Moving from Model 4 to 5, similar relationships continue to be unveiled. Officer Race, Age, Education, Co-worker relations, Job Involvement, Stress and Role Conflict each exhibited significant correlations to turnover intentions. General risk perceptions, much like personal, also fail to reach a statistically significant level of influence on

correctional officers and their desires to terminate employment. Many of these findings compliment results obtained within the broader correctional officer turnover intention literature (Lambert et al. 2010a; Matz et al. 2013). Finally, the explained variance percentage remains rather high at 45.0 in the final model.

Table 7.16: OLS analyses of the predictors of the correctional officer turnover intentions

| Variable | Model 1 | | Model 2 | | Model 3 | | Model 4 | | Model 5 | |
|------------------------|--------------------|--------------|--------------------|--------------|--------------------|--------------|--------------------|--------------|--------------------|--------------|
| | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio | <i>b</i> (s.e.) | t-ratio |
| Race | 0.22 (0.17) | 1.28 | 0.11 (0.17) | 0.65 | 0.11 (0.17) | 0.60 | 0.27 (0.15) | 1.84† | 0.26 (0.15) | 1.78† |
| Gender | -0.09 (0.16) | -0.59 | -0.07 (0.17) | -0.42 | -0.07 (0.17) | -0.41 | -0.10 (0.14) | -0.71 | -0.08 (0.14) | -0.54 |
| Age | -0.21 (0.05) | - 4.61*** | -0.19 (0.04) | - 4.14*** | -0.20 (0.05) | - 4.20*** | -0.14 (0.03) | - 3.51*** | -0.14 (0.04) | - 3.50*** |
| Education | 0.11 (0.07) | 1.57 | 0.12 (0.07) | 1.67† | 0.12 (0.07) | 1.70† | 0.13 (0.06) | 2.17* | 0.13 (0.06) | 2.06* |
| Tenure | -0.01 (0.04) | -0.05 | -0.01 (0.04) | -0.31 | -0.02 (0.04) | -0.36 | -0.02 (0.04) | -0.56 | -0.02 (0.04) | -0.44 |
| Shift | 0.10 (0.15) | 0.66 | 0.04 (0.15) | 0.27 | 0.04 (0.15) | 0.29 | 0.08 (0.13) | 0.61 | 0.06 (0.13) | 0.48 |
| Employment Institution | 0.01 (0.27) | 0.03 | 0.16 (0.28) | 0.57 | 0.20 (0.28) | 0.73 | -0.03 (0.24) | -0.12 | -0.04 (0.24) | -0.16 |
| Co-worker | --- | --- | --- | --- | --- | --- | -0.78 (0.01) | - 4.20*** | -0.08 (0.01) | - 4.16*** |
| Job Involvement | --- | --- | --- | --- | --- | --- | -0.23 (0.03) | - 5.81*** | -0.23 (0.03) | - 5.68*** |
| Role Conflict | --- | --- | --- | --- | --- | --- | 0.05 (0.03) | 1.82† | 0.07 (0.03) | 2.07* |
| Role Ambiguity | --- | --- | --- | --- | --- | --- | 0.05 (0.03) | 1.81† | 0.03 (0.03) | 1.12 |
| Stress | --- | --- | --- | --- | --- | --- | 0.15 (0.02) | 5.88*** | 0.15 (0.03) | 5.88*** |

| | | | | | | | | | | |
|---------------------------|----------------|---------|----------------|---------|----------------|---------|----------------|----------|-----------------|----------|
| Personal Risk Perceptions | --- | --- | 0.07 (0.01) | 5.29*** | --- | --- | 0.01 (0.01) | 0.18 | --- | --- |
| General Risk Perceptions | --- | --- | --- | --- | 0.07 (0.01) | 5.26*** | --- | --- | -0.01 (0.01) | -0.09 |
| Constant | 3.68 (0.40) | 9.10*** | 1.96 (0.53) | 3.70*** | 1.77 (0.55) | 3.25*** | 3.02 (0.75) | 4.00*** | 2.99 (0.77) | 3.88*** |
| R ² | | 0.06 | | 0.12 | | 0.12 | | 0.46 | | 0.45 |
| F | | 4.81*** | | 7.70*** | | 7.62*** | | 26.69*** | | 26.55*** |
| N | | 507 | | 474 | | 474 | | 428 | | 427 |

Note: *b* = unstandardized regression coefficient; s.e. = standard error; † = $p \leq .10$, * = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$.

CHAPTER 8

DISCUSSION AND CONCLUSION

Considerable effort from social scientists across diverse academic fields has been devoted to investigating human risk perceptions and decision-making strategies. Researchers have explored predictors of these concepts, relationships shared between the two, in addition to a wealth of other related inquiries. Although a great deal has been learned from this body of literature, it must be stated that many of these studies relied upon data collected from general population members only. Largely unexamined within the broader risk perception and decision-making paradigms are individuals employed in high risk industries, and specifically, officers of the correctional system. To date, in fact, no study has explored these topics among a sample of correctional officers employed in high security prisons. When one considers the numerous dangers and risks accompanying this line work, such an oversight is surprising. This dissertation, therefore, sought to compensate for this void by collecting survey data from a statewide population of correctional officers working in maximum security level facilities where harmful risk is presumed to be rather high (Crawley, 2004). Of specific interest were examinations of officer risk perceptions of harm from workplace dangers, the predictors of these risk perceptions and of the decision-making techniques adopted by these penal system agents. Findings from these analyses raise a number of important discussion points and are of potential policy relevance to correctional administrators, academicians and other stakeholders.

Limitations

Before discussing the implications and significance of this study's findings, it is important to initially address several of its methodological shortcomings. First, although typed at the top of every electronic questionnaire was the request that officers complete only one, and though officers were reminded of this by both wardens at roll call meetings and the principal investigator during facility visitations, it is difficult to verify whether respondents completed only one survey. If more than one questionnaire was completed by the same CO, this raises concerns over measurement error and error independence in regression models (Hoffmann, 2004). Second, although a population of maximum security correctional officers was surveyed, data for the current investigation were collected from officers in just one state, which inhibits generalization of the findings to officers in other states. Third, the cross-sectional nature of this study limits data interpretation, as causal relationships are difficult to verify. Collection of longitudinal data would enable researchers the opportunity to assess officer risk perceptions and decision-making over time, thus improving attempts at drawing causal conclusions.

Another limitation falls within the domains of officer punishment orientations and bases of power, where values for the coefficient of determination were considerably small for both outcomes. Cullen et al. (1989) and Whitehead and Lindquist (1989), in their analyses of officer punishment philosophies, encountered the same limitation and attributed it to a lack of important predictor variables in the models. Whitehead and Lindquist (1989) further suggested that personality types officers carry into the prison may influence their punishment ideologies. Future explorations of these outcomes should consider the inclusion of personality types as predictor variables. Finally, two of the

danger variables, working alongside mentally ill offenders and working alongside inmates with infectious diseases, were broad in nature. As such, these measures did not allow for a precise understanding of the specific mental or physical illnesses that contributed to officer risk perceptions. These limitations notwithstanding, important insights from this dissertation are still offered and discussed below.

Correctional Officer Personal and General Risk Perceptions

In terms of personal and general risk, officers perceived a rather high degree of harmful risk from an array of dangers encountered within their work environment. This is an interesting finding that indicates that these correctional officers judged their workplace as being unsafe and that they felt vulnerable to its numerous threats. Heightened risk judgments among correctional officers can be particularly problematic for wider institutional safety since they “reduce the likelihood that staff will work cooperatively to resolve tensions...and handle troublesome inmates” (Gordon, Proulx and Grant, 2013, p. 258). In other words, high risk exposure can seriously undermine the ability of officers to effectively perform their job, and given how officers in this study perceived a significant amount of harmful risk, this may be contributing to facility-wide security concerns. To safeguard against such problems, Gordon, Proulx and Grant (2013) recommend a primary strategy of improving organizational communication and/or administrative support for officers since both can “alleviate their levels of...risk” (p. 258).

Another interesting finding was how despite the rather infrequent occurrence of prison riots (Martin and Zimmerman, 1990), and compared to the other workplace hazards, officers perceived the greatest risk of injury from this particular danger. Prison riots have been described as “uncontrollable...and high salience events...that can

severely disrupt authoritative regimes” (Martin and Zimmerman, 1990, p. 713). Although rare, should prison riots occur they have the potential to destroy penal infrastructures, inflict serious harm upon others and generate institution-wide chaos (Useem, 1985). Inspection of other descriptive statistics illustrates how riots, relative to the other dangers, were rated as least controllable and possessing the greatest potential for catastrophic and fatal outcomes. Evidently officers are judging the riskiness of riots not so much on their probability of occurrence, but rather, on their potential for inducing fatal injury should they occur, and thus they value the high severity of their consequences. Restated, the physical danger of a riot was viewed as being very severe and perceived as a greater risk than other more commonplace dangers (like exposure to physical diseases).

Fischhoff et al. (2000) uncovered a similar finding in their respective analysis, where compared to 29 other dangers, survey-takers rated nuclear power plant explosions as posing the greatest fatality risk. Historically nuclear power plant explosions have occurred only sparingly (Slovic et al., 2000), and though respondents may have been aware of this, they understood that such events present disastrous possibilities for humanity (and themselves). Here as well risk was determined more by the magnitude of the consequences, rather than on the probability of the event actually taking place. Subjects in Fischhoff et al.’s (2000) study, much like officers in this one, also found little control over a salient and low probability-high consequence danger. It appears though that the context of the workplace had particular salience to correctional officers, which suggests that while the general public may share a broad risk perception, this can be influenced by one’s working milieu. Findings from each of these analyses, as a result,

provide further insight into how psychologically-based variables operate to influence human judgments of risk.

In sum, summated risk perception ratings across all dangers were considerably high, thereby indicating that officers are aware of a multitude of dangers and of their own workplace as having potential for harmful risk. The presence of so many risk factors highlights the vulnerable nature of working in a high security prison and brings to light the potential for harm and other negative consequences connected to working in such a field. In conjunction with other studies that found correctional officers to be preoccupied with workplace dangers and their possible threats to officer safety, these results reinforce the point that correctional officers are employed in dangerous environments (Garcia, 2008; Alaird, 2009; Gordon, Moriarty and Grant, 2003). With this, attention is now turned to the specific variables that appear to influence officer perceptions of risk.

This study highlights links between officer demographic features, workplace emotions, psychometric characteristics of dangers and risk perceptions. It was found, for instance, that non-White officers were more likely to perceive harmful risk from workplace dangers when compared to their White counterparts. These findings are consistent with those uncovered by Gordon, Proulx and Grant (2013), who found that non-White officers perceived greater risk of inmate victimization than their demographic counterparts. Gordon, Proulx and Grant (2013) explained this relationship as the result of reduced trust and respect between officers, which can create a hostile work environment in which COs invest little care into the physical well-being and safety of their co-workers. Environments characterized by these features jeopardize the security of “not just inmates, but the entire correctional staff during periods of unrest” (Gordon, Proulx and

Grant, 2013, p. 260). The authors recommended the expansion of diversity training among officers that promotes compassion and an environment where there is mutual respect between all employees. If officers know that they have the support of their co-workers and feel physically protected from workplace dangers because of this, they may perceive less risk.

Across both risk perception models, officers who reported greater involvement with their profession perceived less risk compared to their counterparts. For more involved officers, increased investment signals favorable perceptions of each dimension of the job, which may even lead them to view dangers as non-threatening. By contrast, less involved officers, since they voiced little care for their job and negative conceptions of supervisors, co-workers and even dangers, perceived greater risk. Colquitt, Scott and Lepine (2007) found that when line-level organizational employees were heavily involved with their job, they were more informed about what to expect from it as well as how to handle demands and problems. Officers who view themselves as being “more involved” with the workplace may be receiving additional information regarding threats posed by inmates, the dangers they must confront, and have more definitive ideas about how future problems could be avoided. This additional knowledge permits officers a better opportunity to assess and control the dangers found within their workplace, and by extension, attenuate their risk assessments.

Greater role conflict was statistically associated with increases in officer general risk perceptions. Ambiguous job-related directives received by these officers suggest that they may be unsure how to resolve problems and threats within their work environment, thereby increasing perceptions of risk. Garcia (2008) supports this interpretation when

referencing how officers who perceive greater organizational clarity “feel more empowered due to the high level of inter-departmental communication, which makes them more aware of the job and less likely to perceive risk” (p. 41). Since high degrees of role conflict can jeopardize institutional security, increase rates of officer absenteeism and turnover as well as create strained relationships between officers and management, it is important that administrative personnel provide similar work expectation requirements to all officers, ask if officers understand directions and maintain open lines of communication between staff and management (Hepburn and Albonetti, 1980; Lambert et al. 2005). These recommendations, according to Lambert et al. (2005), can also help to reduce danger and risk perceptions on behalf of officers and lead to a more functional institution.

Contrary to hypothesized predictions, greater role ambiguity negatively influenced officer general risk perceptions. Recall that some of the survey items used to measure this concept included “I am unclear to whom I report or who reports to me,” and “I do not understand what is expected of me.” This may suggest that since these officers lack a comprehensive understanding of their work environment, they are not concerned about the presence of workplace dangers and their potential for harmful outcomes.

Absent this knowledge, officers will therefore perceive less risk. Knight (1921) explained that a risk judgment involves information about the parameters characterizing a specific system. Without that information, an assessment of risk is difficult to formulate. This argument is thereby extended to this relationship as those officers who lack organizational understandings may not even have knowledge of what workplace dangers are, which leads them to perceive less risk. However, since this finding was unexpected

and to some extent even contradicts the role conflict result reported above, it is important that future researchers explore this relationship in greater detail.

Higher self-reported levels of stress, in both the personal and general risk perception models, were significantly associated with increased risk perceptions. Garcia (2008) explained that “high job stress makes officers less aware of their environment...leading to poor decision-making and more perceived risk” (p. 41). She further argues that stress induces a lack of environmental awareness because individuals may be preoccupied with internal concerns and neglect to pay attention to their external surroundings. Due to their lack of awareness, these officers may not be taking required measures to protect themselves from such a dangerous work environment. Failure to enhance personal safety and be attentive to threats is evidently impacting how these officers judge the dangers in their workplace. When individuals are stressed, moreover and according to McEwen (2008), they become skeptical and untrusting of others. Slovic et al. (2000) found that when private citizens lacked trust in management tasked with protecting the public from dangers, they perceived higher levels of risk. This was because vulnerability to risks “is a natural extension of a lack of trust” (p. 84). It appears that this argument can be extended to the current stress-risk perception relationship since officers recording higher stress may not trust inmates, co-workers or even supervisors, and as a result, feel vulnerable to prison-based risks.

An extensive line of research has explored the relationships between psychometric properties of dangers and human risk perceptions, with results providing overwhelming support for the predictive power of psychometrics (Slovic et al. 2000; Fischhoff et al. 2000; Kobbeltvedt et al. 2004). Results from this dissertation add to this

line of work by providing additional evidence of the strong association between these variables. The psychometric scale that incorporated measures of the voluntariness, calm, knowledge and control variables exhibited a negative and significant connection to officer personal and general risk perceptions. In 1969, Starr wrote that risk judgments are largely a function of whether we feel prepared to handle negative consequences. Likewise, Sjoberg et al. (2000) found that when members of a community were informed of some of the possible consequences resulting from construction of a nearby nuclear power plant (such as radiation leaks), they perceived less harmful risk from its construction compared to community members who did not receive this information. Such knowledge, explained these authors, led these individuals to feel empowered and prepared to handle any negative outcomes. For the comparison groups in these samples, they held feelings of helplessness and isolation, which appeared to produce comparatively higher risk perceptions. A risk judgment, in the end, is a forecast of the future and if we feel ready to handle and control potentially harmful events, we may perceive of them in a less negative light.

This study is similar to that of Sjoberg et al.'s (2000) analysis because evidence suggests that possession of knowledge and information allowed officers to hold preventive and controllable perceptions about dangers, and by extension, made respondents feel better prepared and empowered. Furthermore, officers who indicated having knowledge and control over dangers and who rated them as involuntarily imposed and manageable perhaps have the resources necessary to indemnify themselves. According to these data, feeling prepared, having advanced knowledge and knowing how to anticipate consequences decreases feelings of vulnerability, which thereby reduces risk

perceptions. An important note is that though these respondents held these perceptions, no measurement of daily activities was obtained to validate behaviors. However, it still appears that the mere presence of these perceptions reduced concerns about dangers in the prison workplace.

Correctional officers who perceived fatal consequences from workplace dangers, who believed their risks were potentially catastrophic and who reported high levels of danger-induced anxiety were significantly more likely to perceive risk than officers who rated these variables in opposite manners. Prior researchers have summed together these ratings to create a composite measure labeled “dread” (Kobbeltvedt et al. 2004). Dread ratings reflect “the extent to which hazards evoke feelings of dread...and represent emotional responses to the risks associated with life’s dangers” (Kobbeltvedt et al. 2004, p. 790). Ratings for each of the variables comprising the “dread” scale, furthermore, signal measurements of respondents concerns over the magnitude and severity of consequences from dangers (Fischhoff et al. 2004). Officers who rated correctional-based dangers as possessing catastrophic and fatal characteristics, for instance, are evidently reporting increased risk perceptions because they are focused on their destructive potential(s). High dread ratings for each of the correctional dangers signal respondent concerns over the number of possible injuries and deaths, the economic costs of prison-based dangers as well as other serious consequences.

Taken together then, not only was each psychometric variable a significant predictor of officer risk perceptions, but these findings are in large agreement with the established body of literature within the psychometric paradigm of risk perceptions (Slovic et al. 2000; Kobbeltvedt et al. 2004). When investigating the influence of

qualitative danger attributes on risk perceptions, past psychometric researchers have traditionally relied upon data collected from general laypeople. Given how this study collected perceptual data from high security correctional officers, it reinforces the point that affective heuristics (Johnson and Tversky, 1983) are extremely vital in predicting people's risk perceptions, and evidently illustrates that psychometrics perform similarly across different categories of people in influencing their risk assessments. What this means, overall, is that psychometrics offer a general, rather than a situational or contextual-based, theory of risk perceptions.

It must also be stated, finally, that findings from this and other examinations of psychometrics underline the importance of personal and emotional responses to dangers. Risk perceptions, contrary to the technical-objectivist viewpoint (Garrick, 2008), are not solely guided by objective quantitative estimates of risk events. Instead, feelings of vulnerability, preparation or even anxiety are a driving force behind many of our judgments, inclusive of risk perceptions. Even Kobbeltvedt et al. (2004) remarked that “people tend to have a multidimensional risk concept incorporating both quantitative measures...but more importantly, qualitative characteristics of a given hazard that elicit emotional responses” (p. 806). Kasperson (1992) stated that when risk managers are debating strategies to protect the public from life's dangers, they must acknowledge their emotional reactions and personal perspectives. This way, risk managers are in a better position to successfully accomplish their job. Correctional administrators are encouraged then to solicit the personal viewpoints and emotional responses of officers regarding workplace dangers in order to institute effective strategies that enhance wider institutional security.

Policy implications of correctional officer risk perceptions

There are a number of potentially relevant policy implications connected to the overall findings on officer personal and general risk perceptions. First, and concerning the descriptive ratings of each of these outcomes, it would behoove correctional administrators to reduce the amount of risk officers are perceiving from their work since having employees distracted by physical and mental threats can “impede their performance and lead to ineffectively run institutions” (Garcia, 2008, p. 159). Officers who are overly preoccupied with safety issues may be distracted and may not be devoting the required attention to their numerous job demands. This can lead to officers feeling vulnerable and susceptible to the countless dangers surrounding them during their shift. As Slovic et al. (2000) even remarked, feelings of vulnerability can lead to a lack of trust and even apprehensiveness in our decision-making. To counteract these consequences, it is suggested that correctional administrators provide officers additional training on their workplace that informs them about its constituent elements and uncertainties. This knowledge, as indicated, can enhance feelings of personal control and minimize feelings of vulnerability. Cognitive psychologists have coined the term “internal locus of control,” which refers to when “people believe they have the ability to control outcomes” (Zaidi and Mohsin, 2013, p. 16). The knowledge and information received from additional training can empower officers and provide them with a sense of security and control in knowing how to anticipate potential outcomes.

Along these same lines, correctional managerial personnel are encouraged to implement cultural diversity training for correctional officers. Gordon, Proulx and Grant (2013) recommended this strategy because it can help foster respect, compassion and

understanding among officers. Such feelings may lead officers to believe that they have a degree of protection and support from their fellow co-workers, which may reduce any judgments about harmful risk. Administrative officials are also encouraged to decrease officer role conflict, which can have wide-ranging and negative impacts on prisons (Lambert et al. 2005). Efforts to decrease role conflict, again, consist of establishing open lines of communication between management and line staff, having supervisors ask if officers understand what is expected of them and enforcing consistent work expectations for all officers (Lambert et al. 2005).

This study further revealed that officers who felt personally gratified with their job were less likely to perceive risk. Supervisors and managers should adopt strategies to increase officer involvement with the job, with one including the development of reward programs that demonstrate to officers that superiors are recognizing their invested effort (Lambert et al. 2013). Lambert et al. (2013) even suggest that by increasing training and providing additional direction to officers concerning their job, officers will be more likely to identify psychologically with the profession. This increased psychological identification can translate into reduced danger and risk perceptions (Lambert et al. 2013). Hiring mental health professionals or at least affording officers outlets to voice their work-related stress and frustrations could decrease officer job-related stress, and by extension, their risk perceptions. Support for this policy recommendation is offered by Peterson and Pbert (1992) who found that levels of stress and mental exhaustion among a sample of incarcerated offenders were significantly decreased following their entry into a mental health rehabilitation program. Even Paoline et al. (2006) recommended that penal

institutions implement additional mental health programs for officers in order to reduce their levels of stress and exhaustion.

Correctional Officer Bases of Power

Mean ratings of the five power bases indicate that officers relied more upon referent power, compared to the other bases, as a method of regulating prisoner conduct. This finding is in some contrast to Hepburn's (1985) study, who instead found that officers ranked legitimate and expert power as the most important reasons why inmates "do what I want them to do" (p. 151)¹⁵. According to these data, respondents evidently believed that the use of behaviors reflecting fairness, respect and friendliness would positively influence the actions of inmates (Smith et al. 2009). Stichman (1993) uncovered a somewhat similar finding in her study, where inmates expressed respect for officers, and as a result, complied with institutional demands. Some research within organizational psychology has found that when superiors behave in respectful, fair and friendly manners with their employees, subordinates are more likely to engage in organizational citizenship behaviors and increase their work ethic (Wiesenfeld, Raghuram and Garud, 2001). These authors explained this as the result of an instilled sense of obligation that leads workers to engage in behaviors that will please their bosses.

Even Taxman and Gordon (2009) found that when correctional officers believed that their bosses were friendly and behaving in organizationally just manners, COs were less likely to report stress and more likely to be committed to the job. Organizational justice has two dimensions: distributive and procedural fairness. While the former

¹⁵ Among others, differences in the statistical methodologies employed between this study and Hepburn's may be accounting for these contrary findings. Whereas again this study relied upon variations of the ordered logistic regression technique to predict officer power bases, in 1985 Hepburn computed ANOVA summaries.

focuses on the outcome of a decision, the latter centers around the process leading to the outcome (Folger, 1977; Lind and Tyler, 1988). When individuals believe that they are receiving fair outcomes and that the decision-making process preceding the final result was undertaken in unbiased and fair manners, people are more likely to respect the decision-maker(s), and as a result, behave in organizationally approved manners (Taxman and Gordon, 2009). It can be argued that these same dynamics are operating between inmates and correctional officers. COs apparently believe that by treating inmates fairly, they will elicit respect in return, which will transition into positive behavioral feedback on behalf of offenders. With this, a discussion of the models predicting officer power bases is provided, beginning first with referent power. Within each section, interpretations of effects are offered and policy implications are suggested.

Referent Power

Among the statistically significant predictors of referent power ratings was officer race, where in three of the four models, it was found that non-White officers were statistically more likely to adopt referent power than their White counterparts. As explained earlier and according to Gordon, Proulx and Grant (2013), non-White officers represent a demographic minority status within the correctional officer workforce. Due to their minority status, they may be trying to assert their authority on inmates by invoking feelings of respect, fairness and friendliness (Smith et al. 2009). Also, since the majority of the inmate population is comprised of minorities (Freeman, 2003), perhaps non-White officers believe that inmates are more respectful of this particular demographic of officers. Even Britton (1997) found that minority officers reported strong relationships with inmates and efficacy in working with them partially because they seem to identify

with incarcerated offenders. If officers understand that they can monitor offender behavior by invoking the above feelings of respect and fairness, they may try to interact with prisoners in organizationally just manners and use other similar strategies to evoke respect (Taxman and Gordon, 2009).

It was also found that more educated and tenured COs were more likely to value referent power. One might expect these officers in particular to utilize respect, for instance, as a way to modify inmate behavior, mostly because of their experienced and educated statuses. These officers may be cognizant of the fact that inmates respect educated and experienced persons, so they will use their positions to their advantage. If in fact referent power serves its intended purpose of successfully regulating offenders, administrative officials may seek to recruit and hire more educated and experienced correctional officers, or at least officers who can demand respect on behalf of the offenders they supervise (Stichman, 1993). It also recommended, again, that officers utilize procedural and distributive fairness when dealing with inmates as these concepts have been shown to correlate with numerous positive behavioral outcomes (Taxman and Gordon, 2009; Lind and Tyler, 1988; Sunshine and Tyler, 2003).

Reward Power

Statistically significant associations between officer tenure and education levels and their reward power reliance were observed across all four models estimating this decision-making strategy. Specifically, officers with more education and/or job-related experience were more likely to perceive value in providing inmates special help and benefits. Additional knowledge and job experience acquired by these officers over the years may have led them to conclude that affording prisoners amenities is an efficient

way of ensuring their compliance with institutional rules. Correctional guards reporting greater involvement with their job were also more likely to perceive utility in providing inmates with rewards for good behavior. Williams, Pitre and Zainuba (2000) explain this dynamic as part of a concept called organizational citizenship. Here, citizenship behaviors of employees “increased when they perceived of rewards offered by supervisors as positive” (p. 33). In other words, when employees believed that they were receiving rewards from managerial personnel, they were more likely to invest additional effort into the job. For the above correctional officers, by allowing inmates opportunities to work in the canteen or affording them additional food or time in the yard (Stojkovic, 1984), they perceive an associated positive behavioral response from the offenders, and by extension, reductions in workplace risks.

In contrast, correctional officers who favorably evaluated their co-workers expressed a reduced reliance upon reward power techniques, thus suggesting that for these officers, affording inmates rewards does little to control offenders and reduce risk. If these officers care about their relationships with peers and wish to not see them harmed by inmates, they may perceive reward power as an ineffective way of bringing about these outcomes. Another interesting finding within the reward power concept regarded the influence of overall officer risk perceptions. Heightened risk perceptions were associated with a decreased reliance upon this power base, indicating that for those officers perceiving greater risk, providing rewards and benefits to inmates is an ineffective behavioral control mechanism. Hepburn (1985) explained that offering rewards is only a passive form of power, and that given wider institutional, bureaucratic and socio-political changes to correctional industries since the beginning of the 20th

century, officers are rarely able to provide inmates rewards and benefits. These changes and observations may be accounting for these relationships. In the end, contextual factors surrounding the regulation of offender behavior, as these findings further indicate, must be considered when debating whether rewards provide a safe method of ensuring wider prison safety (Hepburn, 1985).

Legitimate Power

Two variables across every equation estimating officer legitimate power ratings surfaced as being statistically significant. Older and more educated officers were each more likely to use authority as a way to enforce institutional regulations. Regarding the effects of age, older officers perhaps believe that advanced age is something to be respected on behalf of inmates and they will use this as a way to modify prisoner behavior and reduce risks. Younger individuals are sometimes socialized to be respectful of their elders; hence, if older officers are cognizant of this, they believe they can assert their authority simply upon the grounds of their older age. More educated officers, instead, perhaps believe that they are somewhat superior to inmates because of their advanced knowledge and will use this as leverage in making inmates comply with demands. Similar to the referent power discussion, status for these officers seems to be a way of asserting authority, so it may be suggested that officers utilize positional differences in order to enforce rules. In Stichman's (1993) study, in fact, she found that inmates respect the position and authoritative power of the correctional officer and will respond to demands when they believe that this job is being performed fairly. Given this, it is again advised that officers be fair and unbiased in their interactions with offenders in order to elicit deference in return.

Coercive Power

In three of the four models estimating officer coercive power ratings, role conflict surfaced as a statistically significant predictor, with higher values on this variable associated with an increase in coercive power reliance. Given how these officers have been provided unclear directions concerning how to regulate and supervise offenders, they perhaps view force and sanctions as the only means available to monitor them. Across three of the four models, higher ratings on officer stress scales were associated with a decreased reliance on coercive power. Due to their reportedly high stress, these officers may be reluctant to apply force or use sanctions for fear of the repercussions that may ensue as a result. It may also be stated that highly stressed officers feel weak and incapable of applying force on inmates. Stress, in fact, has been linked to a number of negative outcomes including burnout (Lambert et al. 2010a), mental exhaustion (Lambert, 2006) and even physical exhaustion (Koeske and Koeske, 1993).

Consistent with hypothesized expectations, higher general risk perceptions by officers correlated with coercive power reliance. One possible explanation for this relationship is that for those officers who perceive injurious risk for others within the workforce, they view sanctions, force or even their threats as effective strategies to mediate the risks posed by inmates. Hepburn (1985) partially supports this interpretation given how his analyses found more punitively-oriented officers to favor coercive power tactics. Given how this study found higher risk perceptions to correlate positively with punitive orientations, it can be argued that officers perceiving high levels of risk view physical retaliation as a way to protect themselves. Hepburn (1985) goes on to state that coercive power is an effective mechanism for monitoring offender behavior—but only

when it is used sparingly. Correctional institutions, therefore, are encouraged to invoke this form of power only when necessary, and instead, rely more upon the legitimate and referent authority of the institution itself.

Expert Power

Age surfaced as a statistically significant predictor of expert power, with older officers more likely to rely upon this decision-making strategy than their counterparts. Older correctional guards may believe that their advances in age have provided them life lessons that have yet to be experienced by the younger demographic of incarcerated offenders. These officers have lived longer and experienced different phases of life; thus, they have the professional judgment (Cressey, 1965) to guide inmates. Cressey (1965) has conceptualized professional judgment as when one possesses the technical competence and knowledge required to direct prisoner behavior and prison activities. Officers expressing greater involvement with the job were also statistically more likely to adopt expert power, a finding uncovered in three of the four model estimations. Correctional officers who are more involved with the job are provided information about prison activities and on-goings that can thereby be used to regulate offender conduct. As such, Cressey's (1965) conceptualization of expert power may be used to explain this relationship as well.

Higher stress and overall risk perception ratings were negatively associated with expert power. The mental and physical exhaustion often accompanying high degrees of stress or preoccupations with safety can sometimes lead individuals to question their capabilities. Slovic and colleagues (2000) found that when general public members of their sample were placed in stressful situations and/or are heavily concerned with their

physical safety, they were likely to behave irrationally and make impulsive decisions. Stressed and/or overly concerned officers may be experiencing these emotions, which leads them to believe that they are not in a position to offer sound professional judgment. Another interpretation of these findings is offered by Wrong (1979), who views expert power as a base that utilizes techniques of nurturance in order to ensure inmate compliance. Officers who are experiencing stress, perhaps because of inmates, and officers who perceive high degrees of harmful risk from the very inmates they supervise, may view nurturing methods as ineffective in their quest to establish order within the prison.

Correctional Officer Punishment Orientations

It will be remembered that the rehabilitation, social distance, concern for corruption of authority and punitive punishment orientations were the four concepts under examination in this part of the study. These measures were selected because they represent perceptions that are often entrenched and take time to develop and because they provide long-term strategies to reduce risk. Descriptive findings revealed how correctional officers expressed strong agreement in adopting decision-making strategies that protect them from the corruptibility of offenders. Specifically, a majority of officers reported that they did not desire to establish close relationships with inmates, that they did not trust inmates and that they must maintain short and businesslike conversations with offenders at all times. Ultimately these findings indicate that officers are reluctant to establish close connections to offenders for fear that such relationships will only harm officers. Whitehead and Lindquist (1989) observed similar response patterns in their investigation, and remarked that because officers in their sample possessed strong moral

convictions regarding their role and status within the prison, they desired not to have their morality marred by offenders. It may be explained then that if officers in the current sample hold similar ethical principles, they view a close relationship with offenders as a risk factor that can lead to eventual corruption.

It was also found that respondents expressed relatively moderate and equal degrees of agreement across the social distance, punitive and rehabilitation scales. Cullen and colleagues (1989) uncovered similar findings and explained that orientations are not so much reflections of the “true” ideals of officers, but instead are indications of whether officers are willing to adopt any strategy available to monitor offenders. Since oftentimes different circumstances require different responses, it is important that officers are open to a variety of decision-making tactics that can be used to effectively perform their job (Cullen et al. 1989). For example, there may be instances where offenders are particularly problematic and require more punitive treatment, while instead other offenders would benefit from additional counseling. Officers who recognize these differences and are open to employing an assortment of strategies will be better prepared to handle the variable nature of the offender. Administrative officials are therefore encouraged to recruit and hire those officers who express flexibility in their orientation-based decision-making.

To date, only a handful of studies have explored predictors of each of these punishment orientations, with no study having incorporated either officer personal or general risk perceptions as independent variables (Cullen et al. 1989; Whitehead and Lindquist, 1989; Bazemore, Dicker and Al-Gadheeb, 1994). This study adds to this body of knowledge by regressing officer punishment ideologies on their demographics,

workplace emotions and personal and general risk assessments. Below are discussions of the findings for each ideology, as well as interpretations of relationships and potential policy suggestions.

Correctional officer rehabilitation orientation

In the first model estimating the rehabilitative orientation of correctional officers, tenure surfaced as a statistically significant demographic predictor. Possessing additional years of job-related experience led these officers to favor counseling and rehabilitation for inmates. With time in the workplace, these officers developed positive perceptions of the utility of rehabilitative strategies. Respondents who rated positively their relationships with co-workers were also statistically more likely to adopt a rehabilitative orientation towards inmates. Since these officers feel that they are valued and respected by their peers, maybe they believe that same social support should be provided to offenders. Helsen, Vollebergh and Meeus (2000) found that when adolescents felt that they were cared for and assisted by friends and family, they were less likely to engage in anti-social conduct. Other studies found that when humans feel accepted and respected, they are more likely to behave in pro-social manners and develop positive outlooks on life (Zehr, 2002; Braithwaite, 2002). These findings then offer some support for the expansion of rehabilitation programs across correctional institutions.

Conversely, officers reporting a poor understanding of their work environment and expectations were statistically less likely to favor rehabilitation. Lambert et al. (2005) found high levels of role ambiguity to positively predict officer job dissatisfaction and even turnover intentions. If these officers are experiencing these latter emotions, they are perhaps less likely to assist offenders in a rehabilitative manner because they believe

offenders do not deserve such favorable treatment. It could also be argued that given a deficient understanding of their job, they are unsure what even constitutes a rehabilitative role. Finally, it was found that officers who perceived greater personal risk were less likely to orient themselves in a rehabilitative manner towards inmates. Since these officers believe that inmates pose a physical threat to their well-being, they may be disinclined to believe that rehabilitation is a way to suppress any injurious risks. De Fruyt, Van de Wiele and Heeringen (2000) found that when their research participants (consisting of general public sample members) felt threatened by others, they reported significantly greater desires to retaliate in physical manners. This was because participants viewed force as the optimal risk mediation technique.

Correctional officer social distance orientation

Non-white officers, in all four equations examining officer social distance, were statistically more likely than their White counterparts to demonstrate distance from inmates by reporting less compassion and trust for them. Whitehead and Lindquist (1989) found similar results and suggested that black officers must “be hired for reasons other than their presumed propensity to relate to...black inmates” (p. 84). It would be a mistake on the part of correctional administrators, according to these analyses, to hire non-White officers simply upon the assumption that they can establish social connections to minority offenders. Evidently minority officers do not desire to create close friendships with inmates, which signals an inclination on their part to maintain professional relationships at all times. Older correctional guards, compared to their more youthful co-workers, were instead more likely to believe that officers should demonstrate trust and compassion for inmates. Advances in age have perhaps made these officers more accepting of the social

support offenders require in order to be reformed. Blekesaune and Quadagno (2003) found in their study of public attitudes towards welfare and other social programs that older sample members not only favored the expansion of these programs, but viewed disenfranchised people with great empathy. Officers of this study are apparently experiencing these same empathetic sentiments, which may explain their desire to minimize social distance with inmates.

It was also found that feeling satisfied and content with the job significantly decreased social distance between officers and inmates. Part of the job of a correctional officer is to associate with offenders and sometimes even develop rapport with them. If officers are involved and feel satisfied with this component of their profession, they will perhaps feel more inclined to develop compassion and trust for the offenders they supervise. Toch and Klofas (1982) suggested how maintenance of institutional safety is largely predicated upon the relationships officers establish with inmates. Prison administrative officials are therefore recommended to institute some of the policies outlined above to increase job involvement among all officers, which evidently, may have wide-ranging benefits for the institution.

Higher ratings on both the personal and general risk perception scales significantly increased ratings of social distance. This relationship makes intuitive sense as officers who believe prisoners pose a physical threat may take efforts to disassociate themselves from inmates. Officers who assume such a viewpoint also believe that increased distance will serve as a risk management strategy. Kasperson (1992) found that when study participants perceived high degrees of risk from dangers such as gang presence, they were statistically more likely to remove themselves from these high-risk

situations than respondents who perceived less risk. Human beings desire to feel protected and when under threatening circumstances, they will take courses of action that will enhance their safety. Evidently increasing social distance serves as a self-protective measure for these officers.

Correctional officer punitive orientation

Both older and non-White officers, compared to their respective demographic opposites, were statistically less likely to agree that inmates should be treated in punitive manners. Whitehead and Lindquist (1989) and Jurik (1985) also found minority officers to hold more favorable attitudes towards inmates when compared to White correctional officers. Adoption of a punitive stance towards not just inmates, but humans in general, has typically been viewed as a reflection of a more conservative philosophy (Williams, 2006). Non-White officers, traditionally, have instead reported more liberal ideologies (Williams, 2006). Consistent with some of the broader social and political science literatures (Collins, 2005), data from the current investigation demonstrate that non-Whites are more likely to adopt a liberal viewpoint concerning the treatment of inmates. Collins (2005) argues that such liberal mentalities arise from the socialization experiences of minorities who historically have represented a subjugated population, and now wish to not reciprocate such unfavorable treatment upon others. Regarding the effects of age, older officers who have worked in corrections for a number of years and witnessed the revolving door of inmate reform (Freeman, 2003), have perhaps become skeptical of the utility of harsh punishment as a reformation tactic. Sherman (1993) supports this interpretation when claiming that rapacious treatment often leads humans to become defiant against power-holders.

Negative and significant connections between stronger co-worker relations and punitive orientations were also observed. When one feels valued, respected and appreciated by fellow peers, that person is likely to reciprocate this treatment upon others (Garcia, 2008). Officers with stronger bonds to their peers, furthermore, are perhaps more content and satisfied with life and thereby inclined to view and treat inmates favorably. Contrary to this relationship, officers recording higher stress and role ambiguity were more likely to favor punitive treatment of offenders. Often when humans are strained or stressed, they may express those frustrations by treating others harshly. In an overview of the organizational stress literature, Lazarus (1995) found that when employees were stressed, not only were they more likely to be dissatisfied with the job, but they were also more likely to treat fellow co-workers and supervisors in negative manners. If overly harsh treatment of prisoners by even correctional officers can lead to defiant or disruptive behavior on behalf of inmates, as suggested by Sherman (1993), prison administrative officials are encouraged to adopt policy recommendations that reduce levels of officer stress and role ambiguity. Such measures may include, as referenced earlier, hiring additional mental health staff and maintaining open lines of communication between staff and management. Officers must feel emotionally stable and have the information required to successfully accomplish their job. When these elements are in place, the wider institution may function more effectively.

It was found that higher personal perceptions of risk were positively related to the punitive orientation scale. Officers who feel threatened by inmates may believe that punitive treatment is a means to mitigate these risks. Returning again to the findings from De Fruyt, Wiele and Heeringen (2000), when general public members of their sample felt

threatened and/or that their safety was in jeopardy, they were more likely to respond with physical retaliation. If officers understand the dangerous nature of their job and are instructed about how to handle risks using less combative tactics, they may not only sidestep the use of force as a protective mechanism, but perceive less risk as a result. Once again it is recommended that prisons provide additional training to their officers that includes information about inmates, the threats they pose, and the decisions officers *should* take to protect themselves and others.

Correctional officer concern for corruption of authority orientation

In all estimations of the concern for corruption of authority orientation, older officers, compared to their younger peers, were statistically less likely to be concerned with the corruptive potential of inmates. Whereas younger officers are perhaps inexperienced to the way they should interact with inmates and enter the workforce with specific morals they wish to not have corrupted, older officers have become accustomed to inmates and have learned that they do not pose much of a threat concerning corruptibility. Their advanced age and experience have led them to adopt a more laissez-faire mentality concerning social interactions with incarcerated offenders. Whitehead and Lindquist (1989) observed a similar relationship and explained that younger officers were in a position where they needed to earn respect from superiors and believed that fraternization with inmates jeopardized not only this objective, but their overall ability to assert authority as well.

Greater job involvement negatively predicted concern for corruption, which may be explained by the fact that these officers feel satisfied with their relationships with inmates and thus seldom preoccupied with any corruptible risks they may pose. Again, a

large aspect of the correctional officer's job is to interact with inmates; hence, for those officers expressing total satisfaction with their profession, they may only hold positive evaluations of inmates. Among Black correctional officers, Whitehead and Lindquist (1989) found a similar result in that satisfied officers were less likely to be concerned over the corruptible threats posed by inmates. Since part of their total job satisfaction derives from their relationships with inmates, it is a natural extension that they would not fear being corrupted. In line with expectations was the finding that greater stress ratings would correlate in the positive direction with concern for corruption. Officers who are stressed may be more likely to question inmate motives. Recall from earlier how McEwen (2008) found high stress levels to negatively predict trust in others, mostly because when we are under high stress, we feel vulnerable to potential threats. Given the reportedly high stress levels experienced by these officers, they apparently find it a sound strategy to avoid placing themselves in potentially vulnerable states.

An interesting finding that surfaced from this study, and one that ran counter to original predictions, was that greater role ambiguity negatively impacted concern for corruption of authority. Given that these officers did not even understand that they have authority or how to enforce it, they thus were less likely to feel threatened by inmates. They are indicating unawareness that unprofessional relations with inmates could mar the well-intentioned nature of correctional officers. It is suggested that administrative officials instruct these officers about such possibilities so that at if threats do present themselves, these officers can at least engage in self-protective measures. Finally, increased personal and general risk perceptions correlated positively with corruptibility concerns. Being morally and/or professionally corrupted may be, according to these

officers, the antecedent to other more serious risks such as injuries or fatalities. At the core of such skepticism is a fundamental lack of trust, which Slovic and colleagues (2000) have found can irreparably damage relationships between people. To ensure that inmates and officers are at least collegial, it is important that both sides develop better understandings of one other.

Broader policy implications for officer bases of power and punishment orientations

Prison systems across the United States vary in their correctional philosophies, with some favoring counseling and rehabilitation, others punitive treatment, and still others a blend of different ideologies (Hepburn and Albonetti, 1980; Lambert et al. 2005). As correctional officers are the front line staff delivering any one of these services to inmates (Lipsky, 2010), administrators should be aware of the punishment ideology to which officers ascribe. Depending upon the particular goals of an institution, it would behoove supervisory personnel to attract applicants with philosophies similar to those of the prison. Even Cullen et al. (1989) make the claim that successful delivery of correctional services depends upon the personnel providing them. Bases of power and punishment orientation outcomes analyzed in this dissertation are largely a reflection of how officers believe inmates should be treated, and of how they themselves self-reportedly treat inmates. Variability across these decision-making outcomes was observed, suggesting that not all officers share similar ideologies. Therefore, administrators in need of specific COs may benefit from these results that shed light upon some of the differences between officers in their stance toward offender treatment.

Furthermore, these results may also be of value to correctional administrators given how various factors were found to significantly account for these decision-making

outcomes. For instance, while it was found that officers reporting stronger connections to their co-workers were less likely to use reward power, more educated and/or experienced officers reported greater reliance on this power base. Many of these findings indicate that circumstances surrounding the implementation of these strategies will dictate under what conditions they are most appropriate. Both administrative officials and correctional officers can learn from the insights provided by these officers when debating about how and when any one of these power bases or orientations should be adopted.

Correctional Officer Turnover Intentions

To date, there is a long line of research concerning the voluntary resignation intentions of correctional officers (Lambert et al. 2005; Lambert et al. 2010b; Minor et al. 2010; Stinchcomb and Leip, 2013). Findings from this study's analyses not only contribute to this body of knowledge, but provide guided direction for administrative officials facing the consequences of high officer resignation rates. Among this sample of officers, it was found that between one-third and one-half indicated that they have either thought about or are currently contemplating resigning from their current position. Past research on this topic has found comparable rates of officer voluntary resignation intentions (VTDC, 2005; Lambert et al. 2005; Ferdik, Smith and Applegate, 2013). As indicated, high rates of officer turnover can create serious problems for penal institutions, including "mandatory overtime, order-ins, a higher inmate to correctional officer ratio and working with a revolving door of inexperienced officers" (VTDC, 2005, p. 1). What follows is a discussion of the significant variables impacting this outcome, along with recommendations for policies designed to retain these crucial employees.

Across all five models estimating this outcome, older officers, compared to their younger counterparts, expressed fewer voluntary resignation intentions. Not only does this finding compliment many of the investigations previously outlined, but it can be explained by the fact that older officers, given how they are close to a retirement age, feel that resigning would only place them at a grave economic disadvantage (Lambert et al. 2010b). Although this study was the first to examine officer risk perceptions of harm from specific workplace dangers and their influence on turnover intentions, findings from the second and third models of Table 7.18 are in some agreement with past explorations of this relationship (Minor et al. 2010; Stinchcomb and Leip, 2013). Higher personal and general risk perceptions were positively and significantly correlated with officer desires to quit. Correctional officers desire to be physically protected from the dangers encountered within this work environment, and if they perceive high degrees of threat, they may be more inclined to remove themselves from such a milieu. Prison administrators are therefore advised to increase safety standards across their prisons and provide additional training for officers concerning the threats they may encounter throughout their shift. Once again, possessing a fundamental understanding and knowledge of the work environment can not only keep officers safe, but also keep them from leaving the job. This is a policy recommendation that has been advanced for some time now and from numerous authors within the broader correctional discipline (Ferdik, Smith and Applegate, 2013; Matz et al., 2013).

Results also showed how stronger co-worker relations and greater job involvement were negatively related to officer resignation intentions. These findings indicate that officers desire to be respected and appreciated by both their co-workers and

supervisors. Lambert et al. (2011) further reference how decreased job involvement may result from the fact that administrators are doing little to make sure officers identify psychologically with the job. When this occurs, officers invest little importance into their profession and express desires to resign. As a result, administrative officials are encouraged to hire co-workers who will respect and value input from their peers, and are equally advised to recognize the performance of their line staff. They are also advised to increase levels of officer job involvement by affording them increased autonomy and input into decision-making (Lambert et al. 2011b). Finally, it was also found that officers experiencing greater stress were significantly more likely to want to quit their position. As already referenced, since it has been found that psychiatric treatment services can improve mental health outcomes (Peterson and Pbert, 1992), prison officials are encouraged to hire mental health staff to help alleviate stress or other psychological problems experienced by officers.

Directions for Future Research and Concluding Remarks

Correctional officers are employed under highly stressful and dangerous conditions. Successful management of their workplace requires them to be assertive, alert and prepared for the uncertainties accompanying this particular profession. Although numerous authors across various academic disciplines have attempted to predict and manage the oftentimes dangerous nature of prison facilities, many of these efforts have proven fruitless. Due largely to their role and occupational mandates, officers have shown that they can be a valuable asset to the risk management endeavor. Results from the current study illustrate that officers are preoccupied with the risks and dangers surrounding their work environment. This ultimately means that these correctional

officers perceived a high degree of risk that came from numerous sources such as riots, gang activity, mentally ill inmates and diseases. It is suggested that administrators at least consider these factors and the insight from these officers when addressing the safety conditions of their respective institutions.

The decision-making outcomes analyzed in this dissertation also provide some insight concerning what strategies officers deem most appropriate in their efforts to regulate inmate conduct, and under what conditions each should be employed. Managerial personnel or even other officers interested in understanding how offenders should be managed can learn from some of the insights provided by the officers studied in this dissertation. Different circumstances may require different strategies, and respondents in the current study highlighted this point. However, it must also be acknowledged that the relative dearth of research that has focused on officer bases of power reliance especially, but to some extent even punishment orientations, invites a need for continued explorations of these topics. With respect to officer bases of power, only a handful of investigations have explored this decision-making strategy, with many of the studies having taken place in the 1980's and 1990's. As a result of these points, researchers still do not have a precise understanding of what influences either of these outcomes. Future researchers should consider whether variation in officer power bases and orientations is a function personality differences (Whitehead and Lindquist, 1989), changes in organizational climates, or other wider socio-political factors (Hepburn, 1985). Additional examinations can enhance our understanding of the decisions correctional officers must make in order to effectively accomplish their objectives of monitoring inmates and establishing wider prison order.

Along these same lines and on a final note, an overwhelming majority of the studies conducted on the topics of officer risk perceptions and decision-making, inclusive of the present one, have been quantitative in nature. Perceptions humans form and the decisions they make are to a great extent contextually based, as partly evidenced by this study's findings. Oftentimes surveys and other quantitatively-based methodologies cannot capture the context behind human thoughts and behaviors. It is therefore advised that any future investigations of these research topics employ qualitative methodologies. Observations of and in-depth interviews conducted with correctional officers concerning topics such as risk perceptions and offender treatment may produce insight that otherwise quantitative methodologies are unable to capture. This cannot only broaden our understandings of these issues, but contribute to the important goals of prison-based risk assessment and management.

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APPENDIX A: COVER LETTER AND SURVEY INSTRUMENT

Hello,

We are from the University of South Carolina and are asking for your participation in a study of correctional officer risk perceptions and decision-making. Specifically, we are requesting that you complete a brief survey inquiring about your overall assessment of the dangers you face as a correctional officer, and the job-related decisions you make. We would greatly appreciate if you would take a few minutes to answer these questions, all the while keeping in mind that your responses are very important to us and will help us better understand these issues.

This study is anonymous and confidential. This means that all of your responses placed in the box will be returned directly to researchers at the University of South Carolina who cannot share this information with anyone else (including SCDC). Your identity will never be known to SCDC administration. Moreover, neither your supervisor(s) nor co-workers will have knowledge of your responses. Our goal is to pool all of the responses together in order to provide SCDC administration a final report.

Your participation in this project is voluntary. Some of the questions in this survey may seem sensitive, and you are under no obligation to answer every item. For every question you choose to answer, you can know that your answers will not be shared with your supervisors or any other member of the South Carolina Department of Corrections (SCDC). You may choose not to participate in this research and you may withdraw from taking the survey without consequence. Furthermore, non-participation will not affect your status and/or position as a corrections officer.

We realize this survey may take about fifteen minutes of your time, but your participation is the only way for us to acquire valuable insight into the dynamics of the correctional officer work environment. By obtaining this information, we aim to work with SCDC management officials to provide them input regarding your perceptions of the dangers associated with your job and whether measures can be taken to minimize them. By establishing and maintaining a safer work environment, your general working conditions may be improved and this can only be achieved with your participation. These are the greatest benefits you can derive from participation in this survey.

If you have any questions or comments about this research, please contact Frank Ferdik, Department of Criminology and Criminal Justice at the University of South Carolina, 1305 Greene St, Columbia, SC 29208; (803) 777-6538. Questions or concerns about research participants' rights may be directed at the USCIRB, University of South Carolina Office of Research Compliance (ORC), 901 Sumter Street, Byrnes Building Suite 515, Columbia, SC 29209; (803)-777-7095.

Sincerely,

Frank Ferdik and Dr. Hayden P. Smith
Department of Criminology & Criminal Justice
University of South Carolina
1305 Greene St, Columbia SC 29205

I have read the procedure described above. I voluntarily agree to participate in the study, and I have received a copy of this description.

Signature of Investigators

Frank Valentino Ferdik (Principal Investigator)
Dr. Hayden P. Smith (Co-Investigator)
Department of Criminology and Criminal Justice
University of South Carolina

Correctional Officer Risk Perception and Decision-Making Survey

Directions: This survey is used to measure how you rate risks at your work and how those risks impact your work-related decision-making. In this study, your participation is voluntary, greatly appreciated and you may end it at anytime. You may be comfortable that all responses will remain confidential, which means that no individual answers will be revealed to anyone who is not part of the present research team. Thank you again for your time.

Section I. Personal and job-related information.

1. Which of the following best describes your race?

- Black or African American
- White or Caucasian
- Other (Please specify: _____)

2. How old are you? _____

3. For how many years have you worked as a corrections officer? _____

4. What is your gender? Male Female

5. What is your highest level of education received?

- Less than High School
- High School/GED
- Some College
- 2 year college/Associate's Degree
- 4 year college/Bachelor's Degree
- Other (Please specify: _____)

6. What shift do you currently work?

- Day shift: 12:00 p.m. to 12:00 a.m.
- Night shift: 12:00 a.m. to 12:00 p.m.

7. Please write down the name of the institution where you work _____.

Section II. Your opinion of your job. (Please mark whether you agree or disagree with each statement).

Strongly Agree Agree Disagree Strongly Disagree

I live, eat and breathe my job.....□..... □.....□.....□.....□

The major satisfaction in my life comes from work.....□.....□.....□.....□

| | Strongly Agree | Agree | Disagree | Strongly Disagree |
|--|-----------------------|--------------|-----------------|--------------------------|
| The most important things that happen in my life occur at work..... | □ | □ | □ | □ |
| A lot of times my job makes me frustrated..... | □ | □ | □ | □ |
| I am usually under much pressure when at work..... | □ | □ | □ | □ |
| When at work, I often feel tense or uptight..... | □ | □ | □ | □ |
| I am usually calm and at ease when at work..... | □ | □ | □ | □ |
| There are many aspects of my job that upset me..... | □ | □ | □ | □ |
| I regularly receive conflicting requests from two or more people when at work..... | □ | □ | □ | □ |
| When a problem comes up, people rarely agree on how it should be handled..... | □ | □ | □ | □ |
| I sometimes have to bend rules to get things done..... | □ | □ | □ | □ |
| I often have to do things without adequate resources and materials..... | □ | □ | □ | □ |
| I clearly know what my work duties are..... | □ | □ | □ | □ |
| The rules we have to follow are clear..... | □ | □ | □ | □ |
| I am unclear who reports to me or to whom I report..... | □ | □ | □ | □ |
| I do not always understand what is expected of me at work..... | □ | □ | □ | □ |

Section III. Work experiences with co-workers.

How often have you experienced:

Very Rarely Rarely Now-and-Then Often Very Often Frequently

A feeling that your work-related opinions are valued by your co-workers..... □ □ □ □ □ □ □ □ □ □

Section VI. Your opinion of inmates.

| | Strongly Agree | Agree | Disagree | Strongly Disagree |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| An officer should work hard to earn inmate trust..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It is important for officers to have compassion..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sometimes officers should be advocates for inmates..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Rehabilitation programs should be left to mental health professionals..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Counseling is a job for counselors, not officers..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If an officer wants to do counseling, s/he should change jobs..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| There would be much less crime if prisons were less comfortable..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Improving prisons for inmates makes them worse for officers..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A military regime is the best way of running a prison..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Rehabilitation programs are a waste of time and money..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A good principle is to not get close to Inmates..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A personal relationship with inmates invites corruption..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| You can't trust inmates..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| You must keep conversations with inmates short and businesslike..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If officers are lenient with inmates, they will take advantage of us..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

DISRUPTIVE INMATE BEHAVIOR

Please rate the *chances* of you becoming **seriously injured** by this danger, with 1 meaning there is a very low chance and 5 meaning there is a very high chance.

Very Low 1 2 3 4 5 **Very High**

Please rate the *chances* of other people in your prison becoming **seriously injured** by this danger, with 1 meaning there is a very low chance and 5 meaning there is a very high chance.

Very Low 1 2 3 4 5 **Very High**

Please rate how much of a say you have in facing this danger, with 1 meaning having no say at all and 5 meaning having a lot of say.

No Say At All 1 2 3 4 5 **A Lot of Say**

Please rate how likely you believe consequences from this danger will occur immediately, with 1 meaning not at all likely and 5 meaning very likely.

Not At All 1 2 3 4 5 **Highly**

If exposed to this danger, please rate to what extent you can control any associated risks, with 1 meaning having no control and 5 meaning have high control.

No Control 1 2 3 4 5 **High Control**

Please rate whether this danger harms a few people one at a time, or many people at once, with 1 meaning a few one at a time and 5 meaning many people at once.

A Few One at a Time 1 2 3 4 5 **Many at Once**

Please rate your level of knowledge about this danger, with 1 meaning having no knowledge and 5 meaning having a lot of knowledge?

No Knowledge 1 2 3 4 5 **A Lot**

Please rate how calmly you can deal with this danger, with 1 meaning not calmly at all and 5 meaning very calmly?

Not Calmly At All 1 2 3 4 5 **Very Calmly**

Please rate how fatal the consequences from this danger can be, with 1 meaning not fatal at all and 5 meaning very fatal?

Not Fatal At All 1 2 3 4 5 **Very Fatal**

Please rate how anxious this danger makes you feel, with 1 meaning not at all anxious and 5 meaning very anxious.

Not At All 1 2 3 4 5 **Very Anxious**

