RESISTING BURNOUT: CORRECTIONAL STAFF SPIRITUALITY AND RESILIENCE

A dissertation presented

By

George Williams, S.J.

to
The College of Social Sciences and Humanities

In partial fulfillment of the requirements for the degree of
Doctor of Philosophy

In the field of
Criminology and Criminal Justice

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ABSTRACT OF DISSERTATION

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ABSTRACT:

Workplace stress has been shown to contribute to emotional burnout among correctional workers. This study tested the hypotheses that spirituality affords correctional officers (COs) ability to avoid burnout and maintain emotional resilience in their work.

The study used three well-validated scales: The Maslach Burnout Inventory, General Scale (Maslach, Jackson & Leiter, 1981), the Resilience Scale (Wagnild, 2011), and the US Army Chaplain’s Leadership Spirituality Scale (Wester, 2010) to measure the relationship between self-reported levels of burnout, resilience and spirituality.

The mixed methods design used an online survey instrument to collect data from COs and correctional chaplains from the Departments of Correction of Oregon and Nevada. Controlling for several demographic variables, findings supported the hypotheses that a higher spirituality score would predict a lower level of burnout and greater resilience scores among respondents.

Qualitative data were collected from intensive interviews with 6 COs and 6 chaplains. Interview results proved helpful by highlighting with vivid examples some of the relationships between spirituality burnout and resilience that the quantitative analyses demonstrated. The interview results lend support to the theoretical premise of this research that COs’ resilience and resistance to burnout are socially learned behaviors and these socially learned behaviors are the result of a dynamic interaction with their prison environments.

Finally, the interviews revealed a rich lived experience of resilience and humor among the correctional workers despite the potential for fear and violence in their prison workplaces. Additional study is needed to further explore and identify how spirituality can promote CO well being by increasing resilience and decreasing burnout.
DEDICATION & ACKNOWLEDGEMENT

The participants in this study, particularly those who offered their time to be interviewed, are people who work in stressful and often violent and disturbing environments. They are thoughtful, compassionate service-oriented men and women who remain hopeful and committed to their work despite the harsh reality of modern prisons.

It is to COs and chaplains like these, my colleagues that I dedicate this work, in the hope that it will bear fruit in helping them thrive in their profession.

I’d like to thank Dr. John McDevitt, my dissertation chair for his support and encouragement throughout my years at Northeastern University. I also thank Dr. Natasha Frost for her mentorship and her passion for scholarship in Criminal Justice, particularly in her work in corrections. And I am grateful to Dr. Jody Sundt who graciously served on my dissertation committee. Her expertise on correctional chaplains and COs served to inspire me to research this often overlooked dimension of criminology. Special thanks to Dr. Thomas Beckner whose friendship and example of what a prison chaplain and a man of God should be continues to inspire me.

I could not have completed this challenging program without the encouragement and friendship of my peers at Northeastern. Special thanks to V-Tsien Gaius Fan and Carlos Monteiro for their calm reassurance whenever I felt inclined to panic and despair. I appreciate the advice of Donna Bishop, Walter Forrest, Glenn Pierce and Phil He to keep focused and never give up. And thank you, Laurie Mastone, for helping me to keep smiling through it all.

Finally, I thank the departments of correction of the States of Oregon and Nevada for allowing me to conduct my research with their employees. I hope the results of this research will benefit their workers.
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CHAPTER 1: INTRODUCTION

“Those who work in prisons are not only shaped by their work, but have the ability to affect these environments” (Sundt & Cullen, 2002).

The purpose of this research is to explore the relationship between spirituality, burnout and resilience among Correctional Officers exposed to the stressful conditions endemic to working in prisons. Researchers have found that work stress among COs is an occupational hazard (Cooperstein, 2001; Brower et al., 2013). Studies of stress levels of correctional officers (COs) confirm that prison work stress is significantly correlated with physical and mental health, including depression, hypertension, substance abuse and burnout and an elevated risk of suicide (Stack & Tsoudis, 1997; Finn, 1998; Armstrong & Griffin, 2004; Finney et al., 2013).

This study was designed to test the hypothesis that spirituality affords COs the ability to resist burnout and maintain emotional resilience in the face of the challenging work environments they encounter every day. The study uses Albert Bandura’s Cognitive Learning Theory as a theoretical lens to better understand the workplace environment of prisons and how this unique workplace both shapes and is shaped by the attitudes and behaviors of correctional employees, particularly correctional officers. While workers are active agents who exercise some influence over their own motivations and actions, Bandura theorizes, “In social transactions, people become each other’s environments” (1886:335).

The project hypothesizes a correlation between spirituality, resilience and burnout among correctional workers. Those COs who score higher on indices of spirituality are predicted to be more emotionally resilient and less likely to suffer burnout than COs working in the same environment who do not have professional religious training, spirituality or a connection to supportive faith communities.
Correctional officers are critical to the operation of a prison and wield great power within the institution (Dilulio, 1987:77). COs are front line staff in prisons. Front line staff refers to those workers in an organization who interact directly with clients or customers (Lipsky, 1980). In corrections, these are the workers who engage directly with inmates and spend most of their work time in the same work, recreation and living space as inmates. While there is a range of duties correctional officers perform, COs are primarily responsible for keeping their prisons safe and secure for inmates, staff and visitors, and for supervising the activities of the inmate population (Finney et al., 2013:2).

As front line staff, COs are in continuous contact with prisoners who sometimes continue violent criminal activities while in prison. Many of these prisoners are also traumatized by the effects of incarceration such as the loss of personal autonomy, loss of primary relationships, loss of privacy and the constant fear of violence in the prison (Spitale, 2002). Simply being exposed to traumatized people affects those who themselves are not directly traumatized (Freedman, 2002; Bonanno, 2004; Agaibi & Wilson, 2005).

Correctional chaplains were included in this study because of their spirituality and training. Chaplains’ work, while constantly evolving, has at its core an explicitly spiritual dimension. Threlfall-Holmes & Newitt (2013) describe the nature of prison chaplains’ work as “liminal, standing between heaven and earth, pointing out the existence of an alternative reality” (2013:3). In order to qualify for their position, chaplains must have training in some aspect of spirituality, unlike any other correctional employees (Beckner, 2012).

It is hypothesized that correctional chaplains by virtue of their professional religious training, spirituality and connection to supportive faith communities, are more emotionally resilient and less likely to suffer workplace stress and burnout than COs working in the same
environment who do not have professional religious training, spirituality or a connection to supportive faith communities.

Given the nature of their work, it is expected that chaplains would be likely to score high in spirituality and connection with faith communities. If they were to score low on spirituality, they would be expected to be less resilient and more burned out than their more spiritually well-equipped fellow chaplains.

Many in the Academy maintain spirituality, because of its non-material nature; either does not exist or cannot be studied using the empirical tools of social science research (Slife, Hope & Nebeker, 1999). However in recent years more attention has been given to the phenomenon of spirituality by researchers, particularly those in workplace management and in workplace psychology studies (Mohamed, et al. 2004). Some have argued that spirituality should be viewed as a dimension of human personality (Maltby & Day, 2001). Fabricatore et al. (2000), found evidence that spirituality moderated the stress levels of their subjects in a study of 120 undergraduates at a private religiously-affiliated college. They reported that students’ spirituality moderated the relationship between stressors (both significant life events and daily routine sources of stress) and feelings of subjective well-being.

These findings are also supported by a growing body of research linking spirituality to wellness in workers (Baker, 2003; Myers & Sweeney, 2004, 2008; Rachele et al., 2013).

*Significance to the Field*

This study will expand on previous studies of corrections officers and chaplains. In the pages that follow it will be argued that spirituality, properly understood, offers a means of helping correctional officers cope with the stressful environment of the prison. The ultimate goal of this research is to explore how spirituality might help neutralize some of the
stressful effects of the prison environment on corrections staff. The ability to increase resilience is theoretically supported by what Bandura describes as the basic tenet of cognitive therapy: *To alter how people behave, one must alter how they think* (Bandura, 1985:519).

This research has direct benefit in its contribution to the literature on both correctional officers and corrections chaplains and hopefully will benefit all correctional employees’ ability to avoid the debilitating effects of workplace stress and burnout.

*Structure of the Dissertation*

Chapter 2 has three sections. It begins with a brief historical literature review of developments over the past 40 years of the American prison system that have had a major impact on the contemporary work environment for most correctional officers. A discussion will follow about how the advent of the era of mass incarceration, with a corresponding turn in correctional policy away from a rehabilitative ideal toward a more punitive penology, has adversely affected the work of correctional officers by increasing the amount of stress they experience in work due to larger numbers of inmates incarcerated for longer periods of time.

The next section focuses on correctional officers themselves, beginning with a brief overview of the historical evolution of this profession, followed by a discussion of correctional officer culture with a brief description of the kinds of role conflict and workplace stressors encountered in this work.

The third section of this chapter is given to a discussion of correctional chaplains. A brief overview will be presented of the history of American prison chaplains with a discussion of how the roles of chaplains have evolved over time in the United States. As with the previous discussion of COs, this section will consider the kinds of role conflict and workplace stressors
that correctional chaplains find in their work. The chapter concludes with a brief discussion of spirituality in the literature pertaining to chaplains.

Chapter 3 presents the conceptual and theoretical framework of this study. To-date, few of the studies conducted on correctional workers have been informed by a theoretical frame of reference that offers an explanation of the mechanisms of burnout and resilience. The reason for this is that most studies in this area are descriptive and are driven by the need for immediate answers to specific problems that arise in correctional departments such as worker suicide or retention of workers. This study is unique in that it uses the cognitive social learning theory of Albert Bandura as a theoretical lens for understanding how resilience and burnout might be affected by the components of spirituality as defined in this study.

A brief discussion of spirituality theory and wellness theory is offered, based on past and current research in the field. While these theories have been developed in theological and health science fields, they have not often been applied to correctional settings. The chapter concludes with a brief discussion of the research philosophy supporting this study.

Chapter 4 presents the exploratory and descriptive research design and the methodology employed in this study. The research questions and hypothesis are presented followed by a description of the operationalization of the independent variable spirituality as well as the operational definitions of the dependent variables burnout and resilience. The instruments used to measure these variables are introduced: The Maslach Burnout Inventory©, the Resilience Scale© and the US Army Chaplains’ Spirituality Index©.
Research Questions

The research aimed to explore the relationship between spirituality, burnout and resilience among correctional workers exposed to the stressful conditions emerging from working prison. Three questions are posed:

- Is there a correlation between Spirituality and Resilience among correctional workers, particularly COs?
- Is there a correlation between Spirituality and Burnout among correctional workers, particularly COs?
- Do correctional chaplains score higher on resilience and lower on burnout than COs?

This study used both quantitative and qualitative methods to collect data. Recruitment, data collection, sampling and ethical considerations follow. A brief description of the analysis used to determine statistical power is provided as well as the specific instruments used to assess the independent variable spirituality and the dependent variables of burnout and resilience. Factor analyses are presented along with a discussion of the reliability, validity and generalizability of these instruments. The chapter concludes with a description of the control variables.

Chapter 5 reports the empirical findings of this research. Descriptive statistics and the result of multiple regression models testing the hypotheses are offered with a step-by-step analysis of the results. Quantitative data results are presented first, followed by a presentation of the qualitative data results. Chapter 6 concludes the dissertation with a discussion of the strengths and limitations of this study, along with some possible policy implications and recommendations and suggestions for future research.
CHAPTER 2: CORRECTIONAL OFFICERS AND CHAPLAINS

The Legacy of Mass Incarceration: “The Prison Industrial Complex”

To understand the current environment in which COs and chaplains work, it would be helpful to describe how the American penal system has evolved over the last 40 years. The United States today manages the largest penal system in the world. Beginning in the 1970s, the United States entered a period of mass incarceration (Alexander, 2012). Capitalizing on public perceptions and anxiety about crime, policy makers vied to outdo one another to appear “tough on crime,” driven by what some criminologists term, a “punishment imperative” (Clear & Frost, 2013).

As a result, Americans now incarcerate a greater proportion of their fellow citizens than any other contemporary industrialized nation. The American “prison-industrial complex” (Schlosser, 1998; Davis, 2003), costs over 200 billion dollars a year to maintain and employs more people than the nation’s two largest private employers combined (Perkinson, 2010).

Forty years ago, this scenario would have been unimaginable. American penology since the late 1800s had been influenced by positivist social science views maintaining social inequalities; poverty and unstable families caused crime and deviancy. It was commonly believed that therapeutic interventions would provide means of mitigating these social ills and reducing criminal behavior. A rehabilitative ideal guided American criminal justice policy for over a century, from the 1870s until the mid-1970s (Allen, 1981; Abramsky, 2007).

By the early 1970s, some criminologists believed prisons were on the verge of obsolescence (Morris, 1974). They could not have been more mistaken. Faith in the efficacy of rehabilitation of prisoners was already fading. Martinson’s provocative study in 1974
concluded that many of the rehabilitative programs then in vogue in American corrections had “No appreciable effect on recidivism” (Martinson, 1974:25).

In the latter half of the 1970s, American penal policy shifted rapidly away from the pursuit of rehabilitation of offenders and toward incapacitation of criminal offenders. Haney writes, “The concept that had served as the intellectual cornerstone of corrections policy for nearly a century - rehabilitation, was publicly and politically discredited” (2006:59). By the late 1970s, the rehabilitative ideal “collapsed precipitously in the face of a number of seismic socio-political shifts that were occurring in American society” (Gendreau, Smith & French, 2008:420). Where previously, government efforts to intervene in the lives of the poor were viewed as helpful and necessary, historical events such as the Vietnam War and the Watergate scandal undermined Americans’ trust in their government’s ability to correct social problems. Fear of intrusive government led many to believe that vulnerable Americans did not need help from the State, but protection from it (Cullen & Gendreau, 2001).

As the United States entered into the 1980s, federal and state legislatures reacting to public fears of crime and economic uncertainty enacted more punitive laws resulting in a mushrooming population of prisoners in the U.S. A series of “tough on crime” policies were implemented, including restrictions on judicial discretion in sentencing, determinate sentencing, mandatory minimum sentences, three strike laws, and harsher penalties for illegal drug sale and use (Clear & Frost, 2013). Skotnicki (1996) describes how public anger at the lack of consistent and predictable sentencing led to a sharp curtailment of judicial discretion in sentencing and the introduction of mandatory minimum sentences for a variety of offenses.
The prison system grew on a scale never before seen in the United States, from less than 200,000 inmates in state and federal prisons in 1970 to over 1,600,000 in 2011 (Porter, 2011). Between 1982 and 2001, total state corrections expenditures increased each year, rising from $15.0 billion to $53.5 billion in real dollars. Between 2002 and 2010, expenditures fluctuated between $53.4 billion and $48.4 billion (Bureau of Justice Statistics, 2013).

By the beginning of the new millennium, more than one out of every 100 Americans was locked up in jails and prisons (Pew, 2008). The United States continues to have the highest incarceration rate in the world (Eisenberg, 2016). As of April 2016, the U.S. incarceration rate is four times the world average with 2.2 million people in American prisons and jails (Furman & Holtz-Eakin, 2016). As a consequence, there are now more people working in American prisons than ever before (Minton, 2013).

With the shift in policy from reformation to incapacitation came a new metaphor for dealing with crime and criminals. Beginning in the 1970s, a narrative began to be constructed around the metaphor of a “war on crime,” and a “war on drugs,” a conservative backlash to the liberal great society experiments in social engineering begun in the 1960s as a “war on poverty” (Johnson, 1964).

The result not only was a “war” on crime and drugs, but also a war that disproportionately targeted the poor and minority urban population of the United States (Alexander, 2012). During this period, beginning in the late 1970s as construction of new prisons in the United States accelerated, greater numbers of COs were needed to guard the growing number of prisoners. In 1971 there were less than 60,000 COs employed in U.S. jails and prisons (Cahalan & Parsons, 1986). By 2012, the total number of Correctional Officers
in the U.S. (in both state prisons and local jails) was 469,500 (US Bureau of Labor Statistics, 2014). COs had to adapt to a shifting correctional environment as deterrence and incapacitation along with a ballooning population of prisoners reshaped their work environments (Jurik & Musheno, 1986).

The explosive rise in prison construction led to competing ideological views of imprisonment. For some, prison construction was seen as a boon to economically depressed rural communities, providing both construction employment and then steady work for workers who no longer had the opportunity for well-paying blue collar manufacturing jobs. Private prison corporations, beginning in the 1980s provided political interests the chance to look both “tough on crime and fiscally conservative at the same time” (Greene, 2002:95).

For others, this wave of prison construction was criticized as the product of a new correctional ideology that had replaced the psychology-based orientation of treating and rehabilitating offenders. This “new penology” (Feeley & Simon, 1992) emphasized risk assessment and actuarial approaches to managing large aggregates of incapacitated prisoners rather than seeking the well-being of individual offenders. It reflected a “waste management” attitude toward the incarcerated on the part of policy makers and correctional managers (1992:470). Some suggested it was a way of controlling “the dangerous classes” - the poor, urban underclass in contemporary society (Wacquant, 2001).

The era of mass incarceration coincided with a “punishment wave” sweeping the American political landscape (Haney & Zimbardo, 1998). “Supermax” prisons were quickly brought online in response to public fears in a powerful political “rage to punish” (Forer, 1994). Supermax prisons, which are long-term solitary confinement facilities (Reiter, 2016), were established on the basis of what Haney terms “ideological toxicity” - the result of what
has come to be called “the penal harm movement,” which became dominant during the “mean season” of corrections, where “what passed for penal philosophy amounted to little more than devising creative strategies to make offenders suffer” (Haney & Zimbardo, 1998:340). Supermax prisons were promoted as a necessary means of containing the “worst of the worst,” using public fear of criminals in an effective propaganda campaign to advance the agenda of politicians who vied to prove themselves more “tough on crime” (Perkinson, 2010; Reiter, 2016). The conditions of some of these supermax prisons “raise the level of punishment close to that of psychological torture” (Morris, 2000).

The heightened sense of security resulted in COs working in military jumpsuits and routinely wearing tactical armament such as flak jackets and face shields. Even non-custody staff was often required to wear protective body armor and face shields while working in high security units. Goffman describes this phenomenon in his discussion of characteristics of total institutions:

> Each grouping [staff and inmates] tends to conceive of the other in terms of narrow, hostile stereotypes, staff often seeing inmates as bitter, secretive, and untrustworthy, while inmates often see staff as condescending, highhanded, and mean (Goffman, 1961:7).

This ideological toxicity was perhaps exacerbated by the fact that the dawn of mass incarceration in the early 1980s also coincided with the beginning of the HIV/AIDS epidemic. Inmates were not seen simply as dangerous in terms of their criminal behavior, but were also perceived by correctional workers as potential carriers of not only HIV, but also hepatitis and tuberculosis. These fears were not unfounded as prison inmates are a high-risk group for these infectious diseases because of their high-risk behaviors including intravenous drug use, unprotected sex, illicit prison tattooing, and the risk of direct exposure on the part of COs to prisoners’ bodily fluids via blood and excrement (Hartley, et al, 2012).
It became normative for COs to use surgical gloves and medical face masks in their daily physical interaction with inmates, interactions which required intimate contact with inmates’ bodies in the forms of strip searches, bodily cavity searches as well as physical contact when the situation required the use of physical force to subdue and control inmates. Hartley, et al, documented fears of contracting these diseases were positively correlated to job stress (Hartley, et al 2012: 326).

Similar to a battle zone in a war, prisons pose the challenge of having to subdue, manage and secure a large number of unwilling and potentially dangerous people (Armstrong & Griffin, 2004). Not only inmates are traumatized by the harsh conditions of confinement. There is ample empirical evidence that correctional staff who witness the violence of prison first-hand are subject to severe stress from vicarious traumatization (Ortlepp & Friedman, 2002; Bonanno, 2004; Agaibi & Wilson, 2005). The war on crime with its resulting punishment wave has also generated its own cadre of traumatized veterans and victims.

While there are hopeful signs of a “sea change” in American corrections marking perhaps the “beginning of the end of mass incarceration” (Goode, 2013, c.f. Frost), the effects of mass incarceration on both prisoners and corrections staff will live on, just as the harm caused to soldiers in war lives on years after the wars have ended.

In a 2010 nationwide Internet survey of 750 correctional officers, Spinaris and Denhof (2010) found 58.5% of their sample met the re-experiencing criteria of PTSD. COs reported emotional responses to violence: Anger: 75.6%; Indifference/Hardness: 69.3%; Fear: 55%; Emotional Numbing: 46.4%; Powerlessness/Helplessness: 41.1%; Grief/Sadness: 35.4%; Horror: 18.9%. (More than one choice was possible per respondent). Spinaris and Denhof noted that nearly all surveyed (99%) witnessed violence at work.
With any war, be it a war on drugs, crime or “terror,” there is a toll taken on the lives of all involved in the conflict. Enemy combatants, civilians, friendly forces, individual soldiers – all experience the trauma of violence that is war. The United States is faced today with the problems of traumatized veterans returning from recent wars in Iraq and Afghanistan (Satel, 2006). The effects of war on all involved are increasingly being understood as significantly damaging psychological distress that left untreated can severely impair or curtail the lives of survivors.

While military veterans of all U.S. wars comprise only seven percent of American society, they account for 18% of American adult suicides. The US Department of Veterans Affairs has completed the most comprehensive analysis of Veteran suicide rates in the U.S., examining over 55 million Veteran records from 1979 to 2014 from every state in the US. Their data reveal:

- Veteran suicides average one every 80 minutes in the United States – 20 suicides per day in 2014.
- Since 2001, U.S. adult civilian suicides increased 23%, while Veteran suicides increased 32% in the same time period.
- Firearms were used in 66% of all Veteran deaths from suicide.
- After adjusting for differences in age and gender, risk for suicide was 21% higher among Veterans when compared to U.S. civilian adults. (2014)
- After adjusting for differences in age, risk for suicide was 18% higher among male Veterans when compared to U.S. civilian adult males. (2014)
- After adjusting for differences in age, risk for suicide was 2.4 times higher among female Veterans when compared to U.S. civilian adult females. (2014). (US Department of Veterans Affairs, 2016)

Not surprisingly, and tragically, just as traumatized war veterans have a high rate of suicide, corrections officers nationally have a 39% higher suicide rate than any other occupation in the United States (Stack & Tsoudis, 1997, Denhoff and Spenaris, 2013, Deamicis, 2016).

A New Jersey Police Suicide Task Force study in 2009 reported COs commit suicide at over two times the rate of police officers (2009):
### 2003-2007 Comparative Suicide Rates: *per 100,000 men:*

<table>
<thead>
<tr>
<th>U.S. Adult Men 25-64 years old</th>
<th>Male Police Officers US</th>
<th>Male Corrections Officers US</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>15.1</td>
<td>34.8</td>
</tr>
</tbody>
</table>

*Source: The New Jersey Police Suicide Task Force (2009)*

In addition to the higher risk of suicide, COs are confronted with dismal life expectancy statistics in general. COs have the second highest mortality rate of any occupation and on average are seriously assaulted at least twice during a 20-year career Deamicis, (2016). Deamicis also notes that the life expectancy of an American CO is 59 years, compared to the current US average of 78.8 years (the average of US males and females) Tavernise, (2016).

**Correctional Officers: History**

As long as there have been prisoners there has been a need for someone to guard them and prevent their escape. Throughout history, guards have tended to come from the lower classes, poor and uneducated and not all that different socially from their prisoners (O’Brien, 1998:180). The jails and prisons of antiquity served as holding places – people were held in jails for trial, not for punishment. In fact, Roman law forbade the use of prison itself as punishment. The Roman jurist Ulpian (d. 223 C.E.) wrote: “Prison is properly regarded as a means of detaining men, not punishing them” (Peters, 1995:20).

The birth of the penitentiary in early 19th century America represented a change in the traditional role of jailers and prison guards. Both the Auburn and the Pennsylvania systems reflected the beliefs of reformers that prisons could, through strict discipline and order, transform criminals into law-abiding citizens. Both systems required guards to comply with the rehabilitative goals of the reformers (Rothman, 1995). However, the basic task of the guards
remained to prevent inmates from escaping prison and in these new penitentiaries to enforce the mandatory silence and prevent inmates from communicating with one another (McKelvey, 1977).

Rothman (1995) describes how this emphasis on close disciplinary supervision of inmates served to both increase their contact with the prisoners while at the same time increased the boundaries between guards and those they guarded. In the Auburn prison, the guards began wearing distinctively military-like uniforms and were forbidden to engage in any unnecessary conversation with the inmates (1995:123). Despite these rules, guards continued to talk with inmates, accept bribes from them, and even provide contraband alcohol and tobacco to the prisoners (McLennan, 2008).

Perkinson (2010) describes an entirely different historical evolution of the prison guard in the southern United States. In the former slave-owning states of the Confederacy, the prisons evolved from the model of the plantation, unlike the Quaker-inspired reforms in the north that emphasized work as a tool of rehabilitation.

Jewkes & Johnston (2007) describe the period following the American Civil war as one characterized by the disappearance of the prison from public view. This phenomenon occurred both in the United States as well as in Europe during this time. This was a period of increasing bureaucratic control over the daily operation of the prison, a development that some scholars argue represented the beginning of the modern penal system in the US and Europe (Foucault, 1977; Garland, 1985).

The 1870s marked the end of the penitentiary experiment and the beginning of a new penal ideology in the progressive era. The reformatory system was introduced in the northern United States (McKelvey, 1997). While there was a call for greater professionalization of the prison guards’ work, the practice of the reformatories was to put the work of rehabilitation in the
hands of specialized workers, leaving the role of maintaining discipline to the guards (Garland, 1985; Pisciotta, 1994). Forsythe (1995) notes that positivist ideas of rehabilitative practices had little effect on the day-to-day operation of prisons, which remained harshly punitive.

Most studies in prison historically were focused on the effects of prison on prisoners. Few early criminologists studied correctional officers themselves. Gresham Sykes (1958) is perhaps the first criminologist of note to speak about modern prison guards. The role and public perception of COs in American prisons has changed and evolved over time, reflecting the changes occurring in the criminal justice system in the US.

At the 1954 Congress of Corrections in Philadelphia, the name of the American Prison Association was formally changed to the American Correctional Association, reflecting the rehabilitative ideal current in American penology at that time, as well as efforts to professionalize the work of those who were tasked with providing security in prisons while at the same time promoting the goals of rehabilitation (ACA, 2016). The professional term “Correctional Officer” was not adopted until the 1970s by the U.S. Department of Labor, replacing the commonly used terms “guards” or “keepers.” (Because of this shift in terminology, this researcher refers to correctional staff prior to the 1970s as “guards” and those after 1970 as “Correctional Officers”).

Prior to the 1980s, before the era of mass incarceration initiated a dramatic increase in the number of COs nationwide, research on correctional officers tended to focus on how COs treated offenders. Gresham Sykes, writing about the “Regime of the Custodians” in his seminal work “The Society of Captives” (1958), described the work of prison officials in bureaucratic terms, primarily as task-oriented toward maintaining order and control over inmates and preventing escapes. Sykes’ descriptive account of prisons was mainly focused on the effects of
prison on inmates. Writing during the Cold War, he reflected American mistrust of “total institutions” like the prison. He was interested in the power and role of prison guards in maintaining the order of the prison. He recognized the limits of the ability of prison officials to force compliance from inmates as “defects of total power” (1958:14).

Philliber (1987) notes that until the 1980s, much social science literature described prison guards as “less than quick witted… less than the highest level of intelligence… requiring only 20/20 vision, the IQ of an imbecile, a high threshold for boredom, and a basement position in Maslow’s hierarchy” (1987, c.f. Toch, 1978). There was a cultural assumption (reinforced by the negative image of prison guards in media and popular culture) that people were drawn to corrections work because of some innate authoritarian or sadistic impulses or were transformed by the prison environment into aggressive and cruel actors (Jacobs and Crotty, 1983; Haney, Banks & Zimbardo 1973; Kaufman, 1988).

A more compassionate view of COs has since emerged, especially as researchers have studied police officer stress and traumatization. Over the last 30 years, COs have been viewed more as victims themselves of the dehumanizing effects of the prison environment (Crouch, 1980; Cullen et al., 1985). In recent years, organizations such as Desert Waters, a Colorado non-profit group have been founded to provide wellness resources and support for corrections personnel (Spinaris, Denhof, & Morton, 2014).

Correctional Officers: Culture

While much has been written in recent years about police officer culture (Chan, 1996; Kappeler, Sluder, & Alpert, 1998; Paoline, 2003), very little empirical research has examined correctional officers’ workplace culture. This may be due to the small number of correctional officers relative to police officers prior to the advent of mass incarceration. A notable exception
to this was Philip Zimbardo’s 1973 Prison Experiment at Stanford, which suggested the prison environment served to bring out rigid, aggressive and cruel behavior in prison guards. Zimbardo referred to the non-prisoner subjects of his experiment as “guards” – evoking perhaps the negative view in 1970s American culture of those who worked in prisons (Zimbardo, 2008).

The term “correctional officer culture” is used here to describe “a shared set of assumptions, values, beliefs, and attitudes that officers express, directly and indirectly, and which shape . . . a set of ‘craft rules’ about how and why things are done” (Liebling, Price & Shefer, 2010:107).

While there are similarities between police and CO culture, there are also some significant differences. Farkas & Manning (1997) note parallels include the inescapable reality of interpersonal conflict in the work, the risks and uncertainties faced by both police and COs, and the need to maintain secrecy in an environment of distrust in what remain male-dominated and hierarchical organizations (1997:62). Among the characteristics of both police and CO cultures is an ethos that discourages showing “weakness” to peers and family members or even communicating inner feelings of distress to others (Deamicis, 2016:27). Pittaro (2015) writes,

*Corrections employees were not supposed to appear emotionally vulnerable or fragile. After all, emotional vulnerability often equates to emotional instability, which is perceived to be a weakness within the profession.*

Spinaris-Tudor (2008) observes that it is often difficult for law enforcement professionals to admit their own vulnerability and distress because their self-image is one of protecting the weak and vulnerable in society; a self-image that demands strength.

The cultures of police and COs diverge in several ways. Police tend to work in a larger territory, encountering different people every day in their line of duty. COs work in a much more geographically bounded environment. While police and COs share a sense of daily risk,
COs do not generally carry lethal weapons on their person within a prison. Without the immediate threat of physical violence afforded by weapons, COs must manage potentially life-threatening situations with interpersonal and verbal skills (Carter, 1994). COs must rely on the cooperation of inmates for compliance with rules and regulations (Sykes, 1958:40).

Earlier research on correctional officers reported COs worked in ways that isolated them from one another. These studies suggested COs did not have close working relationships and did not socialize outside of work (Lombardo, 1987). More recent research disputes this, finding that COs do socialize both during work and after work (Farkas, 1996). This might be due to contemporary changes in prison design and management where modern prisons have 2 or more COs assigned together in units or common areas of the institutions (1996:59).

This change supports Chenault’s (2010) contention that the history of corrections shows the development and evolution of a correctional officer occupational culture. Both policing and correctional cultures are constantly evolving (Hawkins, 2008). For example, Houston (1995) observes that since the beginning of the age of mass incarceration, nearly all corrections systems have developed policies and procedures that allow inmates unrestricted access to courts” (1995:56). This has served to constrain the decisions of administrators that in turn affect their management of subordinate COs in their paramilitary organizational structures (Farkas, 1997:60). Chenault (2010) noted a consequence of this in his study of Midwestern CO culture where he observed officers’ distrust of administrators and their perception that administrators treat inmates preferentially due to fear of inmate lawsuits (2010:98).

As incarceration (and prison construction) escalated in the mid-nineteen eighties, more attention was given to the study of the social subculture of correctional officers (Walters, 1991; Farkas & Manning, 1997). There was a lively debate in the 1980s as to whether a “guard
“subculture” even existed. Some researchers found evidence supporting the reality of a subculture using surveys of guards’ goals compared with correctional administrators’ goals (Kaufman, 1988). However, others argued that these findings were not sufficient indication of a subculture because they lacked appropriate measures and definitions of what a subculture was in the context of prison guards (Klofas, 1984; Hepburn, 1985; Lombardo, 1985).

Kaufman used longitudinal data, obtained from interviews with 40 officers over the course of four years to construct a typology for correctional officer culture. Her work also suggested that stress among correctional officers resulted in a high degree of job turnover. After four years, nearly 60% of the original CO participants in her study had quit their jobs (Kaufman, 1988). Farkas’ (1997) qualitative study using 79 interviews with COs confirmed Kaufman’s findings of a cohesive CO culture.

Despite the limitations of measurement and lack of theoretical clarity (Philliber, 1987) some researchers employed qualitative methods such as intensive interviews and participant-observation to describe correctional officers’ subculture (Owen, 2006). Others became corrections officers in order to gather their data (Marquart, 1986, Conover, 2006) however these methods posed ethical problems as they involved subterfuge on the part of the researcher.

Two notable examples of sound ethnographic studies that found compelling evidence of correctional officers’ culture are relatively recent: Joshua Page’s (2007) study of the California Peace Officers’ Union and Scott Chenault’s (2010) study of correctional officer culture in Nebraska state prisons. Their findings suggest that in their interactions with each other within the prison environment a unique culture develops among COs. This is consistent with a key theoretical premise of this research project, based on the Cognitive Learning Theory of Albert
Bandura. Bandura argues that environment influences behavior and behavior influences environment (Bandura, 1986:23). Bandura’s theory will be presented in detail in Chapter 3.

Chenault’s research led him to conclude that COs negotiate their work environments through what he termed four cultural “scripts” (2010:91). These four scripts, according to Chenault can be understood as the previously mentioned “Distrustful Script,” as well as a “Protective Script, an Empathic and a Dehumanizing Script:

<table>
<thead>
<tr>
<th>Distrustful script</th>
<th>Protective script</th>
</tr>
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<tbody>
<tr>
<td>Officers believe administrators value inmates more than officers. Additionally, officers believe inmates are treated better, primarily due to fear of inmate lawsuits.</td>
<td>This script emphasizes officers should protect each other from a variety of physical and symbolic threats such as inmates and administrators</td>
</tr>
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<table>
<thead>
<tr>
<th>Empathetic script</th>
<th>Dehumanizing script</th>
</tr>
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<tbody>
<tr>
<td>This script views inmates as human beings who made a mistake.</td>
<td>This script views inmates as untrustworthy, manipulative, and dirty</td>
</tr>
</tbody>
</table>

Source: Chenault (2010)

Correctional Officers: Stress

With the rapid growth of correctional officer employment that began in the 1980s, scholarly attention regarding COs turned to more specific effects of stress such as burnout and physical health (Dignam, 1986), burnout and emotional health (Heinrich, 1986), “correctional stress” burnout and susceptibility to heart disease and other physically debilitating illnesses (Wiggins, 1989).

The 2000s saw a burgeoning body of literature studying workplace stress. There is ample empirical research establishing prisons as stressful work environments. Researchers have identified CO emotional and behavioral problems, including depression (Patterson, 2003; Tennant, 2001), anxiety, (Lowman, 1993; Lundberg, 1996), burnout (Anderson, 2000; Garland, 2004).
While these researchers measured stress among COs in their studies, Durak, Durak & Gencoz (2006) were the first researchers to develop a work stress scale specifically for COs. The results of their testing showed a positive correlation between work stress and depression, anxiety and hopelessness and were negatively correlated with COs perceptions of social support (2006:157). Their study was conducted in Turkey with Turkish correctional officers. A study by Mahfood, et al. (2013) used their scale to measure job stress in a Texas prison with American COs. They found role conflict and ambiguity as well as the physical condition of the prison to be predictors of job satisfaction and stress (Mahfood, et al., 2013).


The phenomenon of burnout will be treated in detail in Chapter 3. It should be noted here that this study is not measuring stress itself, but instead a consequence of stress: burnout. Maslach defines burnout as “a psychological syndrome in response to chronic interpersonal stressors on the job . . . characterized by feelings of exhaustion, cynicism, detachment, ineffectiveness and a personal lack of accomplishment” (Maslach, Schaufeli & Leiter 2001:399).

In their exhaustive and rigorous review of job stressors in corrections, Finney, et al. (2013) found compelling evidence that the organizational structure and climate of correctional institutions have the most consistent relationship with COs’ job stress and burnout (2013:11). For example, organizational factors such as work overload, administrative paperwork and lack of promotion opportunities may contribute to CO stress. COs working within the paramilitary, bureaucratic prison system are also challenged with the problem of role conflict, having to
comply with the written regulations of the administration, while at the same time needing to maintain security through informal interactions with inmates that may not be in compliance with the written rules (2013:3).

Prior to the 1990s, most work on stress in law enforcement had focused on police officers. Finn & Tomz (1998) observed that law enforcement officers face a number of unusual, often highly disturbing, sources of stress. While the work of correctional officers and police officers share some common characteristics, researchers have found COs experience daily stressors more often than those of police officers in the community (Armstrong & Griffin, 2004). Cullen et al. (1985) argued that COs’ work needs to be conceptualized as unique from that of other (corrections) employees since they “work in an unusual social setting and have an unusual technical task” (1985:4).

Researchers turning their attention to COs found that overall, working in corrections was stressful and resulted in a high degree of burnout. For example, Hurst and Hurst (1997) found that over 50% of officers studied reported symptoms of burnout, such as emotional exhaustion. In addition, COs, like their law enforcement colleagues, are among the highest at-risk groups for spousal abuse and suicide, as well as exhibiting higher-than-average percentages of sleep disturbances, anger and PTSD and other co-occurring, negative mental health symptoms” (Beckner, 2012).

Researchers have, in recent years devoted considerably more attention to corrections officer stress and attitudes (Cullen et al., 1989; Josi, and Sechrest, 1998; Maahs and Pratt, 2001; Farkas, 2001; Cheeseman, 2007; Castle, Tammy L. 2008; Tewksbury and Mustaine, 2008; McCraty, et al. 2009). In a meta-analysis of earlier studies of correctional officers, Schaufeli and Peeters (2000) found that role problems, work overload, required social contact with
prisoners, colleagues and supervisors, and poor social status to be the most frequently emphasized stress factors. Finney, et al. (2013) questioned these results, noting that the studies included in the Schaufeli and Peeters meta-analysis combined various correctional employees in the samples used. This is consistent with Maahs’ and Pratts’ (2001) observation that since the 1980’s there has been a substantial increase in studies attempting to evaluate correctional officers’ attitudes and behaviors, but these studies have tended to be independent, unrelated and “haphazard” (2001:14). While quantitative studies of correctional officers exist, they have proven inconsistent in their methodologies. “Findings varied with sample size, type of methodology, length of study and attitudinal exploration” (2001:25).

Finney et al. (2013) discovered that corrections facilities employees are potentially exposed to a greater number of on the job risk factors [than are workers in the general working population] because prisons house people who are there against their will (2013:13). They found 37% of COs experience job stress and burnout, compared with an estimated stress and burnout level of 19-30% in workers in the general working population (Bourbonnais, et al., 2005).

Ferdik (2016) offers a critique of the studies to-date. He notes that while much of the extant research so far has looked at CO workplace dangers and risks, more research is needed that approaches these issues from the perspective of COs themselves. This study endeavors to address this gap in the research.

Correctional Officers: Role Conflict

Since COs have as their primary responsibility the maintenance of safety and security of their correctional institutions, they must closely monitor and supervise the inmates in their custody (Finney, et al., 2013). Their work inevitably brings them into frequent, physical contact with inmates. Working directly with prisoners means they regularly encounter people in crisis
and are unavoidably exposed to trauma and suffering (Brown et al., 1999). Correctional officers share with prisoners the constant fear of violence in the prison (Spitale, 2002). Their daily working conditions can be unpredictable, combining boring routine with ever-present danger (Cooperstein 2001).

COs are tasked with providing both safety, security and control for their institutions; often having to confront inmates who challenge their authority and act out in socially inappropriate, often violent ways. At the same time, corrections officers are expected to “correct” as their title implies, teaching inmates better coping and behavioral skills and to comply with prison rules. All this occurs among men and women who are confined against their will. As Spenaris-Tudor notes, these requirements are often seen as contradictory by staff (Spenaris-Tudor, 2008:25). This phenomenon was observed by Sykes (1958) and by Cressy (1959) who described the inherently stressful conflict between the goals of custody and the goals of treatment.

More recently, Sundt reported that role conflict is one of the most constant predictors of CO stress, dissatisfaction with work and stress (1998:66; Cullen, Link, Wolfe & Frank, 1985). Sundt and Cullen (2002) caution however that despite a tendency to assume that COs identify solely with their custody role (Haney, Banks, & Zimbardo, l973), this theorizing has not been borne out in empirical research. Instead, Sundt and Cullen found that COs have been shown to support both custody and treatment (2002:370).

Carroll observed that prison administrators seeking to professionalize the ranks of COs created “goal diffusion” and confusion among COs (Carroll, 1974). This of course came as the rehabilitative ideal was becoming increasingly discredited, and as Cheatwood (1974) suggested, COs felt caught in the middle between the needs of inmates and administrators. Cheek and Miller (1983) found in their study of correctional officers in New Jersey that the ‘macho’ ethos of
their work created a “double-bind” effect of feeling powerless because the COs surveyed tended to deny the work stress resulting from officer-inmate interactions, viewing this as a sign of weakness and at the same time felt that administrators sided with inmates against them, gave conflicting directives and offered criticism more often than praise of the officers’ work (1983: 117).

Another dual-bind for COs was described by Brower (2013) as the dual role conflict experienced by COs who must supervise potentially violent and uncooperative people and thus are forced to use communication skills and behavior control strategies that, while useful in the prison environment may be quite damaging to family functioning at home (Brower 2013:13). Several of the officers interviewed for this study described this tension in their own lives.

COs’ daily routines are marked by often difficult social interactions with both inmates and superiors. “Intensive and emotionally charged contacts with prisoners are the hallmark of the correctional officers job” (Schaufeli & Peeters, 2000:35). Officers with little or no training in psychology and human behavior are expected to monitor, control and protect incarcerated individuals. These prisoners often suffer from the effects of past physical and emotional trauma, mental illness and addictions (Gibbons & Katzenbach, 2006).

Corrrectional Chaplains: History:

Note: The terms “Correctional Chaplains” and “Prison Chaplains” are used interchangeably since all the chaplain subjects in this study worked in prisons.

Campagna (1993) was one of the first researchers to compare correctional officers to non-custody correctional staff. His non-custody sample included nurses, maintenance workers, instructors, mental health professionals and food and industry workers. Notably absent of any
mention in his study were correctional chaplains. Historically, little attention has been given by the academy to the work of correctional chaplains (Sundt, 1997).

This omission is surprising given that religious communities in the United States have always maintained a presence in American prisons through chaplains who ministered primarily to the incarcerated. Some argue persuasively that many of the major developments in American penology can be traced directly to movements in American religious communities (Skotnicki, 1991; Clear & Myhre, 1995). Skotnicki is one of the few scholars to write extensively about the role religion played in the development of the American penal system, from colonial days to the dawn of the era of rehabilitation.

Despite the constitutional wall of separation between church and state, religion has played an important role in the evolution of American prisons since the founding of the Republic. The country’s first prisons were established at the urging of and with help from people of faith, who believed that offenders could be reformed during their time in prison.

Quakers were instrumental in the early design of the modern penitentiary in the United States. Inspired by the writing of the British prison reformer John Howard and their belief in the healing power of one’s inner spiritual light, Quakers led the reform of the squalid Walnut Street Jail in Philadelphia.

This first wave of reform in the American criminal justice system came on the heels of the American Revolution. Americans wanted to distance themselves from the harshly punitive British approach to crime (Rothman, 1971). The reformation of the Walnut Street Jail led eventually to the establishment of two new models of penitentiaries; one at Eastern State in Philadelphia, the other in Auburn, New York. Each reflected an underlying theological and philosophical understanding of human nature based on competing Christian notions of sin and
repentance. These model prisons originally called for strict silence and solitary segregation of inmates in their cells in order to facilitate the reflection, repentance and spiritual growth of the inmates.

The Pennsylvania system was based on the Quakers’ theological views of human beings’ basic goodness. The Eastern State Penitentiary opened in 1829 and was designed to create an environment of total solitude for the convicts. Those imprisoned were confined to their cells day and night both to facilitate their conversion and to protect them from the sinful and corrupting influence of their fellow prisoners. Chaplains were expected to visit each inmate and speak to him through the cell door to provide spiritual guidance.

The other model of penitentiary at Auburn State Prison opened in 1821. Its design was influenced by Protestant Calvinist theology that had a far less optimistic view of human nature than the Quakers. The underlying determinism of Calvinism held that while some criminals might not be able to be reformed, they could all be controlled and put to work – hard work being a key virtue in Calvinist thought. In Auburn, the inmates were locked up in solitude at night but were required to work together in enforced silence during the day. Chaplains would stand at various points of the prison and preach to the inmates. Inmates were also compelled to attend church services in chapels that kept them separated from one another.

Their spiritual growth and repentance depended on the chaplains’ presence to provide individual pastoral care to each inmate. However, as in many efforts to reform corrections, the results were far from the original intentions. Within a short period of the new prisons’ celebrated openings it became clear that the strict separation and solitude was leading to unacceptable levels of madness and suicide among the inmates (Johnston, Finkle & Cohen, 1994).
Chaplains played an important role in the correctional ideology of these first prisons. They were seen as facilitators of repentance and conversion in the Eastern State model, and as both pastors and agents of penal control in the Auburn model, the latter perhaps a foreshadowing of the role conflicts that would continue to bedevil chaplains. As Beckner notes, “correctional philosophies [of this era] matched religious views of deviant behavior; thus prisons were constructed and correctional programs designed in ways that were consistent with those assumptions” (2012:157).

These religious assumptions were soon challenged during a revolution in American Protestant theological thought that began in the mid-1800s. The mid-19th century marked a radical change in American Protestant theology among the Protestant denominations that generally provided chaplain ministers to prisons. Biblical scholarship emphasizing a historical and critical reading of scripture along with emerging positivist secular scientific theorizing challenged the certainties of belief. An example was the effect that Darwin’s theory of evolution had on religious thinking regarding the historicity and accuracy of the Bible (Robbins and Cohen, 2008).

Chaplains continued to serve in prisons at this time, indeed virtually every prison in the United States had a chaplain in the years following the Civil War (Wines 1968), but there was a growing liberal theological and secular challenge that became more pronounced in the progressive era of the United States. Sundt (1998) observes that “a belief in the inherent goodness of humankind, coupled with a view of sin as rooted not in depravity, but in the environment, led directly to confidence in the rehabilitation of the offender” (1998:32). This belief marked the beginning of a process of marginalization of the prison chaplain as wardens began to introduce other specialists into the prison to bring about reform of the inmates. Sundt
cites Bates’ (1938) observation that educators, social workers and psychologists began to take over many of the duties previously reserved to chaplains (Sundt, 1998 c.f. Bates, 1938:163).

Warfield (2012) observes that from the 1870s to the 1970s the dominant paradigm of American penology was the rehabilitative ideal. He notes that this represented a shift away from the earlier “19th century Jacksonian Era penology that was deeply rooted in moral and criminal reformation via isolation and hard labor” (Warfield, 2012:25, c.f. Cullen & Gilbert, 1982). With the ascent of the rehabilitative ideal in penology, chaplains’ spiritual role as ministers became increasingly marginal to the central objectives of the correctional system (Sundt & Cullen, 1998). To preserve their foothold in the correctional system, chaplains began to take on more secular duties within the system to further the goal of rehabilitation (Beckner, 2012).

Correctional chaplains became increasingly peripheral members of the prison workforce and attempted to adapt to this changing climate by becoming more and more members of the ‘treatment team” (Sundt, Dammer & Cullen, 2002; Sundt & Cullen, 2002). One example of this was the introduction in the 1930s of Clinical Pastoral Education (CPE). Clinical Pastoral Education is an interfaith professional education program for ministry, particularly hospital and hospice ministry. Theology students and ministers of all faiths experience supervised encounters with persons in crisis. While this is generally done in hospitals, some CPE programs have used prisons as their operational setting. The goal is to help students develop deeper awareness of themselves as persons, better interpersonal and professional relationships and insight about the needs of those to whom they minister (Cobb, Puchalski and Rumbold, 2012). CPE became a normative standard for training in which chaplains, while continuing to be a ‘spiritual’ presence, sought also to be recognized as professional “clinical” staff (Beckner, 2012).
The end of the era of rehabilitation created another new challenge for prison chaplains: space. New prison construction could barely keep pace with the increases in incarceration. By 1990, in the U.S. a new prison or jail was being opened at the rate of one per week (Bauer, 2004). The new prison designs were functional and Spartan, emphasizing economy of operation. Space was at a premium, so these new prisons tended to have instead of chapels, “multi-purpose” rooms that could be shared by all religious and non-religious programs.

Almost all of the nation’s more than 1,100 state and federal prisons have at least one paid chaplain or religious services coordinator, and collectively they employ about 1,600 professional chaplains (Boddie and Funk, 2012). However, many have questioned the need for paid staff chaplains in prisons, resulting in what Beckner terms, “a gradual but persistent erosion of commitment to institutional chaplaincy programs that have now come to be identified as only one of several components in a matrix of treatment alternatives, each of which is expected to have some measurable outcomes” (2012:12). Some states including Colorado and South Dakota have even eliminated professional staff chaplains, opting instead for a volunteer-based chaplaincy drawn from local faith communities (Boddie & Funk, 2012; Beckner, 2012).

In 2000, the U.S. Congress passed the “Religious Land Use and Institutionalized Persons Act” (RLUIPA), which required prison administrators to provide equal access to religious services to any inmate claimants to a rapidly increasing list of faith groups. As O’Connor and Duncan (2011) note, RLUIPA was enacted in large part, “because various prison systems and chaplains were not equally or fairly accommodating the wide variety of humanist, spiritual and religious traditions…in their prisons” (2011:594). Since enactment of RLUIPA there has been a significant increase in the number of religious groups recognized by departments of correction throughout the US. In California alone for example, there are over 150 faith groups listed
recognized by the California Department of Corrections and Rehabilitation. As a result, the traditional denomination-based pastoral role of chaplains continues to erode and the trend of hiring non-clergy religious program managers is increasing nationwide.

*Correctional Chaplains: Role Conflict & Stressors*

Correctional chaplains, like COs are front line staff in prison whose work requires them to interact directly with prisoners in all areas of the institution. Correctional chaplains engage directly with inmates and spend much of their work time in the same recreation and living space as inmates. In fact, they are the only personnel other than corrections officers and medical staff who regularly interact with inmates in all areas of the prison (Shaw, 1995:7). While there has been increasing attention in research on corrections officers and the stressors associated with their work (Schaufeli & Peters, 2000), (Finney, Stergiopoulos, Hensel, Bonato, & Dewa, 2013), little attention has been paid to the stressful effects of prison work on corrections chaplains.

Chaplains operate in an environment where their role is often “fuzzy rather than clear, and contested rather than agreed upon” (Hicks, 2010). Sundt observes, “Chaplains may be uncertain as to what is expected of them outside of providing religious services” (1998:78). Because of this, there is an inevitable tension between the pastoral presentation of spirituality and the custody role of the prison. Chaplains’ work is based on religious beliefs and commitments that are not the same as the institutional correctional goals of safety and security (Sundt, Dammer & Cullen, 2002; Skotnicki, 2004:58). Bound by the same institutional rules that apply to security staff, correctional chaplains engage with inmates in a different role than security staff. Just as COs experience the tension between custody and treatment, so too do chaplains.

While there is increasing attention in research on corrections officers and the stressors associated with their work (Schaufeli & Peters, 2000; Finney et al., 2013), little attention has
been paid to the effects of prison work itself on Correctional chaplains. Chaplains are privy to prisoners’ experiences in a way that is more intimately privileged than that of correctional officers. Sundt and others have written that one of the primary tasks that correctional chaplains engage in is counseling with inmates (Sundt, & Cullen, 2002). In these counseling sessions, inmates often share with chaplains their own horrific experiences of abuse and trauma – not only related to their crimes, but also often related to childhood experiences of abuse and neglect. Chaplains are exposed to repeated traumatic experiences – either directly through their witnessing of violence at work, to vicarious traumatization – by listening to prisoner’s accounts of their own histories of abuse as well as their accounts of their crimes. Prisoners often share with a chaplain their own perspectives on the crime(s) they committed that resulted in their prison sentences. Often violent in nature, these stories can be profoundly disturbing to hear. Several of the chaplains interviewed for this study commented on their experiences with this stressful aspect of their work.

A frequently overlooked source of role problems for correctional chaplains is the conflict between being a good minister or a bad minister. Sundt & Cullen (1998) describe this as the clashing images of “the prison minister as a person answering the Biblical call to visit those in prison (Matthew 25), versus the image of the correctional chaplains as second rate clergy who no one else will hire” (1998:160).

Changes in penal ideology, as well as the general trend toward secularization in American society have also posed an ongoing dilemma for correctional chaplains. Hicks notes chaplains have been forced to adapt to the constantly shifting priorities of the American criminal justice system: “Chaplains hold a unique position in the correctional hierarchy that requires them to flexibly move between different roles and expectations” (Hicks, 2010:3). Their role is unique as
Beckner (2012) observes because “the pastoral role is the only critical dimension of correctional chaplaincy that cannot be filled by someone with no ministerial credentials” (2012:156).

Previously their role in the moral reform of inmates was obvious - by facilitating their religious conversion, chaplains would be instrumental in changing criminals from sinners to useful citizens (Skotnicki, 2000). However, their role in the prison became much less clear in the rehabilitative era (Sundt, 1998). Emerging positivist social science theories viewed crime not as moral failures but instead as treatable social problems. Beckner (2012) writes, “As belief in secular solutions to criminal behavior gained prominence, the role of religion in the reformation of offenders gradually diminished” (2012:15). These changes exacerbated the tension chaplains felt between their role as pastor and their role as treatment team clinicians.

In her seminal study of prison chaplains, Sundt (1998) expected to find that role problems would increase work-related stress and decrease the levels of job satisfaction among chaplains (1998:162; Sundt & Cullen, 2008). Sundt studied “stress, role conflict and job satisfaction” among chaplains, using a nationwide random sampling of prison chaplains in a mail survey (n=174). She examined individual characteristics of chaplains, denominational affiliation, religious beliefs and social support networks. Her dependent variables included: chaplains’ duties, using Likert scales to rank activities from most common to least common, and correctional orientation, and attitudes toward rehabilitation and work stress using Cullen, Lemming, Link and Wozniak’s (1985) measure of work stress of correctional officers.

Her models of job satisfaction regressed with religious and work-related variables revealed that for her sample, “role conflict emerged as a “significant predictor of job satisfaction” (1998:260), supporting her hypothesis that increasing role conflict decreases job satisfaction. She notes that her findings confirm those of previous studies of role conflict and job satisfaction.
Significant to this study’s goals, Sundt concluded that the “chaplains who feel their work is stressful are more likely to find their work unsatisfying” (1998:296). She found however that there was considerable variation in the degrees that chaplains experience role conflicts, and that in her sample, chaplains reported moderate to low levels of stress and they considered their work highly rewarding (1998:238). It is because of their documented lower levels of stress and higher degree of job satisfaction (Sundt & Cullen, 2008), as well as the spiritual training that they bring to their work that they were included in this study as a comparison group to COs.

Correctional chaplains, by their training and sense of ministerial calling, bring to their work not merely a religious identification based on denominational dogma, but also a living spirituality that includes a sense of connection with others and a hopeful outlook – characteristics that comprise the operational definition of spirituality for this study (Wester, 2010). Their spirituality informs their distinctive professional status in the prison.

In this study, correctional chaplains by virtue of their professional religious training, spirituality and connection to supportive faith communities, are hypothesized to be more emotionally resilient and less likely to suffer workplace stress and burnout than COs working in the same environment who do not have professional religious training, spirituality or a connection to supportive faith communities. In the next chapter the theory supporting the use of spirituality in this study is presented.
CHAPTER 3: CONCEPTUAL FRAMEWORK

Bandura’s Social Cognitive Theory:

Social Learning Theory, as developed in the Cognitive Learning Theory of social psychologist Albert Bandura (1986), is the theoretical foundation of this study. A key insight of Bandura is that environment influences behavior and behavior influences environment. Behavior, cognitive and other personal factors and environmental influences all operate dynamically and interactively as determinants of each other. Bandura refers to this “triadic” process as “reciprocal determinism” (1986:23). He rejects the simple one-way causality of radical behaviorism that views behavior as simply a response to environmental stimuli. Instead, he describes a continuous bidirectional interaction of environment with an individual's thoughts, behaviors and psychological processes. He writes, “The whole of any environment may be more powerful and problematic than the simple sum of its individual parts” (1986:276).

Another aspect of Bandura’s thought germane to this study is his notion of self-efficacy. Self-efficacy presumes that an individual has personal agency and some ability to exert control over events in his/her life. Self-efficacy gives people the perseverance to remain focused on their goals even when challenged with severe difficulties. Bandura writes, “The metacognitive capability to reflect upon oneself, one’s sense of personal efficacy, and the adequacy of one’s thoughts and actions is another distinctly core human feature of human agency” (Bandura, 2003:168). His conception of self-efficacy suggests that emotional and psychological resilience as well as behavior can be enhanced by improving the workplace environment.

It would follow based on Bandura’s theory, that the socially learned behaviors of correctional officers are molded and altered by both the environment of the prison as well as the personal characteristics of the COs themselves. Chenault’s (2010) study of CO socialization in
the state prisons of Nebraska offers an illustration of this process. Chenault described how more experienced COs taught new COs sets of competing cultural “scripts” regarding inmates. He found that COs employed different scripts based on the inmate and the situational (social) context. He discovered that COs tended to use a “dehumanizing script” based on fear of the inmate(s) and used “empathic scripts” when they believed inmates deserved respect. Chenault observed that adoption of the empathic script was necessary for COs to achieve negotiated order within the prison, while the dehumanizing script served to insulate officers from being compromised by inmate manipulation (2010:18).

Chenault’s findings support Bandura’s contention that the environment (in this case the prison) is both the product of human choices as well as a force for shaping those choices. His work also serves to illustrate what Bandura terms “social verification by peers” (1986:513). Social verification by peers reinforces the “correctness of ones actions, even if theses actions conflict with previous personally held views of right and wrong (Bandura: 1986).

Chenault noted that among the COs he studied, officers deemed compromised (as the result of perceived inmate manipulation) were rejected by their peers as a danger to the cohesiveness of the CO culture. “Outsiders” were forced out of the profession through a series of informal disciplinary techniques including counseling, ostracizing and retaliation (2010:186). This process suggests that even if individuals begin work as COs with benign attitudes toward prisoners, it is likely their peers will shape their workplace views to fit the institutional mold, which may not be benign at all.

While not explicitly referencing prisons, Bandura describes some problematic elements in the interactive process of individuals with their environments in social settings. Bandura recognizes the dysfunctional nature of some of these interactions. This is consistent with
Haney’s description of how prison environments can have profoundly damaging effects on both those who live and work within them.

For example, the “toxic ideological atmosphere” that Craig Haney identifies in many prison settings (Haney, 2008:956) is made possible through what Bandura calls “social diffusion of responsibility, dehumanization, and a process of social verification or reinforcing of behaviors (1986:510). Haney notes, “A combination of powerful contextual forces to which correctional officers are exposed can influence and affect them in ways that may engender a culture of mistreatment and harm” (2008:956).

Haney characterizes these “contextual forces” as the belief system or ideology of the prison system, the stark deprivation of the prison environment and the conflictual relationship between the correctional officers and those they are keeping in custody (2008:955). This harsh interaction of contextual forces and behaviors describe well some of the mechanisms present in the prison environment that contribute to CO burnout.

From the time they enter the training academy, correctional officers observe how other COs behave. Bandura argues that learned behavior is put into practice by the one who has been observing through a process of “reproduction,” converting symbolic conceptions into appropriate actions” (1986:63). His concept of observational learning explains how learning by imitation is not simply mimicry, but instead requires the interaction of the person with others, a process that includes an exchange of values (1986: 225).

Another aspect of observational learning that Bandura describes is the importance of motivation. The often difficult and negative conditions of prison work affect the motivation of officers. Farkas (2001) notes that COs confront unique occupational conditions working with a population of inmates that is often “anti-authority” and “anti-rule” and that is, by definition,
being held against their will in situations that often require lightening speed judgment and physical reactions (2001:20). Thus the motivation of COs can be negatively impacted because the people who normally observe their day-to-day behavior (the inmates) are generally going to give them negative feedback.

On the other hand, motivation can also be enhanced by COs’ sense of pride, reward and satisfaction with their work. “People are more likely to exhibit modeled behavior if it results in valued outcomes, than if it has unrewarding or punishing effects” (1986:68).

A basic premise of this research is that COs’ resilience and resistance to burnout is socially learned behavior in the context of a dynamic and reciprocal interaction with the prison environment, inmates and fellow-workers. It is hypothesized that spirituality might provide socially-learned values and beliefs that could help COs better cope with their challenging work.

Bandura accounts for spirituality in his cognitive learning theory. The ability to self-reflect is related to spirituality through a process he calls “Spiritual Modeling” (2003:168). Oman et al. (2012) write that in spiritual modeling, people learn spiritual behaviors such as compassion, forgiveness or devotion by seeing such behavior exemplified by others they encounter in their family or community, or through oral, written or electronic media (2012:278).

Bandura notes, “Most people acknowledge a spiritual aspect to their lives, in the sense of seeking meaning and social connectedness to something greater than oneself without being tied to a formal religion or deity” (2003: 170). He also points out that spirituality and religiosity are not confined to one’s “intrapsychic” self, but are socially grounded phenomena (2013:171). For Bandura, our capacity for spiritual life depends on social modeling from other people. Spirituality theory is taken up in the next section of this chapter.
Spirituality Theory

Spirituality as operationalized in this study is not to be confused with confessional religious faith. This study is not about religion. Religious beliefs are not the focus and are not measured. There are however, some relevant similarities between religion and spirituality as defined in this study. Religion as defined by Durkheim, is “a unified system of beliefs and practices relative to sacred things … beliefs and practices which unite into one single moral community” (Durkheim 1995:44). Wrestling with the relationship of religion and empirical science is at least as old as the field of sociology itself. Durkheim writes in his meticulous study of the phenomenon of religion “this entire study rests on the postulate that the unanimous feelings of believers down the ages cannot be mere illusion… the fundamental categories of thought, and thus science itself, have religious origins (Durkheim: 420). Bandura (1983) echoes this when he writes that spirituality is not learned or experienced outside of a social environment.

One of the problems with the term “spirituality” in regard to empirical science is the lack of an agreed upon definition of what spirituality is. It is often wrongly conflated with religious faith and thus placed outside of the realm of measurable, empirical study (Woodhead, 2011).

Another difficulty revealed by the literature is the tendency of behavioral science research to use the term’s religion and spirituality interchangeably. While some researchers are careful to conceptualize spirituality and religion as separate and different phenomena (Harlos, 2000; Shafranske & Malony, 1990), Mohamed et al. (2004) write that some of the epistemological confusion in the field is caused by an artificial and unnecessary distinction made between spirituality and religiosity. They argue that this distinction is artificial because
all the major world religions have a spiritual dimension that promotes a “specific ultimate meaning and purpose for life” (2004:104). They observe that the problem is not that the definitions are incorrect; they are simply incomplete (2004:103).

There is an important distinction to be made between religion and what is meant by “spirituality” in this research. The Catholic theologian Sandra Schneiders offers some working definitions of both religion and spirituality. Religion, she writes, “Is the fundamental life stance of the person who believes in transcendent reality, however designated, and assumes some realistic posture before that ultimate reality” (Schneiders, 2003). Her definition of spirituality is related to but distinct from religion: “[Spirituality] is the experience of conscious involvement in the project of life-integration through self-transcendence toward the ultimate value one perceives” (Schneiders, 2003). Her definitions suggest that religion includes a set of beliefs in a transcendent reality, whereas spirituality is more concerned with self-transcendence and personal growth.

While conflating the concepts of spirituality and religion are a problem in research, the opposite tendency, to attempt to split them apart from one another is an equally serious epistemological trap. Zinnbauer, et al. (1999) caution that attempts by researchers, particularly in psychology and the social sciences, to try to separate religious experiences from the construct of spirituality risks polarizing each into simplistic categories. The polarization of religion and spirituality can yield only a limited understanding of the two constructs (1999:903).

This study wishes to avoid a simplistic definition of religion and spirituality. Every religion has at its heart a spirituality in which the primary goal is to bring people closer to whatever one holds as transcendent truth (Mock, 1992). The emphasis on spirituality,
indeed the choice of spirituality as an independent variable for this study does not imply that religion is something negative and spirituality is something positive.

While much is written in theological circles about religion and spirituality, there has been less attention given to this dimension of human life in the social sciences. This has not always been the case in social science inquiry. Durkheim considered religion to be an essential dimension of human life and the symbolic expression of human societies (Durkheim, 1912). Dewey (1934) sought a humanistic understanding of spirituality that was not tied to traditional religious beliefs. Carl Jung (1964) decried the loss in Western culture of a spiritual view of the world noting, “nothing is holy any longer.” (1964:84). Maslow (1970) argued that “spiritual values have naturalistic meaning . . . they are not the exclusive possession of organized churches” (1970:33). Flannigan & Jupp (2007) write, “Spirituality signifies an indispensable dimension of what it means to be human” (2007:1).

While a small number of researchers have looked at the role of spirituality in corrections (Sundt, 1998; Clear, et al., 2000; Haney, 2008; O’Connor, 2003; Hicks, 2010), most of the work in criminology studying spirituality has focused on offenders (Hirschi, 1969; Maruna, 2001; Giordano, et al.; 2002; Sampson and Laub, 2003). In a review of crime and religion studies conducted between 1944 and 2010, Johnson (2012) found that 91% of the 269 studies reported an “inverse or beneficial relationship between religion and some measure of crime or delinquency (2012:432).

Recently Jeffreys (2013) focused attention on spirituality in places of solitary confinement. He observes, when people hear the word “spirituality” they often think of non-material realities. However, he writes we are spiritual beings who operate through bodies (2013:7). Looking at the historical use of physical punishment in American penitentiaries,
and reflecting on the use of prison architecture to constrain human interaction, Jeffries describes the spiritual damage that high security prisons inflict on the human spirit (Jeffreys, 2013:53). Jeffries’ study focuses on the effects of prison on inmates’ spiritual lives; this research attempts to study the effects of spirituality on the work lives of COs.

There are those within the field who have argued more attention should be given to the spiritual dimension of the criminal justice system. Peacemaking criminologist Quinney defines crime as suffering and suggests the solution to this suffering is of a spiritual nature (Pepinsky & Quinney, 1991). Ironically, some of the best definitions of spirituality in relation to the problems of coping with stress, trauma and violence come not from peacemaking criminology, but from the American military. Recent groundbreaking work by U.S. military chaplains has provided a means by which spirituality can be operationalized and measured as an element of character development (Wester, 2010).

Spirituality is defined and operationalized in this study using a definition of spirituality employed by the U.S. Army chaplains: “[Spirituality] is a process transcending self and society that empowers the human spirit with purpose, identity and meaning” (Wester, 2010:8).

The literature suggests that a limitation in the study of spirituality is the question of validity: Hodge states that since spirituality is “a subjective interior reality” it is difficult to quantify (2003:15). Another limitation in research on religion and spirituality has been the use of overly simplistic constructs that failed to recognize the multi-dimensional quality of spirituality (Haber et al., 2007:266).

A 1999 joint study by the Fetzer Institute and the National Institute on Aging was one of the first major studies to address the multidimensional measurement of spirituality in
health research (Fetzer Institute/National Institute on Aging, 1999). The measurement items used in the Spirituality Scale developed by the US Army chaplains and that are used in this study to measure the independent variable “Spirituality” were taken directly from the 2007 study by Haber et al. Haber and his colleagues drew their questions principally from the Fetzer Institute Religion/Spirituality (R/S) measure.

Haber et al. (2007) wrote, “Since the late 1990’s a steadily increasing number of studies has been published in mainstream psychiatric and medical journals on the relationship between spirituality and health [that] were reasonably consistent in indicating a positive religion/spirituality health influence” (2007:266). They cite findings by Larson, Swyers and McCullogh (1997) that suggest that spirituality variables are “modestly but positively associated with prevention of illness, reduced mental disorder, increased treatment effectiveness, and improved ability to cope with and recover from major medical disabilities and serious addiction” (2007:268).

In addition to their use of the Fetzer Institute measures of spirituality, Haber et al. (2007:271) also employed what they describe as classic measures of spirituality, with well-documented reliability: The Spiritual Well-Being Scale (Ellison, 1983) and the Age-Universal version of Allport and Ross’s Religious Orientation Scale (Allport & Ross, 1967).

In the literature, two aspects of spiritual health have been repeatedly emphasized: The internal characteristics of those who are spiritually well, and the ways in which spiritual individuals express themselves in their external interactions (Hawkes, 1994:4).

Banks (1980) and Ram (1998) agree that intrapsychically, spiritual health seems to provide the individual with life purpose and ultimate meaning. Hawkes (1994) adds to this that spiritual health fosters a sense of connectedness with others. In terms of this connection to
others, spiritually well individuals were said to express themselves through trust, honesty, integrity, altruism, compassion, and service (Banks, 1980; Chapman, (1987). However, Haber et al. (2007) argue research on religion and spirituality has often been limited by use of single Religion/Spirituality variables, use of overly simple constructs, and lack of conceptual clarity.

The issue of well-being or wellness is directly related to spirituality research. A goal of wellness research and practice is the reduction of suffering. Since the beginning of this century, there is a robust and growing body of literature on wellness, particularly as it applies to correctional workers (Brower, Fort & White, 2013). Spirituality contributes to wellness through the process of meaning-seeking, existential purpose and a sense of harmony with others and with the transcendent aspects of human life (Hettler, 1980). The following section describes some of the wellness research focusing on COs.

Wellness theory

Victor Frankl, a concentration camp prisoner of the Nazis during World War II observed that even in the horrors of a Nazi death camp, some prisoners showed remarkable resilience and were able to survive by finding meaning and purpose in their lives, despite what was happening all around them. Frankl wrote in his celebrated book, “Man’s Search for Meaning” (Frankl, 1959) that the search for meaning is a core psychological motivation in life, and only the individual can discover the meaning of his or her own life (1959:102). Maslow describes this growth in awareness and meaning as a process of “self-actualization” (Maslow, 1968). Bandura uses a similar idea in his theorizing about the human need to find meaning in life as “self-efficacy” (Bandura, 1977). Wellness or well-being is associated with spirituality insofar as it is identified as a process of searching for meaning or purpose in one’s life. Miller and Foster
(2010) maintain that the term “wellness” is generally interchangeable with “well-being” in the literature.

Wellness as a legitimate field of scientific inquiry began to enter American medical research after the Second World War, although the concepts and practices of holistic health have existed in almost all human cultures since ancient times (Stará & Charvát, 2015). Dunn (1959) is perhaps the first American researcher to define wellness not as the mere absence of illness, but as the opposite of illness (1959:790). American medical practitioners began in the 1960s to consider wellness as the maintenance of health and not simply a reactive solution to pathology.

The concept of wellness as a holistic model of physical and psychological health emerged as a subject of empirical social science study in the 1970s. By the end of the 1970s, Chapman (2008) notes, corporations were beginning to incorporate wellness programs for their employees, both to help their employees remain healthy and to lower the costs of health insurance for the companies.

Current research approaches wellness as a multidimensional phenomenon (Miller & Foster, 2010) including spirituality. Larson (1999:123) describes wellness as a state of complete physical, mental and social well-being. Ruff and Singer (2006) describe wellness as awareness of one’s feelings, actions, relationships and autonomy as well as the ability to cope with stress and having a positive outlook on life. Feemster, (2009) links spirituality to wellness, noting, “Spirituality is rooted in a belief in something greater than yourself that relieves stress and does away with a toxic self-centeredness” (2009:4).

Given the stressful and potentially dangerous nature of public safety work, it is not surprising that policing and firefighting agencies were quick to adopt wellness programs for their employees. Tanigoshi, Kontos & Remley (1999) note that researchers have consistently found
Police officers are more vulnerable to suicide, alcoholism, drug use, depression, anxiety, internal stress, PTSD, marital problems and domestic violence compared with the general population. To address these issues, Employee Assistance Programs (EAP) were established by public safety agencies as a means of helping and rehabilitating employees. These programs quickly expanded to include mental health and wellness services for both employees and their families (EASNA, 2016).

Despite the stressful nature of the work and similarities to other public safety agencies, corrections departments were slow to implement EAP programs for correctional workers. Ferdik & Smith (2016) observe that while significant numbers of policing agencies in the US have introduced EAP programs to help distressed police officers, only 100 prisons (out of 4000 in operation in the US in 2013) had any form of EAP program and “very few of these existing programs were ever scientifically evaluated to determine their effectiveness at improving CO well-being” (2916:35).

Fortunately this is changing. For example, as of August, 2016 the California Department of Corrections and Rehabilitations (CDCR) has established Peer Support Programs (PSP) that use peer mentors from the correctional custody and non-custody staff throughout its state prison system. Peer support volunteers are trained in basic listening and counseling skills and can answer basic questions and refer their colleagues to helpful resources. Since they are not outside professionals, they are more likely to be trusted by their peers in the institutions (Roland 2011).

EAP and PSP programs are limited in that they tend to be focused on treating and rehabilitating employees whose problems are already impacting or endangering their work performance (Klinger & Nalbandian, 1998). Wellness programs are different because they are
preventative in nature and encourage healthy lifestyle choices before stress-related problems emerge.

While some researchers have argued that a construct for wellness is difficult because of the subjective nature of “well-being” (Kelly, 2000), there are several well-validated instruments that have been designed to measure wellness. (Anderson, et al., 1989; Ryff, 1990; Brown & Ryan, 2003; Hattie, et al., 2004; Shapiro et al., 2008).

The most current research on CO wellness is reported by Ferdik & Smith in their 2016 (and as yet unpublished) meta-analysis of CO safety and wellness literature. Ferdik & Smith note that it is only recently that researchers have begun empirical study of CO wellness. Their review of the literature encompassing studies from 2000 and afterward reveal that many correctional agencies have begun introducing CO safety and wellness policies and programs with the intention of enhancing CO well-being, but few of these programs have been subjected to rigorous scientific evaluation (2016:4).

Ferdik writes, “Correctional researchers, administrative officials and prison systems in general have largely neglected the health and safety concerns of officers” (2016:38). This study is an attempt to address this gap in our understanding by adding to the scant literature on CO wellness in order to suggest policy choices for correctional agencies to improve the well-being of their officers.

**Research Philosophy**

This research is a search for truth, acknowledging that while there may be an objective world, our knowledge of this world is always contingent and shaped by the subjective experience of both researcher and the subjects being studied. Given the subjective nature of one’s “spirituality,” this study employed a qualitative, grounded theory approach, in addition to the
quantitative data collected. It is hoped that this approach will capture and reflect on the stories, feelings and work experiences of a subgroup of the sample of COs and chaplains studied.

While some social scientists are reluctant to employ spirituality as an empirically measurable variable, this researcher believes moral, religious and spiritual norms are appropriate, indeed necessary tools for social research. Arguably the basic tenet of Durkheim’s sociology was an understanding that systems of human interaction are governed by moral and religious norms (Durkheim, 1912).
CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

The purpose of this study is to test the hypothesis that spirituality affords correctional officers the ability to resist burnout and maintain emotional resilience in the face of the challenging work environments they encounter every day. The study addressed the following three research questions and hypotheses:

Question 1: Is there a correlation between spirituality and burnout among correctional workers?

Hypothesis 1:
- \( H_1 \) Correctional workers who score high on indices of spirituality will demonstrate lower burnout scores than correctional staff who do not score high on spirituality.
- \( H_0 \) Spirituality will show no correlation with burnout.

Question 2: Is there a correlation between spirituality and resilience among correctional workers?

Hypothesis 2:
- \( H_2 \) Correctional workers who score high on indices of spirituality will demonstrate greater emotional resilience scores than correctional staff who do not score high on spirituality.
- \( H_0 \) Spirituality will show no correlation with resilience.

Question 3: Do correctional chaplains score higher on resilience and lower on burnout than correctional officers?

Hypothesis 3:
- \( H_3 \) Correctional chaplains have greater resilience and less burnout than correctional officers.
- \( H_0 \) No difference

Question three with its corresponding hypothesis was included not because it was the focus of this study, but to support a theoretical assumption on the part of the researcher that correctional chaplains, by virtue of their work and their training would score higher on measures of spirituality.
Quantitative Research Design:

This cross-sectional study used survey methodology incorporating three existing, well-validated scales into an online survey administered to a randomly selected sample of correctional officers and correctional chaplains in two departments of correction (Oregon and Nevada) in the western United States. Data were collected from both this online survey and 12 intensive interviews with correctional employees who had indicated in their response to the online survey they were willing to participate in a follow up interview.

The online survey included demographic information such as gender, age, and years of service (in corrections). Online surveys have emerged as an effective data collecting strategy as access to the Internet becomes more widespread (Roberts & Allen, 2015). Conley (2007) writes that online surveys have increased in popularity and practicality among social science researchers and that well-constructed online surveys are less expensive, easier to complete and summarize than traditional mail or telephone surveys. However, Cull et al. (2005) observe that survey response rates have been in steep decline in the U.S. (and other nations) for several decades. Despite this trend, given the difficulty accessing prison personnel, online surveying remains a viable means of collecting data (Best & Krueger, 2004).

The research design of this study reflects its exploratory and descriptive nature. The purpose of this study was to examine how correctional workers’ spirituality affects their resilience and their ability to avoid workplace burnout. This first section describes the operationalization of the quantitative variables, quantitative data collection and the sampling strategies used. The qualitative methodology is described in the second section of this chapter.

Quantitative data were collected using the online survey of correctional officers and correctional chaplains. Stata 14© software was used to organize and analyze the survey data.
Qualitative data were collected by conducting 12 intensive interviews with COs and chaplains who had completed the online survey and volunteered to be interviewed as a follow up to the questionnaire. The purpose of the qualitative component was to provide a richer context for understanding the work environment and challenges encountered by correctional workers. Atlas.ti© software was used to manage, organize and analyze the data collected by the interview process.

Operational Definitions

Independent variable: Spirituality

During the height of the U.S. military engagement in Iraq in 2008, U.S. Army chaplains were tasked by General David Petraeus to study how spirituality affected the ethical behavior and resilience of soldiers (Wester, 2010:2). Military leaders were concerned about reports from the field that indicated “significant percentages of military personnel who stated they would not report a fellow member of the military for killing or wounding an innocent non-combatant” (Wester, 2010:3).

The chaplains developed a survey they called EXCEL – “Excellence in Character, Ethics and Leadership.” 1,250 randomly selected soldiers in combat zones in Iraq were surveyed using this EXCEL paper-and-pencil instrument. Their study tested a wide range of constructs about the ethical attitudes and behavior of U.S. soldiers. The Army chaplains noted, “Ethical dilemmas abound, and soldiers are constantly faced with demanding challenges. Lapses like Abu Graib and other severe ethical failures make it evident that ethics training is an ongoing necessity” (Dunlap, 2005).

The EXCEL survey was constructed using existing well-established surveys that measured spirituality. These included the “Dimensions of Religion/Spirituality and Relevance to
Based on the findings of a sample (N=1263) of American soldiers and their commanding officers in an Iraqi combat zone, the authors found spirituality could best be measured using three subscales: Connection to Others, Religious Identification and Hopeful Outlook (Wester, 2011). Their study found that spirituality, properly understood, “correlates positively . . . with increased psychological and physical resilience” (2010:3).

The three factors comprising the spirituality subscales were compared with other validated self-reported scales measuring correctional staff burnout and resilience. Refer to Appendix 2 for the U.S. Army Chaplains’ Spirituality Index. While clearly these three factors do not account for all elements of spirituality, Wester notes that they reveal a workable model of spirituality for those surveyed (Wester, 2010:7).

Dependent Variable 1: Burnout

Burnout is operationalized for this study using the Maslach Burnout Inventory (Maslach, 1986). The MBI is a well-established and validated measure of burnout. The MBI index can be found in Appendix 3.

In the early 1980s, the authors recognized the need for a standardized measure of an individual’s experience of burnout (1986:1). “Burnout is a state of exhaustion in which one is cynical about the value of one’s occupation and doubtful of one’s capacity to perform” (1986:20). Designed originally to measure burnout in human services work, the MBI has subsequently been
adapted for use with educators (MBI-Educators Survey) and for use with workers in other occupations (MBI-General Survey).

Maslach et al. use three subscales to measure Burnout: Cynicism, Emotional Exhaustion and Professional Efficacy. Cynicism, as defined in the General Survey used in this study is a measure of one’s indifference, detachment and/or negative attitudes toward one’s work and other people. Emotional Exhaustion measures the degree to which the subjects feel emotionally depleted or overextended by their daily work. Professional Efficacy measures the subjects’ sense of or expectations about their effectiveness at work (Schutte, et al. 2000:54).

The subscale Professional Efficacy is related to Bandura’s concept of self-efficacy. Bandura notes that our sense of efficacy is what motivates us and helps us succeed in our efforts. A lack of self-efficacy weakens this. Positive goals encourage people to persevere (Bandura, 1986). “The rewards of personal efficacy, the satisfactions and benefits derived from mastering events, figure prominently in the generality and steadfastness of human pursuits” (Bandura, 1986:255).

Dependent variable 2: Resilience

There is a robust body of research on resilience. The concept was pioneered in the work of George A. Bonanno, a psychiatry researcher at Columbia University. He proposed resilience be understood as “The ability of adults in otherwise normal circumstances who are exposed to an isolated and potentially highly disruptive event such as the death of a close relation or a violent or life-threatening situation to maintain relatively stable, healthy levels of psychological and physical functioning” (Bonanno, 2004:7).
In their 2005 review of the Literature on Trauma, PTSD and Resilience, Agaibi and Wilson define resilience as the “ability to adapt and cope successfully despite threatening or challenging situations” (2005:198).

Resilience is operationalized for this study using the 25 item Resilience Scale for Adults© (RSA), developed by Gail M. Wagnild & Heather M. Young (1987). Refer to Appendix 4.

Resilience can be measured as a sum of its (5) Subscales: Self-reliance, Meaning, Perseverance, Equanimity and Existential Aloneness. Self-reliance is recognition of one’s personal strength and capability to accomplish goals by means of one’s own abilities. Meaning measures the degree to which subjects feel their lives have purpose. Perseverance is the ability to continue to function and construct one’s life in the midst of difficulties, adversity and setbacks. Equanimity suggests a balanced life where one is capable of confronting challenges with moderation and a sense of humor. The fifth subscale, Existential Aloneness measures the subject’s sense of uniqueness and freedom as well as their recognition (and self-confidence) that some experiences must be faced alone (Wagnild, 2009:106).

Conceptual Diagrams: Figures 1-4

Figure 1 (page 94) illustrates the individual subsets of the IV spirituality (Hopeful Outlook, Religious Identification and Connection to Others) with the three DV burnout subscales (Cynicism, Emotional Exhaustion and Personal Efficacy).

Figure 2 (page 95) shows the hypothesized effects of the IV Spirituality on the DV Burnout, indicated with positive [+] or negative [-] symbols. The Spirituality and Burnout coefficients from the data analysis are presented in Figure 4, Appendix 1 on page 145.

Figure 3 (page 108) shows the individual subsets of IV spirituality with the five (5) DV resilience subscales (Self-reliance, Perseverance, Meaning, Equanimity, and Existential
Aloneness) with their hypothesized effects indicated as positive [+] or negative [-]. The Spirituality and Resilience coefficients from the data analysis are presented in Figure 4, page 109.

Research Strategy

Data Collection and Sample recruitment procedures:

Conducting exploratory research in correctional facilities poses a daunting challenge. Lofland et al. (2006) describe correctional settings as private places which require a “formal invitation” to gain access. The Departments of Correction of California, Washington State, Maryland and Massachusetts were all approached by this researcher and all refused access to their employees. Typically, lack of resources to dedicate to the research was cited as their reason for denying access.

This study used a random sample of correctional officers and correctional chaplains selected by their respective departments from the state prison systems of Oregon and Nevada. Due to privacy concerns, the OR and NV Departments of Correction insisted that they be the ones to select and contact their employees. These employees were randomly selected by their departments from their DOC employee databases, using a random number generator.

At the time the survey was conducted there were approximately 2500 COs in the OR DOC and 1450 COs in the NV DOC. Random sampling was employed to ensure the sample taken was statistically and demographically representative of the DOC employees in both states. Refer to Tables 1-3 for sample characteristics.

Once the COs and chaplains were selected, their respective departments forwarded to each of them an email from this researcher inviting them to participate in an online survey. Refer to
Appendix 6. The email contained an introduction, an online consent form and a link to the online survey. On average, the survey took respondents 12 minutes to complete. The subjects indicated their consent by going to the online link provided and completing the online questionnaire. See Appendix 6 for this questionnaire.

A total of 700 randomly selected corrections officers, (400 from the Oregon Department of Correction and 300 from the Nevada DOC) and 25 chaplains (21 from OR and 4 from NV) were contacted by their departments via email inviting them to participate in an online survey. Data were gathered from their responses to the online survey.

Because the number of corrections chaplains in each state is much smaller than the number of COs, the entire chaplain population in each state was surveyed: 21 chaplains in Oregon and 4 chaplains in NV.

Included in the introductory email message was an invitation to respondents to volunteer for a 30 to 40 minute phone or Skype interview to follow up on their survey responses. Their willingness to be interviewed was indicated on the online survey by their response to the question, “Are you willing to be interviewed?” Willing respondents were instructed to including their email address in the space provided in the online survey in order for the researcher to contact them. This allowed for qualitative data to be collected from the intensive interviews.

Of the original 134 respondents, 45 COs and 17 chaplains expressed their willingness to be interviewed. The interview protocol used is found in Appendix 7.

Development of Data Set:

The online instrument for collecting the quantitative data for this study was constructed using Qualtrics Software© (2014). The online questionnaire consisted of a combination of the
three validated instruments measuring spirituality, burnout and resilience. In addition, demographic information was collected as follows: Gender, Age, Years of Service in Corrections, Highest Level of Education, Prior Military Service, and Security Level of their institution. The online survey differentiated between chaplains and COs by asking them which work role they served. Respondents were asked what faith group/religious denomination they affiliated with and their perceived level of workplace danger.

Data Management and Analysis:

Only the researcher had access to the data during collection, via a password-protected online survey platform. The researcher employed a graduate student assistant to code the transcribed interviews and the confidentiality of the subject interviewee was safeguarded by the researcher removing any identifying information from the interview transcripts prior to providing them to the student coder. The data collected has been used for analysis for this dissertation project only. It will not be used or given to anyone else to use for any subsequent research. The data sets from the online survey were cleaned and stored on a password-protected flash drive accessible only to this researcher. The interviews were recorded digitally and then transcribed into word documents. Both original recorded interviews and transcripts and codebooks were then stored on a password-protected flash drive accessible only to this researcher. This was in accordance with the IRB approved protocol for this study.

Data management and analysis was performed using Stata 14© software for the survey data. Atlas.ti© software was used to managed, organize and analyze the data collected by the interview process.
Ethical Considerations:

IRB Human Subjects approval was granted for this project from Northeastern University‘s Internal Review Board on April 1, 2014. Approval was renewed on March 4, 2015. IRB# 14-02-11. It is expected this research presents no more than minimal risk of harm to human subjects. Refer to Appendix 5 for informed consent protocols.

Data Quality Concerns:

The major challenge of this project was collecting an adequate sample size from a workforce that is difficult to access given the high level of control and security characteristic of U.S. prison departments. A statistical power analysis was conducted to calculate sample size needed as well as the power level for one independent variable and seven dependent variables (including the demographic control variables). A minimum sample size of 108 COs was required to yield an anticipated effect size of 0.15, a desired Statistical Power level of 0.8, and probability level of 0.5 (Soper, 2006). To ensure a minimum sample size, it was determined that 700 COs would be contacted. 120 COs responded to the online survey for a response rate of 17%. Of these, 9 COs’ submitted surveys had missing data or were not fully completed and were discarded. Thus, the final sample size of COs was 111.

Given the small number (25) of Correctional chaplains in both states, all of the chaplains were contacted. 23 of the 25 chaplains contacted responded to the online survey for a response rate of 92%. All of the responding chaplains’ submitted surveys were complete.
Response Rates:  (Percentages may not add to 100 due to rounding).

<table>
<thead>
<tr>
<th></th>
<th>Total # of Surveys Sent</th>
<th>Total Responses</th>
<th>Response Rate</th>
<th>Agreed to be Interviewed</th>
<th>Interview Response Rate**</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Respondents</td>
<td>725</td>
<td>134</td>
<td>18.5%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>All COs</td>
<td>700</td>
<td>120*</td>
<td>17%</td>
<td>45</td>
<td>38%</td>
</tr>
<tr>
<td>OR COs</td>
<td>400</td>
<td>85</td>
<td>21.5%</td>
<td>31</td>
<td>37%</td>
</tr>
<tr>
<td>NV COs</td>
<td>300</td>
<td>35</td>
<td>12%</td>
<td>14</td>
<td>40%</td>
</tr>
<tr>
<td>All Chaplains</td>
<td>25</td>
<td>23</td>
<td>92%</td>
<td>17</td>
<td>70%</td>
</tr>
<tr>
<td>OR Chaplains</td>
<td>18</td>
<td>17</td>
<td>94%</td>
<td>17</td>
<td>100%</td>
</tr>
<tr>
<td>NV Chaplains</td>
<td>7</td>
<td>6</td>
<td>92%</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

* 9 CO responses had to be discarded because of missing data on survey returned.

** Interview response rate was based on total number of responses received.

This table shows that among all COs, 17% responded to the online survey. The OR COs had about twice the response rate of NV COs- (21.5% compared with 12% from NV). The CO response rate for interviews was consistent across all groupings- averaging 38% for both OR and NV COs.

Chaplains had a considerably higher response rate of 92% in both states. Among the OR chaplains, all but one responded to the initial survey and of these 17 respondents, all 17 offered to be interviewed as a follow up to the survey. Among the NV chaplains, all but one responded to the initial survey but none of these offered to participate in the follow up interviews. It was not possible to ascertain their reasons as they did not offer their emails in the survey for the follow up contact.

Measures:

The independent variable used in this study is Spirituality. The Spirituality Scale has three subscales: Connection to Others, Religious Identification and Hopeful Outlook. The objective was to measure if and how much the independent variable, Spirituality can predict...
levels of burnout and resilience among prison workers. The Spirituality Scale is presented in Appendix 2. For this study, the Army-context language of questions 10, 11 & 12 (Refer to Appendix 2) were adapted for correctional workers. For example, Question 10 originally asked soldiers if they believed their personal prayers helped them during their deployment. The question was reframed for this survey asking respondents in prisons if they believed their personal prayers helped them at their workplace.

Connection to Others:

Q.151 I feel that on a higher level all of us share a common bond.
Q.152 Although there is good and bad in people, I believe that humanity as a whole is basically good.
Q.154 Although individual people may be difficult, I feel a bond with all of humanity.

Wester defined connection to others as, “a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together” (Wester, 2007:9). He notes that the Connection to Others construct goes beyond camaraderie or esprit de corps. He noted that this factor correlated with intentions for ethical action, moral attitudes and a general increased ability to withstand the rigors of combat.

Religious Identification:

Q.155 My spiritual life is an important part of who I am as a person.
Q.159 I go to my place of worship (Chapel, Church, Synagogue, Temple) because it helps me connect with friends.
Q.160 I believe my personal prayers help me during this deployment.
Q.161 I believe the prayers of my family and friends back home help me.
Q.162 I believe the presence and ministry of my unit chaplain brings value to the unit.

Regarding Religious Identification, Wester notes that “spirituality is not experienced in a vacuum – soldiers who recorded a higher level of spirituality tended to connect that spirituality
to some level of participation in recognized religious activity – prayer, prayer by others and worship” (Wester, 2007:9).

Hopeful Outlook:

Q.157 I feel a sense of well-being about the direction in which my life is heading.
Q.163 I feel good about my future.
Q.164 I have forgiven myself for things that I have done wrong.

Wester observes that hope, optimism and a positive outlook are notable given the conditions under which these surveys were collected- from soldier living and working in a combat zone (Wester, 2010:10).

Wester offers the following conclusions on his spirituality scale:

• Spirituality is multidimensional and includes three factors: connection to others, religious identification, and hopeful outlook.
• Spirituality scores correlate moderately with age and rank.
• Spirituality correlates slightly with gender (higher in women), and education (2010:20).

The Army researchers found that in using this measurement model, a three-factor substructure provided good fit indices. They also found that the fit of the three-factor model was much better than a one-factor model. They recognized that these three factors do not account for all elements of spirituality, but the factor analysis they conducted revealed that the EXCEL instrument revealed “A workable model of spirituality for the soldiers surveyed” (Wester 2010:7).

<table>
<thead>
<tr>
<th>Factor Structure</th>
<th>$\chi^2$</th>
<th>NFI</th>
<th>NNFI</th>
<th>CFI</th>
<th>GFI</th>
<th>SRMR</th>
<th>RMSEA</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Factor</td>
<td>1662.12</td>
<td>.759</td>
<td>.705</td>
<td>.764</td>
<td>.767</td>
<td>.102</td>
<td>.173</td>
<td>1574.12</td>
</tr>
</tbody>
</table>

(Wester, 2010:8)

A fit index above .90 is considered extremely strong. Fit indices at .75 are acceptable.
To test the reliability of the Spirituality Index using the data from this study, a factor analysis was conducted to determine the Cronbach Alpha scores for each index. Cronbach’s method can be used as a tool for determining what items in a scale should be included to maximize reliability (Carmines and Zeller, 1979).

A factor analysis of the Spirituality Index as presented above, using this study’s data revealed a robust inter-correlation of all items. Cronbach’s method for reliability analysis of the combined spirituality index yielded an alpha score of .90. The acceptable threshold for reliability is a Cronbach alpha score of 0.8 or higher (Carmines and Zeller, 1979). Using this study’s data, each item analyzed met the threshold, revealing the existence of a single phenomenon measured by each index, indicating this researcher’s instrument to measure spirituality was acceptably reliable. The Cronbach’s Alpha scores for this study’s data for the Spirituality Scale are:

- Connection to Others .81
- Religious Identification .92
- Hopeful Outlook .76*
- Spirituality Combined Index .90

*Rounding .76 to the nearest 10th yields .80. The Hopeful Outlook index consists of only 3 variables. Factor loadings were high.

**Dependent Variables:**

The two dependent variables in this study are burnout and resilience. Burnout was measured using the Maslach Burnout Inventory. (Refer to Appendix 3). The MBI has been used for over three decades by social science researchers and its validity and reliability are well-established in the literature (Maslach, Jackson & Leiter, 1981; Maslach, Schaufeli & Leitner, 2001).
The MBI-General Scale (GS) was developed to meet the need for a scale measuring burnout in occupational groups that did not see themselves primarily as human service workers. The focus of this survey is to measure burnout as a crisis in one’s relationship with work, and not necessarily as a crisis in one’s relationship with people at work (Maslach, 1981:220).

This researcher selected the MBI-GS because correctional officers do not tend to see themselves as human service workers in the same way as other professional caregivers Chenault, 2010). While correctional chaplains’ work is similar to that of other professional caregivers, there is also reluctance on their part to be identified solely as human service workers (Hicks, 2010).

The MBI-GS has three subscales: Emotional Exhaustion (Ex), Cynicism (Cy) and Professional Efficacy (PE). The items (subscales) comprising each index are as follows:

**Cynicism (CY)**
I have become less interested in my work since I started this job.
I have become less enthusiastic about my work.
I just want to do my job and not be bothered.
I have become more cynical about whether my work contributes anything.
I doubt the significance of my work.

**Emotional Exhaustion (EX)**
I feel emotionally drained from my work.
I feel used up at the end of the workday.
I feel tired when I get up in the morning and face another day on the job.
Working all day is really a strain for me.
I feel burned out from my work.

**Professional Efficacy (PE)**
I can effectively solve the problems that arise in my work.
I feel I am making an effective contribution to what this organization does.
In my opinion, I am good at my job.
I feel exhilarated when I accomplish something at work.
I have accomplished many worthwhile things in this job.
At my work, I feel confident that I am effective at getting things done.

A high degree of burnout is reflected in high scores on Exhaustion and Cynicism and low scores of Professional Efficacy. Unlike the Resilience Scale, the MBI cannot be scored as a sum of its three subscales: Cynicism, Emotional Exhaustion, and Professional Efficacy. Because of this, each subscale of Burnout was regressed in a separate model (see Table 4) as: Models 1a-1f Cynicism, Models 2a-2f – Emotional Exhaustion, and Models 3a-3f Professional Efficacy. The results will be presented in the following chapter.

The MBI-GS items with factor loadings according to Maslach (2013) are as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale</th>
<th>IY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel emotionally drained from my work.</td>
<td>EX1</td>
<td>.70</td>
</tr>
<tr>
<td>2. I feel used up at the end of the workday.</td>
<td>EX2</td>
<td>.71</td>
</tr>
<tr>
<td>3. I feel tired when I get up in the morning and face another day on the job.</td>
<td>EX3</td>
<td>.80</td>
</tr>
<tr>
<td>4. Working all day is really a strain for me.</td>
<td>EX4</td>
<td>.69</td>
</tr>
<tr>
<td>5. I can effectively solve the problems that arise in my work.</td>
<td>PE1</td>
<td>.51</td>
</tr>
<tr>
<td>6. I feel burned out from my work.</td>
<td>EX5</td>
<td>.82</td>
</tr>
<tr>
<td>7. I feel I am making an effective contribution to what this organization does.</td>
<td>PE2</td>
<td>.70</td>
</tr>
<tr>
<td>8. I have become less interested in my work since I started this job.</td>
<td>CY1</td>
<td>.81</td>
</tr>
<tr>
<td>9. I have become less enthusiastic about my work.</td>
<td>CY2</td>
<td>.89</td>
</tr>
<tr>
<td>10. In my opinion, I am good at my job.</td>
<td>PE3</td>
<td>.65</td>
</tr>
<tr>
<td>11. I feel exhilarated when I accomplish something at work.</td>
<td>PE4</td>
<td>.51</td>
</tr>
</tbody>
</table>
12. I have accomplished many worthwhile things in this job. PE5
13. I just want to do my job and not be bothered. CY3
14. I have become more cynical about whether my work contributes anything. CY4
15. I doubt the significance of my work. CY5
16. At my work, I feel confident that I am effective at getting things done. PE6

Schaufeli, Leiter (2009) found that the MBI-GS was consistently related to other constructs. A series of principal component analyses found Exhaustion to be associated with mental and physical strain, work overload and role conflict at work. Professional Efficacy was related to satisfaction, organizational commitment, job involvement and access to resources. Cynicism was primarily related to the same constructs as Exhaustion, but with negative secondary loading on the attitudinal constructs that are associated with Professional Efficacy (Maslach, 2013:25).

As with the spirituality index, this researcher conducted his own factor analysis of the MBI index portion of the study’s survey data. Cronbach’s method for reliability analysis of the combined burnout index yields an alpha score of .91, well above an acceptable 0.8 threshold for scales.

<table>
<thead>
<tr>
<th>Index</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cynicism Index (CY)</td>
<td>.89</td>
</tr>
<tr>
<td>Emotional Exhaustion Index (EX)</td>
<td>.90</td>
</tr>
<tr>
<td>Professional Efficacy Index (PE)</td>
<td>.77</td>
</tr>
<tr>
<td>Burnout Combined Index</td>
<td>.91</td>
</tr>
</tbody>
</table>

The qualitative data revealed some consistent patterns of burnout through the descriptions given by subjects of their working conditions. These will be discussed in Chapter 5.
**Resilience:**

The 25-item Resilience Scale for Adults® (RSA), developed by Gail M. Wagnild & Heather M. Young (1987) was used to measure the dependent variable resilience. In this scale, resilience can be measured as a sum of its (5) subscales: Self-reliance, Meaning, Perseverance, Equanimity and Existential Aloneness.

Both the MBI and The Resilience Scale have been used extensively for psychological assessments of subjects in many studies. They have been well-validated. Refer to Resilience Scale in Appendix 4.

As with the Burnout and Spirituality Indices, this researcher conducted his own factor analysis of the Resilience Scale using the study’s survey data. Reliability was fairly high, particularly with the combined indices of resilience. Cronbach’s method for reliability analysis of the combined resilience index yields an alpha score of .86.

The Cronbach Alpha scores for Resilience are as follows:

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Alpha Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Reliance Index</td>
<td>.75</td>
</tr>
<tr>
<td>Meaning Index</td>
<td>.79</td>
</tr>
<tr>
<td>Perseverance</td>
<td>.67</td>
</tr>
<tr>
<td>Equanimity</td>
<td>.69</td>
</tr>
<tr>
<td>Existential Aloneness</td>
<td>.61</td>
</tr>
<tr>
<td>Resilience Combined Index</td>
<td>.86</td>
</tr>
</tbody>
</table>

**Demographic variables used as control variables:**

In addition to the dependent variables burnout and resilience, four demographic variables were included as control variables in the final analysis of the data: Gender, Age, Years in Service and Work Role (CO or chaplain). These variables were included because they showed statistically significant effects. While there were other variables measured in the survey, including fear of workplace violence, security level of the institution, education,
prior military service, experience of depression and perceived level of support from peers, family and friends, modeling of these variables did not produce robust results.

**Gender:**

In this study, gender was measured as a conventional dichotomous variable (0=female; 1=male). Independent samples T-tests were conducted to compare the study sample size to the OR DOC statistics provided by the department with results indicating the study sample was fairly representative of the overall OR DOC population (*NV data for entire department were not available*).

In a 2005 study of a large urban police force, He et al. (2005) found that in the workplace, dynamic factors such as measures of work environment and coping mechanisms contributed more in explaining police stress than static factors such as race and gender. Gender has been shown to have a marked effect on police officers, both in how they construct their identity and how they view their roles as police. In a 2008 study, Rabe-Hemp observes that conceiving of gender as a role obscures the power and inequality inherent in the historical differentiations between men and women (c.f. West & Fenstermaker, 1995; West & Zimmerman, 1987).

Studies of the effects of gender on correctional officers have had mixed results. Tewksbury & Collins (2006) found higher stress levels among female COs compared with their male colleagues. However, other studies suggest females experience higher levels of personal achievement and accomplishment than their male counterparts (Carlson et al. 2003).

**Age:**

Age was measured in 10-year increments. On the survey, the minimum selection was 1, representing ages 20-30, 2, representing 31-40, 3 representing 41-50 4, representing 51-60
and the maximum selection was 5, representing 61 or more years old. The (modal) age range was between 40-50 years old.

*Years in service:*

Years in correctional service were measured in 5-year increments. 1 represented 1-5 years of service, 2 represented 6-10 years, 3 represented 11-15 years, 4 represented 16-20 years, 5 represented 21-25 years and 6 represented more than 25 years of service.

*Work Role:*

Respondents work role was indicated with a dichotomous variable, 0= chaplain; 1= correctional officer.

*A note on race:*

While many studies of correctional personnel include race as a variable, this researcher chose not to include either race or ethnicity. The race of the subjects was not asked or recorded. Extant literature has not shown that race or ethnicity correlated significantly with correctional work stress. Cheeseman & Goodlin-Fahncke (2011) observe that the vast majority of research on the effect of race and ethnicity on work stress of correctional officers has been inconclusive. Owen (2006) and Brough & Williams (2007) found no relationship between race and work stress (Cheeseman & Goodlin-Fahncke, 2001). Some studies suggest that if there is an effect of race on work stress, it appears to vary geographically (Cullen et al., 1985, Lambert et al., 2002).

*Analytic Strategy:*

The survey data were analyzed for descriptive statistics. Bivariate Pearson Correlations were used to examine the relationship between the independent variable spirituality and the dependent variables burnout and resilience.
A series of multiple regression models were then conducted to test the hypotheses that corrections workers scoring high in spirituality would tend to report less burnout and greater resilience than those scoring low in spirituality. Multiple Regression was chosen in order to allow the researcher to control for all variables. By holding constant all the other predictor variables in the models, the researcher was able to better identify changes in predictors without confusing the effects of the other predictor variables. The outcomes of each nested model were measured by examining the coefficients for each predictor, with a p-value of <0.05 as the criterion for significance. Stata 14® software was used to analyze this data. This process is described in detail in Chapter 5.

The quantitative data of the study were augmented with qualitative data obtained through intensive interviews with a subset of the survey respondents who agreed to participate in a follow-up phone interview.

*Qualitative Research Design:*

The independent variable of this study is spirituality, as defined by the U.S. Army chaplains. Underlying the Army chaplains’ definition is of spirituality is a theory of spiritual connection. An example of an attempt to articulate a theory of spirituality comes from the qualitative research of Gottheil and Groth-Marnat (2010). They used grounded theory to analyze narratives that centered on the phenomenon of suffering in people’s lives. Among their findings was evidence that spiritual healing may occur through connection with another or nature, a connection with the sacred, acquiring wisdom, or transforming the internal state” (2011:459). Grounded theory is one approach that can address the difficulties inherent in theorizing about spirituality, particularly the challenge of quantifying subjective experiences (Katz, 1997).

The qualitative portion of this study relied on a series of interviews conducted with
correctional workers to probe more deeply the way spirituality, particularly connection with others serves to increase resilience and reduce burnout. Qualitative data were collected from six COs and six chaplains. The interviews were conducted either by phone or Skype and were recorded with the permission of the interviewees. Immediately following each interview, the researcher created a typed transcript of the interview, which was then downloaded into the qualitative software program.

The interviewer began with open-ended questions followed by semi-structured, focused questions. Refer to Appendix 7. The interviews helped the researcher better understand the general results of the online survey by exploring specific experiences of participants in the study. Charmaz writes that intensive interviewing fits grounded theory methods particularly well because both are “open-ended yet directed, shaped yet emergent, and paced yet unrestricted” (Charmaz 2006:28).

This study’s use of qualitative data is further supported by Maahs and Pratt’s 2001 meta-analysis of 19 quantitative studies of correctional officers’ attitudes and behaviors that prompted them to write that “qualitative or ethnographic research may be a better approach for understanding the minitua and mechanics of working in prison” (Maahs & Pratt, 2001: 17). For this reason, qualitative methods were included in this study in order to provide a richer insight into the lived experiences of the correctional workers interviewed. The analysis used tools of grounded theory research, to “see the data in fresh ways [to] construct an original analysis of [the] data” (Charmaz: 2006:2).

Grounded theory techniques of qualitative data analysis were used to penetrate more deeply into the lived experiences of those working in correctional institutions to provide a “thick description” of the experiences of those interviewed. This inductive approach was
intended to yield a deeper understanding of the experiences of the correctional workers and how having or not having an articulated spirituality helps them cope with the inherent stressors of their work.

Aware of the likelihood of coder bias, given his many years of experience working in correctional institutions, the researcher hired a sociology graduate student from the University of California to code all the data independently of the researchers’ input. The coder was trained in the use of grounded theory research coding to analyze the data. “Coding distills data, sorts them, and gives a handle for making comparisons with other segments of data” (Charmaz: 2006:3).

Since “inductive analysis means that the patterns, themes and categories of analysis come from the data [and] emerge out of the data rather than being imposed on them prior to data collection and analysis” (Patton, 1980:306), having another coder who did not work in prisons reduced the risk of imposing the researcher’s bias into the data as much as possible.

The interview data were analyzed by the University of California-Davis graduate student coder line-by-line and coded using the concepts and terms that emerged from the data itself. These thematic codes and concepts were then reviewed and a process of memo writing was used to provide a contextual framework for the emerging themes suggested by the codes.

The data were entered into the qualitative software after all the interview coding was completed. The graduate student assistant assigned both labels for the codes, based on words used by the interviewees (in vivo codes), as well as the analytic memos based on the coded data. The researcher then used Atlas.ti© software to analyze the data codes and memos, developing the second level of coding using ‘axial codes’ – which pulled together into families or patterns the codes that the graduate student had identified from the raw data.
The student, who had no experience working in prisons and was not familiar with the quantitative data in this study was able to organize the codes into 5 basic themes, based on her line-by-line coding of the interview data. These 5 themes: Stress and Burnout, Resilience, Spirituality, Work Environment, and CO Culture are depicted in Appendix 8, charts 1-5.

A more detailed discussion of these themes and findings will be presented in the following chapter.
CHAPTER 5: RESULTS / FINDINGS:

This chapter presents the results of both the quantitative and qualitative analyses of this study’s data. There is consistent and statistically significant evidence that for the data collected in this study, spirituality predicts both burnout and resilience scores, once all other relevant variables are controlled.

Part 1 presents the quantitative data. First, the sample’s descriptive characteristics are presented. Refer to Tables 1, 2 & 3. Then the results of a series of multivariate regression models are presented showing the relationships between the independent variable spirituality and its three subscales with the two independent variables burnout and resilience, with their respective subscales. Demographic variables of gender, age, years of service (in corrections) and occupational role (CO or chaplain) were the control variables. An interpretation of the statistical findings follows.

*Tables 3 and 4 show the results of the regression models.*

Part 2 presents the qualitative data, based on 12 intensive interviews. Discussion of policy implications and the limitations of this study are presented in the final chapter.
Part 1: Quantitative Findings:

Descriptive Statistics:

Gender: Of the COs sampled, .68 were male, and .32 were female out of a total OR DOC employee population where .83 of the COs are male and .16 are female.

Age: The age of the respondents was measured in 10-year increments. On the survey, the minimum selection was 1, representing ages 20-30 and the maximum selection was 5, representing 60 or more years old. The median age range of all CO respondents to the survey was between 30-40 years old. The median age range for all chaplains responding to the survey was considerably older - in the 50-60 year age range.

Of those volunteers interviewed for this study, the median age range of COs (50-60) was slightly older than the total CO respondents: 40-50 years. The median age of the chaplains who responded (in the 50-60 year old age range) corresponded with the total chaplain respondents’ ages.

Survey data reveal that chaplains tended to be older than the CO respondents. Of the chaplains, 74% were 50 years old or more, while 34% of the CO surveyed were 50 years old or more. Only the Oregon Department of Correction was able to provide a complete demographic analysis of their workforce, so the following table compares this study’s sample age range with the OR DOC Human Resources statistics provided by the OR DOC:
**Age of COs and Chaplains surveyed.** For comparison, only OR COs in sample are shown here

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Sample Total</th>
<th>OR DOC Total</th>
<th>Sample Percentage</th>
<th>OR DOC total workforce Percentage</th>
<th>Diff btwn Sample proportions</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>8</td>
<td>251</td>
<td>.10</td>
<td>.11</td>
<td>.01</td>
</tr>
<tr>
<td>30-40</td>
<td>25</td>
<td>566</td>
<td>.30</td>
<td>.25</td>
<td>.05</td>
</tr>
<tr>
<td>40-50</td>
<td>15</td>
<td>700</td>
<td>.18</td>
<td>.31</td>
<td>.13</td>
</tr>
<tr>
<td>50-60</td>
<td>29</td>
<td>569</td>
<td>.34</td>
<td>.25</td>
<td>.09</td>
</tr>
<tr>
<td>60+</td>
<td>9</td>
<td>180</td>
<td>.11</td>
<td>.08</td>
<td>.03</td>
</tr>
<tr>
<td>Totals:</td>
<td>N= 84</td>
<td>2266</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Confidence level 95% for the difference between two independent proportions*

**Age of COs and Chaplains interviewed:**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>COs</th>
<th>Chaplains</th>
<th>Sample Total (COs &amp; Chaplains)</th>
<th>Sample Percentage</th>
<th>OR DOC total workforce Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>.09</td>
<td>.11</td>
</tr>
<tr>
<td>30-40</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>.25</td>
<td>.25</td>
</tr>
<tr>
<td>40-50</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>.17</td>
<td>.31</td>
</tr>
<tr>
<td>50-60</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>.40</td>
<td>.25</td>
</tr>
<tr>
<td>60+</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>.09</td>
<td>.08</td>
</tr>
<tr>
<td>Totals:</td>
<td>N=6</td>
<td>N=6</td>
<td>N= 12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The sample in this study is very close to the OR DOC age ranges, which suggests that the 17% of the random sample who responded is representative of the original sample. For example, in the chart below, the percentage of COs and chaplains working in the OR DOC who are between the ages of 20-30 years old is 11% for the total workforce. The sample percentage of respondents aged 20-39 years is 9%. This similarity remains consistent for all age groups in both the total workforce and the sample respondents:
Years in Service:

Years in service in corrections were measured in 5-year increments. The years in service of those surveyed tracked very close to the statistics offered by the OR DOC of their employee seniority, which, like the age data suggests that the 17% of the random sample who responded is representative of the original sample.

When sorted into the same 5 year increments of service, 23% of the CO respondents to the survey had worked less than 5 years, compared to 31% of the total number of OR DOC COs who have worked less than 5 years in the department. For all those working 6 to 20 years, the survey respondents had almost exactly the same amount of work experience as the total number of employees in the OR system.

Even at the most senior levels of work experience, the ratio of respondents did not diverge substantially from the total number of COs. For example, among those who responded to the survey, 9% had worked 21 to 25 years, compared with 5% of the total number of OR DOC CO’s with the same amount of work experience. Similarly of those responding to the survey, 6% have worked over 25 years, compared with 3% of the total number of OR DOC COs who have that much seniority. These differences are quite small, especially given the small sample size.

Overall, the results show that the years of work experience served by the respondents is virtually the same as the overall work experience statistics provided by the OR DOC Human Services Department:
**OR COs surveyed:** For comparison, only OR COs in sample are shown here

<table>
<thead>
<tr>
<th>Years in service</th>
<th>Sample Total</th>
<th>OR DOC Total</th>
<th>Sample Percentage</th>
<th>OR DOC Percentage</th>
<th>Diff btwn Sample proportions Pa – Pb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>17</td>
<td>701</td>
<td>.20</td>
<td>.31</td>
<td>.11</td>
</tr>
<tr>
<td>6-10 Years</td>
<td>20</td>
<td>480</td>
<td>.24</td>
<td>.21</td>
<td>.03</td>
</tr>
<tr>
<td>11-15 Years</td>
<td>20</td>
<td>427</td>
<td>.24</td>
<td>.19</td>
<td>.04</td>
</tr>
<tr>
<td>16-20 Years</td>
<td>16</td>
<td>467</td>
<td>.19</td>
<td>.21</td>
<td>.02</td>
</tr>
<tr>
<td>21-25 Years</td>
<td>11</td>
<td>110</td>
<td>.13</td>
<td>.05</td>
<td>.06</td>
</tr>
<tr>
<td>25+ Years</td>
<td>0</td>
<td>81</td>
<td>0</td>
<td>.03</td>
<td>--</td>
</tr>
<tr>
<td>Totals:</td>
<td>N= 84</td>
<td>2266</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Confidence level 95% for the difference between two independent proportions*

The OR COs interviewed were similar to the OR DOC workforce years of service percentages in the 11-20 years in service range, but differed markedly in their seniority compared to the DOC total workforce in that 50% of the interviewees had served 25 or more years in their Department of Corrections. However, given the small size of the interview sample, it is not possible to generalize this data. It suggests that of those COs who responded, those with the most seniority were willing to be interviewed.

**OR COs interviewed:**

<table>
<thead>
<tr>
<th>Years in service</th>
<th>Total</th>
<th>CO Sample Percentage</th>
<th>OR DOC total workforce Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>0</td>
<td>--</td>
<td>(.31)</td>
</tr>
<tr>
<td>6-10 Years</td>
<td>0</td>
<td>--</td>
<td>(.21)</td>
</tr>
<tr>
<td>11-15 Years</td>
<td>1</td>
<td>(.25)</td>
<td>(.19)</td>
</tr>
<tr>
<td>16-20 Years</td>
<td>1</td>
<td>(.25)</td>
<td>(.21)</td>
</tr>
<tr>
<td>21-25 Years</td>
<td>0</td>
<td>--</td>
<td>(.05)</td>
</tr>
<tr>
<td>25+ Years</td>
<td>2</td>
<td>(.50)</td>
<td>(.03)</td>
</tr>
<tr>
<td>Totals:</td>
<td>N= 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The total number of OR chaplains who responded to the survey is consistent with OR DOC workforce years of service percentages with the exception of the 21-25 year range. The reason for this is probably due to the fact that many COs have the opportunity to retire at 20 years and do so, while chaplains, having the same opportunity to retire, may be more likely to remain past the 20 year point than their CO colleagues.

**OR Chaplains surveyed:**

<table>
<thead>
<tr>
<th>Years in service</th>
<th>Sample Total</th>
<th>Chaplain Sample Percentage</th>
<th>OR DOC total workforce Percentage</th>
<th>Diff btwn Sample proportions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>5</td>
<td>(.22)</td>
<td>(.31)</td>
<td>.09</td>
</tr>
<tr>
<td>6-10 Years</td>
<td>4</td>
<td>(.17)</td>
<td>(.21)</td>
<td>.03</td>
</tr>
<tr>
<td>11-15 Years</td>
<td>4</td>
<td>(.17)</td>
<td>(.19)</td>
<td>.02</td>
</tr>
<tr>
<td>16-20 Years</td>
<td>4</td>
<td>(.17)</td>
<td>(.21)</td>
<td>.04</td>
</tr>
<tr>
<td>21-25 Years</td>
<td>5</td>
<td>(.22)</td>
<td>(.05)</td>
<td>.17</td>
</tr>
<tr>
<td>25+ Years</td>
<td>1</td>
<td>(.05)</td>
<td>(.03)</td>
<td>.02</td>
</tr>
<tr>
<td>Totals:</td>
<td>N= 23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OR Chaplains Interviewed:**

<table>
<thead>
<tr>
<th>Years in service</th>
<th>Total</th>
<th>Sample Percentage</th>
<th>OR DOC total workforce Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>2</td>
<td>(.33)</td>
<td>(.31)</td>
</tr>
<tr>
<td>6-10 Years</td>
<td>1</td>
<td>(.16)</td>
<td>(.21)</td>
</tr>
<tr>
<td>11-15 Years</td>
<td>2</td>
<td>(.33)</td>
<td>(.19)</td>
</tr>
<tr>
<td>16-20 Years</td>
<td>0</td>
<td>---</td>
<td>(.21)</td>
</tr>
<tr>
<td>21-25 Years</td>
<td>1</td>
<td>(.16)</td>
<td>(.05)</td>
</tr>
<tr>
<td>25+ Years</td>
<td>0</td>
<td>---</td>
<td>(.03)</td>
</tr>
<tr>
<td>Totals:</td>
<td>N= 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As would be expected, the variables Age and Years in Service are highly correlated, however multicollinearity is not a serious problem here because these variables are used as controls in the models.
Table 1:

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>Tolerance (1/VIF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Spirituality</td>
<td>1.31</td>
<td>0.7629</td>
</tr>
<tr>
<td>Connection to Others</td>
<td>1.30</td>
<td>0.7720</td>
</tr>
<tr>
<td>Religious Identification</td>
<td>1.24</td>
<td>0.9145</td>
</tr>
<tr>
<td>Hopefulness</td>
<td>1.12</td>
<td>0.8921</td>
</tr>
<tr>
<td>Gender</td>
<td>1.10</td>
<td>0.9097</td>
</tr>
<tr>
<td>Age</td>
<td>1.57</td>
<td>0.6369</td>
</tr>
<tr>
<td>Years of Service</td>
<td>1.42</td>
<td>0.7057</td>
</tr>
<tr>
<td>CO or Chaplain</td>
<td>1.41</td>
<td>0.7088</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.28</td>
<td></td>
</tr>
</tbody>
</table>

Education Levels:

Chaplains were considerably more educated than COs, 88% of all the chaplains surveyed had a BA or higher, and of these, 22% had doctoral degrees. Among the 6 chaplains interviewed this education level remained consistent: 100% of the chaplains had a BA or higher and among this group, 1 (17%) had a doctoral degree.

Among COs, 31% of all surveyed had Bachelors’ Degrees and 5% had Master’s Degrees. None of the COs surveyed had completed doctoral studies. This was consistent with the 6 COs interviewed: 50% had some college, 17% had earned a Bachelor’s Degree and 17% Master’s degree.
<table>
<thead>
<tr>
<th>Education Level:</th>
<th>Total CO respondents</th>
<th>CO interviewees</th>
<th>Total Chaplain respondents</th>
<th>Chaplain Interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Only</td>
<td>18 (.16)</td>
<td>1 (.17)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Some College</td>
<td>52 (.47)</td>
<td>3 (.50)</td>
<td>3 (.13)</td>
<td>--</td>
</tr>
<tr>
<td>BA</td>
<td>35 (.31)</td>
<td>1 (.17)</td>
<td>5 (.22)</td>
<td>1 (.17)</td>
</tr>
<tr>
<td>MA</td>
<td>6 (.05)</td>
<td>1 (.17)</td>
<td>10 (.44)</td>
<td>4 (.66)</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>0</td>
<td>--</td>
<td>5 (.22)</td>
<td>1 (.17)</td>
</tr>
<tr>
<td>Totals:</td>
<td>N=111</td>
<td>N=6</td>
<td>N=23</td>
<td>N=6</td>
</tr>
</tbody>
</table>

Total workforce educational data was not available from either OR or NV DOCs, so it is not possible to ascertain whether the 17% respondents of the random sample education levels are representative of the overall population of COs.

**Security Level:**

The survey asked the respondents to describe the security level of the institution in which they worked: Maximum, Medium or Minimum. The security levels of the interviewees’ prisons were proportionately consistent with the overall security levels of all sampled:

<table>
<thead>
<tr>
<th>Security Level</th>
<th>Minimum</th>
<th>Medium</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>All COs surveyed</td>
<td>N=111</td>
<td>32 (.29)</td>
<td>50 (.45)</td>
</tr>
<tr>
<td>All Chaplain Surveyed</td>
<td>N=23</td>
<td>8 (.35)</td>
<td>9 (.40)</td>
</tr>
<tr>
<td>All COs interviewed</td>
<td>N=6</td>
<td>1 (.16)</td>
<td>3 (.50)</td>
</tr>
<tr>
<td>All Chaplains interviewed</td>
<td>N=6</td>
<td>1 (.16)</td>
<td>3 (.50)</td>
</tr>
</tbody>
</table>

*Perceived Danger of Workplace Violence/Victimization:*

“You know, going in and not knowing if you are going to get assaulted, you don’t know what kind of day you’re going to have, because within minutes it can start out being a good day and just suddenly go bad.” OR CO

Respondents were asked their perception of the danger to themselves working in their facilities. COs reported a higher level of perception of workplace danger than chaplains: In the
online survey, 62% of COs and 48% of chaplains reported they sometimes felt they were in danger at work, 14% of COs and 13% of chaplains reported feeling in danger frequently and 10% of COs reported feeling always that their workplaces were dangerous. None of the chaplains reported always feeling their work environment was dangerous. Only 14% of COs stated they never felt they were in danger, while 40% of chaplains reported never feeling danger.

Military Service:

The majority of respondents (76%) never served in the military. 23% of all respondents served in the military but are now discharged and only 1 person (1 male CO) is currently on active duty. 55% of male COs and 37% of female COs never served in the military. Among the chaplains surveyed, only one male chaplain ever served in the military and is now discharged.

Perceived support of coworkers, family and friends:

Two questions on the online survey asked the respondents about their perceptions of support – one from co-workers and the other from family and friends. The majority of COs and chaplains reported they perceived a high level of support from coworkers and family and friends. Only 3% of COs and none of the chaplains reported never feeling support from their co-workers. 73% of COs reported feeling frequently or always supported by their peers; 91% of chaplains frequently or always felt supported by co-workers. Family and friends were reported by both groups to be even more supportive: 85% of COs and 100% of chaplains reported frequently or always feeling supported by family and friends.

Depression:

In self-reported levels of depression, chaplains reported less depression than COs (60% of chaplains reported never feeling depressed while only 46% of COs reported never feeling depressed. None of the chaplains surveyed reported feeling depressed frequently or all of the
time, although two spoke of having gone through periods of burnout and depression during their careers. 6% of COs reported feeling depressed frequently or all of the time. Two COs and one chaplain interviewed reported having experienced and received treatment for depression.

Faith Groups:

Respondents were asked in the survey (as an optional response) to indicate their faith group, if any. The largest group was None (50% of respondents). These were all COs as all of the chaplains as expected, identified themselves with a specific faith group. 60% of the CO respondents report no affiliation with a specific religious group. The largest faith group represented was “Protestant” at 22% of COs and 35% of chaplains. Protestant covers a range of beliefs and practices from non-denominational Christians to mainline Christians such as Lutherans or Baptists. The second largest faith group represented was Catholic, with 14% of COs and 35% of the chaplains. The other faith groups, Jewish, Muslim, Native American, LDS (Mormon) and “Other” each comprised less than 5% of respondents. Other included Buddhists, Wiccan, Baha’i and Hindu.

Race:

Race or ethnicity were not used as variables in this study, primarily because the State of Oregon is one of the more racially homogeneous states in the US. The majority of the state’s population (.86) identifies as ‘Caucasian’ or White, which closely mirrored in the demographic data provided by the OR DOC regarding its employees. Because of this lack of diversity (African Americans, Asians and Native Americans combined comprise less than 1% of the state’s population) and due to the small sample size, the researcher determined that getting a representative sample of the non-white population would require a much larger sample size.
Table 2: Correlation Matrix:

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. GENDER</td>
<td>.672</td>
<td>.471</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. AGE</td>
<td>3.127</td>
<td>1.210</td>
<td>0.110</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. YearsService</td>
<td>2.940</td>
<td>1.516</td>
<td>-0.182*</td>
<td>0.475*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. COorCHap</td>
<td>.828</td>
<td>.378</td>
<td>-0.046</td>
<td>-0.354*</td>
<td>-0.070</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Education</td>
<td>2.604</td>
<td>.996</td>
<td>0.167</td>
<td>0.260*</td>
<td>0.044</td>
<td>-0.578*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Dangerous</td>
<td>2.112</td>
<td>.801</td>
<td>-0.217*</td>
<td>-0.255*</td>
<td>0.055</td>
<td>0.212*</td>
<td>-0.274*</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Military Service</td>
<td>1.246</td>
<td>.449</td>
<td>-0.278*</td>
<td>-0.044</td>
<td>0.143</td>
<td>0.213*</td>
<td>-0.150</td>
<td>0.236*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>8. Security Level</td>
<td>2.172</td>
<td>.946</td>
<td>0.126</td>
<td>0.171*</td>
<td>0.049</td>
<td>0.168</td>
<td>0.152</td>
<td>-0.284*</td>
<td>-0.136</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*note: *= p< .05-- Correlation significant at the 0.05 level

Multivariate Results:

This section presents both the results of the multivariate regression modeling used in this study. First the Spirituality and Burnout regression models are discussed, followed by the Spirituality and Resilience models.

The reader is reminded that the first research questions posed in this study asked if there is a correlation between spirituality and burnout among correctional workers. It was hypothesized that correctional workers who score high on indices of spirituality would demonstrate less burnout than correctional staff that do not score high on spirituality.

This hypothesis is tested in the first 3 regression models. The individual subsets of the independent variable spirituality (Connection to Others, Hopeful Outlook and Religious Identification – depicted as triangles) were regressed with the three burnout subscales (Cynicism, Emotional Exhaustion, and Professional Efficacy – depicted as circles.)

The following is a schematic diagrams of IV Spirituality with the DV Burnout subscales (Figure 1), followed by a diagram of the hypothesized direction of effects of the three burnout subscales regressed with the three subsets of the IV spirituality. The hypothesized direction of the
effects is indicated by either a positive [+] or a negative [-] sign. Arrows indicate the direction of regression. Burnout is measured by an increase in Cynicism and Emotional Exhaustion and a decrease in Personal Efficacy. Spirituality is predicted to decrease Cynicism, Decrease Emotional Exhaustion and increase Personal Efficacy.

Note: The burnout index subscales are not cumulative in scoring and do not allow for all three subscales to be combined, so they were modeled separately.

Figure 1: Spirituality subscales with Burnout Subscales coefficients:
Figure 2:
**Spirituality and Burnout Regression Models:**

There were three multivariate regression models for each of the three Burnout Subscales – Model 1 for Cynicism, Model 2 for Emotional Exhaustion and Model 3 for Professional Efficacy. Each of these had six nested models, identified by the letters “a” through “f.” For example, looking first at the Cynicism model:

**Table 3: Burnout Subscale 1: Cynicism**

<table>
<thead>
<tr>
<th></th>
<th>Model</th>
<th>1a</th>
<th>1b</th>
<th>1c</th>
<th>1d</th>
<th>1e</th>
<th>1f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td>.439</td>
<td>.261</td>
<td>.407</td>
<td>.357</td>
<td>.331</td>
<td>.272</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>-.315</td>
<td>-.201</td>
<td>-.294</td>
<td>-.373*</td>
<td>-.273</td>
<td>-.286*</td>
</tr>
<tr>
<td>Years of Service</td>
<td></td>
<td>.204</td>
<td>.177</td>
<td>.222</td>
<td>.202</td>
<td>2.12</td>
<td>.187*</td>
</tr>
<tr>
<td>CO or Chaplain</td>
<td></td>
<td>1.24*</td>
<td>.641</td>
<td>.812</td>
<td>.641</td>
<td>.453</td>
<td>.434</td>
</tr>
<tr>
<td>Spirituality - Connection to Others</td>
<td></td>
<td>-.747*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirituality - Religious Identification</td>
<td></td>
<td></td>
<td></td>
<td>-.388*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirituality - Hopeful Outlook</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.859*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Spirituality:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.867*</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>1.707*</td>
<td>4.793*</td>
<td>3.383*</td>
<td>5.839*</td>
<td>5.515*</td>
<td>6.564*</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>0.2</td>
<td>0.316</td>
<td>0.24</td>
<td>0.33</td>
<td>0.31</td>
<td>0.368</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>134</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

The first items regressed (a) were the control variables. For example, Model 1a, the Cynicism subscale score was regressed on the demographic control variables Gender, Age, Years of Service (in corrections) and Occupational Role (CO or chaplain). In the subsequent nested models, each subscale of the independent variable spirituality was regressed one at a time. Model 1b shows Cynicism and the spirituality subscale “Connection to Others” with controls. Model 1c depicts Cynicism and the spirituality subscale “Religious Identification” with controls.
Model 1d shows Cynicism regressed with the spirituality subscale “Hopeful Outlook” with controls.

Model 1e shows Cynicism regressed with the total (combined) score of the three spirituality subscales with controls. Since it is theoretically possible that one or two of the spirituality subscales may matter more than the others in predicting Burnout, the final regression model (1f), shows the subscale regressed with all three subscales of spirituality *separately* in order to control for each subscale: *(Connection to Others, Religious Identification & Hopeful Outlook)*. This was done in order to show which subscales matter most.

In this final model, total spirituality is *not* regressed with the subscales in order to avoid problems of multicollinearity. This final model shows how the subscales hold up in relationship to each other.

Examining the $R^2$ values of the first set of models (1a-1f), the data reveal that the Total Spirituality model ($R^2$ 0.31 in model 1e), accounts for less of the variation than either spirituality subscale Connection to Others ($R^2$ of 0.316 in model 1b) or the spirituality subscale Hopeful Outlook ($R^2$ of 0.33 in model 1c). This relationship remains consistent for all three Burnout subscale regression models.

Among the control variables, Model 1a predicts that COs are more likely to score higher on the Cynicism score than chaplains (+1.24). This theme was borne out in the interviews as only one of the chaplains described himself as cynical compared to all the COs interviewed (five of the six COs described themselves as cynical).

For each unit increase in the Connection to Others score, Model 1b predicts a statistically significant regression coefficient of - 0.747, suggesting that for each unit increase in the score of Connection to Others, the respondents were predicted to have a decrease in the Cynicism score,
controlling for gender, age, years of service in corrections and occupational role (CO or chaplains). This model explains 32% of the variance in Connection’s influence on cynicism.

Model 1c regressed the second spirituality subscale Religious Identification instead of Connection to Others. This model reveals a statistically significant coefficient of -0.388, suggesting that for each unit increase in the score of Religious Identification, respondents are predicted to have a lower score on Cynicism, controlling for the demographic variables. This model accounted for 24% of the variance. As noted, this is consistent with the fact that more than half (60%) of the COs reported no religious affiliation. The overall results suggest that the more a person is identified with a religious faith group, the less cynicism they report. However, this effect of Religious Identification tends to disappear when the other subscales of spirituality are controlled (refer to Models 1f, 2f and 3f).

The third subscale of spirituality (Hopeful Outlook) is measured in Model 1d. This model revealed a statistically significant coefficient of -0.859, suggesting that for each unit increase in the score of Hopeful Outlook, respondents are predicted to have a lower score on Cynicism, controlling for the demographic variables. This suggests the more a person reports having a Hopeful Outlook, the less cynicism they report. This model accounted for 33% of the variance.

Model 1e regressed Total Spirituality (the average of the sum of the three subscales’ scores). For each unit increase in the Total Spirituality score, this model predicts a -0.867 decrease in the Cynicism score. The Total Spirituality model accounts for less of the variation (31%) than do either Connection to Others (32%) or Hopeful Outlook (33%). These findings suggest that Connection to Others and Hopeful Outlook are better predictors of reduction in Cynicism than Religious ID.
Stronger evidence is found in Model 1f. Cynicism was regressed with all three subscales of spirituality (separately, not as an average of the subscale scores,) in order to control each subscale for the other subscales. This final model for cynicism accounts for 37% of the variance, supporting the finding that Connection to Others and Hopeful Outlook are the stronger predictors of cynicism. The hypothesis that a higher spirituality score would predict a lower level of cynicism and thus less burnout is supported by this data.

When this model was run separating COs from Chaplains, having a high score on the total spirituality score and having hopeful outlook in particular were statistically significant predictors of reduced cynicism for both groups:

*Table 4: Cynicism Subscale regressed with COs and Chaplains separately:*

<table>
<thead>
<tr>
<th>MODEL:</th>
<th>1a</th>
<th>1b</th>
<th>1c</th>
<th>1d</th>
<th>1e</th>
<th>1f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.356</td>
<td>-.326</td>
<td>.442</td>
<td>-.301</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yrs of Service</td>
<td>.276</td>
<td>.291</td>
<td>.284</td>
<td>.278</td>
<td>.246</td>
<td></td>
</tr>
<tr>
<td>Connect to others</td>
<td></td>
<td>-.803</td>
<td></td>
<td></td>
<td>-.542</td>
<td></td>
</tr>
<tr>
<td>Religious ID</td>
<td></td>
<td>.386</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopeful Outlook</td>
<td></td>
<td></td>
<td>-.082</td>
<td></td>
<td></td>
<td>(-1.25)</td>
</tr>
<tr>
<td>Total Spirituality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.827</td>
<td>(-1.50)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.73 (3.16)</td>
<td>5.32 (5.26)</td>
<td>3.97 (2.55)</td>
<td>6.16 (7.69)</td>
<td>5.62 (9.9)</td>
<td>6.49 (6.7)</td>
</tr>
<tr>
<td>R2</td>
<td>.10 (.15)</td>
<td>.26 (.20)</td>
<td>.16 (.15)</td>
<td>.24 (.53)</td>
<td>.24 (.32)</td>
<td>.28 (.58)</td>
</tr>
</tbody>
</table>

*p<.05 - only statistically significant coefficients are presented in this table* 

**Bold numerals depict Result of regression of Cynicism subscale with COs only. Red, italicized numerals depict regression with Chaplains only.**
The regression tables for Burnout Subscales Emotional Exhaustion and Professional Efficacy follow:

**Table 5: Burnout Subscale 2: Emotional Exhaustion:**

<table>
<thead>
<tr>
<th>Model</th>
<th>2a</th>
<th>2b</th>
<th>2c</th>
<th>2d</th>
<th>2e</th>
<th>2f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.011</td>
<td>-.142</td>
<td>-.011</td>
<td>-.044</td>
<td>-.068</td>
<td>-.136</td>
</tr>
<tr>
<td>Age</td>
<td>-.306</td>
<td>-.209</td>
<td>-.291</td>
<td>-.344</td>
<td>-.274*</td>
<td>-.254*</td>
</tr>
<tr>
<td>Years of Service</td>
<td>.302*</td>
<td>2.78*</td>
<td>.313*</td>
<td>.30*</td>
<td>.308*</td>
<td>.282*</td>
</tr>
<tr>
<td>CO or Chaplain</td>
<td>0.528</td>
<td>0.017</td>
<td>0.237</td>
<td>0.123</td>
<td>-0.045</td>
<td>-0.078*</td>
</tr>
<tr>
<td>Spirituality - Connectedness to Others</td>
<td>-0.636*</td>
<td></td>
<td></td>
<td></td>
<td>-0.488*</td>
<td></td>
</tr>
<tr>
<td>Spirituality – Rel ID</td>
<td></td>
<td>-0.263*</td>
<td></td>
<td></td>
<td>.011</td>
<td></td>
</tr>
<tr>
<td>Spirituality - Hopeful Outlook</td>
<td></td>
<td></td>
<td>-0.58*</td>
<td></td>
<td>-0.323</td>
<td></td>
</tr>
<tr>
<td>Total Spirituality:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.63*</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.57*</td>
<td>5.2*</td>
<td>3.71*</td>
<td>5.36*</td>
<td>5.341*</td>
<td>6.09*</td>
</tr>
<tr>
<td>R²</td>
<td>0.13</td>
<td>0.24</td>
<td>0.16</td>
<td>0.21</td>
<td>0.21</td>
<td>0.26</td>
</tr>
<tr>
<td>N =134</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* p &lt; .05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Among the control variables, Model 2a predicts with a statistically significant regression coefficient of .302, that years of service are more likely to increase the Emotional Exhaustion score than age, gender or professional role (CO or chaplain).

For each unit increase in the Connection to Others score, Model 2b predicts a statistically significant regression coefficient of - 0.636, suggesting that for each unit increase in the score of Connection to Others, the respondents were predicted to have a decrease in the Emotional Exhaustion score, controlling for gender, age, years of service in corrections and occupational role (CO or chaplains). This model explains 24% of the variance in Connection to Others’ influence on Emotional Exhaustion.
Model 2c regressed the second spirituality subscale Religious Identification instead of Connection to Others. The model reveals a statistically significant coefficient of -.263, suggesting that for each unit increase in the score of Religious Identification, respondents are predicted to have a lower score on Emotional Exhaustion, controlling for the demographic variables. This model accounted for 15% of the variance. The overall results suggest that the more a person is identified with a religious faith group, the less Emotional Exhaustion they report. Again however this effect disappeared when the other subscales of spirituality were controlled.

The third subscale of spirituality (Hopeful Outlook) is measured in Model 2d. This model revealed a statistically significant coefficient of - 0.580, suggesting that for each unit increase in the score of Hopeful Outlook, respondents are predicted to have a lower score on Emotional Exhaustion, controlling for the demographic variables. In other words, the more a person reports having a hopeful outlook, the less Emotional Exhaustion they report. This model accounted for 21% of the variance.

Model 2e regressed Total Spirituality (the average of the sum of the three Spirituality subscales’ scores). For each unit increase in the Total Spirituality score, this model predicts a - 0.630 decrease in the Emotional Exhaustion score. The Total Spirituality model accounts for 21% of the variance. This finding is consistent with the pattern established so far that the higher respondents scored in Spirituality predicted a lower degree of emotional exhaustion than those who reported no spirituality.

Stronger evidence is found in Model 2f. Emotional Exhaustion was regressed with all three subscales of Spirituality in order to control each subscale for the other subscales. This final model for Emotional Exhaustion accounts for 26% of the variance, supporting the finding that
Connection to Others is the strongest predictor of having lower emotional exhaustion among respondents, controlling for demographic variables. As the following table illustrates, there were no statistically significant differences between COs and chaplains regarding the levels of Emotional Exhaustion. The hypothesis that a higher spirituality score would predict a lower level of emotional exhaustion and thus, less burnout is supported.

Table 6: Burnout Subscale 2: Emotional Exhaustion:

<table>
<thead>
<tr>
<th></th>
<th>2a</th>
<th>2b</th>
<th>2c</th>
<th>2d</th>
<th>2e</th>
<th>2f</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.417</td>
<td>-.277</td>
<td>-.395</td>
<td>-.477</td>
<td>-.425</td>
<td>-.393</td>
</tr>
<tr>
<td>Yrs of Service</td>
<td>.424</td>
<td>.379</td>
<td>.435</td>
<td>.429</td>
<td>.425</td>
<td>.393</td>
</tr>
<tr>
<td>Connect to others</td>
<td></td>
<td></td>
<td>-.653</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious ID</td>
<td></td>
<td></td>
<td></td>
<td>-.282</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopeful Outlook</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.565</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-1.18)</td>
<td></td>
</tr>
<tr>
<td>Total Spirituality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.617</td>
</tr>
<tr>
<td>Constant</td>
<td>3.10</td>
<td>5.22</td>
<td>4.01</td>
<td>5.53</td>
<td>5.26</td>
<td>5.83</td>
</tr>
<tr>
<td></td>
<td>(2.72)</td>
<td>(4.93)</td>
<td>(6.98)</td>
<td>(8.05)</td>
<td>(3.56)</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.13</td>
<td>.25</td>
<td>.17</td>
<td>.21</td>
<td>.22</td>
<td>.27</td>
</tr>
<tr>
<td></td>
<td>(.03)</td>
<td>(.07)</td>
<td>(.06)</td>
<td>(.31)</td>
<td>(.13)</td>
<td>(.43)</td>
</tr>
</tbody>
</table>

*p<.05 - only statistically significant coefficients are presented in this table

**Bold numerals depict Result of regression of Emotional Exhaustion subscale with COs only. Red numerals depict regression with Chaplains only.**
**Table 7: Burnout Subscale 3: Professional Efficacy**

<table>
<thead>
<tr>
<th></th>
<th>Model</th>
<th>3a</th>
<th>3b</th>
<th>3c</th>
<th>3d</th>
<th>3e</th>
<th>3f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td>-.11</td>
<td>-.007</td>
<td>-.192</td>
<td>-.062</td>
<td>-.053</td>
<td>-.04</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>.172</td>
<td>.107</td>
<td>.162</td>
<td>.206</td>
<td>.15</td>
<td>.161</td>
</tr>
<tr>
<td>Years of Service</td>
<td></td>
<td>.005</td>
<td>.021</td>
<td>-.003</td>
<td>.007</td>
<td>.001</td>
<td>.019</td>
</tr>
<tr>
<td>CO or Chaplain</td>
<td></td>
<td>-.501</td>
<td>-.158</td>
<td>-.301</td>
<td>-.150</td>
<td>-.086</td>
<td>-.069</td>
</tr>
<tr>
<td>Spirituality - Connectedness to Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.427*</td>
<td></td>
<td>.264*</td>
</tr>
<tr>
<td>Spirituality–Rel ID</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.182</td>
<td></td>
<td>-.047</td>
</tr>
<tr>
<td>Spirituality- Hopeful Outlook</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.504*</td>
<td></td>
<td>.390*</td>
</tr>
<tr>
<td>Total Spirituality:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.458*</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>4.77*</td>
<td>3.01*</td>
<td>3.99*</td>
<td>2.35*</td>
<td>2.763*</td>
<td>2.01*</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>0.1</td>
<td>0.2</td>
<td>0.13</td>
<td>0.23</td>
<td>0.19</td>
<td>0.25</td>
</tr>
<tr>
<td>N =134</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

Among the control variables, Model 3a shows no statistically significant predictors from the demographic control variables on the level of Professional Efficacy, the third subscale of the Burnout inventory.

The regression modeling for spirituality on Professional Efficacy shows that for each unit increase in the Connection to Others score, Model 3b predicts a statistically significant regression coefficient of +0.427, suggesting that for each unit increase in the score of Connection to Others, the respondents were predicted to have an increase in their Professional Efficacy score, controlling for gender, age, years of service in corrections and occupational role (CO or chaplains). This model explains 20% of the variance in Connection to Others’ influence on Professional Efficacy.
Model 3c regressed the second spirituality subscale Religious Identification instead of Connection to Others. The model revealed no statistically significant coefficient, suggesting that Religious Identification is not a good predictor for Professional Efficacy. In other words, among the respondents to this survey, one’s religious affiliation (or lack thereof) does not predict one’s sense of how one performs his or her work. This holds true for both the chaplains and the COs surveyed and would help explain why, despite all chaplains having a clear religious identification with their faith groups, and 60% of the CO’s reporting no religious identification with a faith group, religious identification failed to predict this aspect of burnout among both groups.

The third subscale of Spirituality (Hopeful Outlook) is measured in Model 3d. This model revealed a statistically significant coefficient of +0.504, suggesting that for each unit increase in the score of Hopeful Outlook, respondents are predicted to have a higher score on Professional Efficacy, controlling for the demographic variables. In other words, the more a person reports having a hopeful outlook, more effective they report they are in their work. This model accounted for .23% of the variance. This is borne out in Model 2e, which regressed Total Spirituality (the average of the sum of the three spirituality subscales’ scores). For each unit increase in the Total Spirituality score, this model predicts a +0.458 increase in the Professional Efficacy score. The Total Spirituality model accounts for 19% of the variance. This finding is consistent with the pattern established so far, that overall spirituality is not as strong a predictor of Professional Efficacy as it is for the two other subscales of Cynicism and Emotional Exhaustion.

Finally, in Model 3f, Professional Efficacy was regressed with all three subscales of spirituality (separately, not as an average of the subscale scores) in order to control each subscale
for the other subscales. This final model for Professional Efficacy accounted for 25% of the variance, supporting the finding that Connection to Others and a hopeful outlook are stronger predictors (than Religious Identification) of having a sense of increased Professional Efficacy among respondents, controlling for demographic variables or Professional Efficacy. The hypothesis that a higher spirituality score would predict increased levels of reported Professional Efficacy and thus, less burnout is supported. Regressing COs and Chaplains separately indicate that for COs, having a hopeful outlook is a statistically significant predictor of increased professional efficacy. The models for chaplains did not yield statistically significant results:

Table 8: Professional Efficacy Subscale regressed with COs and Chaplains separately:

<table>
<thead>
<tr>
<th>Model</th>
<th>3a</th>
<th>3b</th>
<th>3c</th>
<th>3d</th>
<th>3e</th>
<th>3f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yrs of Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connect to others</td>
<td></td>
<td>.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious ID</td>
<td></td>
<td></td>
<td>- -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopeful Outlook</td>
<td></td>
<td></td>
<td>.53</td>
<td>.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Spirituality</td>
<td></td>
<td></td>
<td></td>
<td>.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.33 (.54)</td>
<td>2.86 (.267)</td>
<td>3.76 (.43)</td>
<td>2.05 (3.78)</td>
<td>2.76 (2.28)</td>
<td>1.92 (3.15)</td>
</tr>
<tr>
<td>R²</td>
<td>.04 (.11)</td>
<td>.17 (.18)</td>
<td>.07 (.11)</td>
<td>.18 (.14)</td>
<td>.14 (.17)</td>
<td>.21 (.20)</td>
</tr>
</tbody>
</table>

*Bold numerals depict Result of regression of Professional Efficacy subscale with COs only. Red, italicized numerals depict regression with Chaplains only.*
In summary, on every subscale of spirituality, (Models 1-6e) each model predicted a statistically significant (p<.05) decrease in the cynicism score, after controlling for gender, age, years of service in corrections and occupational role (CO or chaplains). The reason for examining each spirituality subscale individually was to try to determine what it is about spirituality that matters most in relation to burnout.

On every subscale of spirituality, including a summation of the three subscales as a total score (Model 1-6f), each model predicted a statistically significant (p < .05) decrease in the Emotional Exhaustion score, after controlling for gender, age, years of service in corrections and occupational role (CO or chaplains).

On two of the three subscales of spirituality, each model predicted a statistically significant (p < .05) Professional Efficacy score, after controlling for gender, age, years of service in corrections and occupational role (CO or chaplains). The only subscale of spirituality that did not predict a statistically significant effect on Professional Efficacy was Religious Identification.

Across all three models of the burnout subscales, Religious Identification has the weakest predictive power. This is borne out in an examination of the variance in each burnout model that shows the total spirituality score model accounts for less of the variation than do either Connection to Others or Hopeful Outlook, suggesting that Connection to Others and Hopeful Outlook are better predictors of burnout than Religious Identification. The effect of Religious Identification tends to disappear when the other aspects of spirituality are controlled (see Models 1f, 2f and 3f in Table 3a). This suggests that while Religious Identification would intuitively seem to be a reasonable variable to use for predicting burnout, it may be so highly correlated
with factors associated with spirituality (Connection to Others and Hopeful Outlook) that on its own it does not provide a reliable predictor for burnout:

**Spirituality and Resilience Regression Models:**

The second research questions posed in this study asked if there is a correlation between spirituality and resilience among correctional workers. It was hypothesized that correctional workers who score high on indices of spirituality would demonstrate greater resilience than correctional staff that do not score high on spirituality. This hypothesis is tested in the remaining regression models.

A series of nested models were conducted to predict resilience scores from the spirituality scores. Model R1 represents the summation of the five resilience subscale scores. The Resilience Index subscales, like the Spirituality Index subscales are cumulative in scoring and therefore allow for all 5 resilience subscales to be combined. The subsequent models (R2-R6) represent the 5 individual resilience subscales. These are: Self-reliance (Model R2), Meaning (Model R3), Equanimity (Model R4), Perseverance (Model R5) and Existential Aloneness (Model R6).

In the following conceptual diagram, the subsets of the independent variable spirituality are depicted with all five of the resilience subscales. Resilience is measured by an increase in Self-reliance, Perseverance, Meaning and Equanimity, and a decrease in Existential Aloneness. Spirituality is predicted to increase Self-reliance, Perseverance, Meaning and Equanimity, and decrease Existential Aloneness. The hypothesized direction of the effects is indicated by a positive [+] or a negative [-] sign. Arrows indicate direction of regression. Resilience is measured by an increase in Self-Reliance, Perseverance, Meaning and Equanimity and a decrease in Existential Aloneness. Spirituality is predicted to increase Self-Reliance, Perseverance, Meaning and Equanimity.
Figure 3: IV Spirituality with DV Resilience subscales with hypothesized effects:
Figure 4: The following shows the same diagram with the statistically significant coefficients:

- Self-Reliance
- Connection to Others
- Perseverance
- Meaning
- Religious Identification
- Equanimity
- Existential Aloneness
- Hopeful Outlook

Statistically significant coefficients:

- +.163
- +.167
- +.092
- +.355
- +.349
- +.201
- +.125
- +.180
- +.288
- +.544
- +.280
- +.258
- +.098
- +.562
- +.161
As with the Burnout Models described above, in all the Resilience models, the first items regressed (a) were the control variables.

**Table 9: Regression model of Resilience subscores totaled:**

<table>
<thead>
<tr>
<th>Resilience (Total Score)</th>
<th>Model</th>
<th>R1a</th>
<th>R1b</th>
<th>R1c</th>
<th>R1d</th>
<th>R1e</th>
<th>R1f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td>-.169</td>
<td>-.112</td>
<td>-.157</td>
<td>-.134</td>
<td>-.127</td>
<td>-.118</td>
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<tr>
<td>Age</td>
<td></td>
<td>.010</td>
<td>-.027</td>
<td>.002</td>
<td>.035</td>
<td>-.007</td>
<td>.018</td>
</tr>
<tr>
<td>Years of Service</td>
<td></td>
<td>-.271</td>
<td>.023</td>
<td>.007</td>
<td>.015</td>
<td>.011</td>
<td>.017</td>
</tr>
<tr>
<td>CO or Chaplain</td>
<td></td>
<td>-.276*</td>
<td>-.085</td>
<td>-.106</td>
<td>-.018</td>
<td>.030</td>
<td>.024</td>
</tr>
<tr>
<td>Spirituality - Connect to Others</td>
<td></td>
<td>.239*</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Spirituality - Religious ID</td>
<td></td>
<td>.155*</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Spirituality- Hopeful Outlook</td>
<td></td>
<td></td>
<td>.371*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Total Spirituality:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>.338*</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>6.094*</td>
<td>5.11*</td>
<td>5.43*</td>
<td>4.31*</td>
<td>4.61*</td>
<td>4.17*</td>
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<tr>
<td>$R^2$</td>
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<td>0.078</td>
<td>0.213</td>
<td>0.159</td>
<td>0.363</td>
<td>0.283</td>
<td>0.34</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>* p &lt; .05</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

For example, nested **Model R1a**, the Total Resilience Score was regressed on the demographic control variables Gender, Age, Years of Service (in corrections) and Occupational Role (CO or chaplain).

**Model R1b** shows the Total Resilience Score regressed with the spirituality subscale “Connection to Others” with controls. **Model R1c** depicts the Total Resilience Score and the spirituality subscale “Religious Identification” with controls.

**Model R1d** shows the Total Resilience Score with the spirituality subscale “Hopeful Outlook” with controls.

**Model R1e** shows the Total Resilience Score regressed with the **total (combined) score** of the three spirituality subscales with controls. As with the burnout modeling described above, this
was done in order to show which subscales matter most. Since it is theoretically possible that one or two of the spirituality subscales may matter more than the others in predicting Resilience, the final regression model (R1f), shows the Total Resilience Score regressed with all three subscales of spirituality separately in order to control for each subscale: (Connection to Others, Religious Identification & Hopeful Outlook). For example, looking at the $R^2$ values of the first set of models for the Total Resilience Score, (R1a-R1f), the data reveal that the Total Spirituality model ($R^2$ 0.31 in model 1e), actually accounts for less of the variation than either spirituality subscale Connection to Others ($R^2$ of 0.32 in model 1b) or the Spirituality subscale Hopeful Outlook ($R^2$ of 0.33 in model 1c). This relationship remains consistent for all of 5 subsequent Resilience subscale regression models.

The quantitative data analysis revealed that on every subscale of spirituality, including a summation of the 3 spirituality subscales as a total score, each model predicted a statistically significant ($p < .05$) increase in the Total Resilience score, after controlling for gender, age, years of service in corrections and occupational role (CO or chaplain). In the first model regressing the Total Resilience scores, COs were predicted to be less resilient than chaplains (-0.276) – see Model R1a. This model however only explains 8% of the variance, controlling for all other variables.

In Model R1b, each unit increase in the Connection to Others score predicts a 0.239 increase in the Total Resilience score, after controlling for gender, age, years of service in corrections and occupational role (CO or chaplains). Statistically significant with $p < .05$, this model explains 21% of the variance in Connection to Others’ influence on Total Resilience. Similarly, regressing Hopeful Outlook and controlling for gender, age, years of service in corrections and occupational role, yields a statistically significant (0.371) increase in the Total...
Resilience score. This model explains 28% of the variance. Religious Identification was a weaker, but still significantly significant predictor (0.155). (See Model R1c) This model explains 16% of the variance.

When all three subscales for spirituality were regressed along with the total spirituality scores (R1f – R6f), the models reveal that as with the burnout models, the effect of Religious Identification mostly disappears once all other aspects of spirituality are controlled.

Across all subsequent models, (the following 5 tables show the regressions of the 5 Resilience Subscales), Religious Identification has the weakest predictive power for resilience. As noted, it may be so highly correlated with factors associated with spirituality (Connection to Others and Hopeful Outlook) that on its own, Religious Identification does not provide a reliable predictor for resilience.

The coefficients for the regression models of all 5 Regression subscales with COs and Chaplains modeled separately are presented in one table in Appendix 1. As in the previous tables, Bold numerals depict Result of regression of Professional Efficacy subscale with COs only. The red, italicized numerals depict regression with Chaplains only. The tables show the disaggregated models (COs and Chaplains regressed separately) followed very closely the patterns of the regression models of the entire sample together.
## Table 10: Self-Reliance Subscale

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<th></th>
<th>Model</th>
<th>R2a</th>
<th>R2b</th>
<th>R2c</th>
<th>R2d</th>
<th>R2e</th>
<th>R2f</th>
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<tbody>
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<td>Gender</td>
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<td>-.127</td>
<td>-.088</td>
<td>-.120</td>
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<td>-.127</td>
<td>-.091</td>
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<tr>
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<td>-.018</td>
<td>-.043</td>
<td>-.024</td>
<td>-.005</td>
<td>-.006</td>
<td>-.023</td>
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<td>Years of Service</td>
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<td>.039</td>
<td>.029</td>
<td>.033</td>
<td>.011</td>
<td>.036</td>
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<tr>
<td>CO or Chaplain</td>
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<td>-.071</td>
<td>-.100</td>
<td>-.061</td>
<td>-.030</td>
<td>-.017</td>
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<td></td>
</tr>
<tr>
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<td>.092*</td>
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<td>5.33*</td>
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<td>5.19*</td>
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<td>0.14</td>
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## Table 11. Meaning Subscale:

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<th>Model</th>
<th>R3a</th>
<th>R3b</th>
<th>R3c</th>
<th>R3d</th>
<th>R3e</th>
<th>R3f</th>
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<td></td>
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<td>.460*</td>
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</tr>
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### Table 12. Equanimity Subscale:

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<th>Model</th>
<th>R4a</th>
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<th>R4c</th>
<th>R4d</th>
<th>R4e</th>
<th>R4f</th>
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<td>.231</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>.544*</td>
<td>.502*</td>
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<td>0.14</td>
<td>0.06</td>
<td>0.27</td>
<td>0.17</td>
<td>0.28</td>
</tr>
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<tr>
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### Table 13: Perseverance Subscale:

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<th>R5c</th>
<th>R5d</th>
<th>R5e</th>
<th>R5f</th>
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</thead>
<tbody>
<tr>
<td>Gender</td>
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<td>-.093</td>
<td>-.123</td>
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<td>-.099</td>
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<td>-.219</td>
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### Table 14. Existential Aloneness Subscale:

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<th>R6c</th>
<th>R6d</th>
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<th>R6f</th>
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</thead>
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<td>.001</td>
<td>.024</td>
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<td>.014</td>
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N = 134
*p < .05

A comparison of $R^2$ values across all 5 resilience subscales modeled reveals that Hopeful Outlook accounts for the greatest percentage of variance explained by the models, except for the Self-reliance Scale where Total Spirituality ($R^2 = .28$) accounts for considerably more of the variance than do any of the spirituality subscales. The data is clear that Hopeful Outlook is the best overall predictor for resilience. Connection to Others is the next best predictor for resilience.

**Control Variables:**

**Gender:**

There were no statistically significant differences due to gender in regard to burnout. Regressing the burnout subscales on the demographic variables indicates that gender does not significantly predict burnout scores.

Regarding resilience, only the models regressing the resilience subscales of Meaning and Existential Aloneness showed gender as a statistically significant predictor of resilience. (Refer
to Models R3a-R3f and R6a-R6f). Gender failed to predict Total Resilience scores, Self-Reliance, or Equanimity.

These data suggest that female (COs and chaplains) are predicted to be more resilient than males in regard to finding their work meaningful and in their self-perceptions of existential aloneliness. This is consistent with Tewksbury & Collins (2006) finding that studies of the effects of gender on correctional officers have had mixed results. While they found higher stress levels among female COs compared with their male colleagues, other studies suggest females experience higher levels of personal achievement and accomplishment than their male counterparts (Carlson et al. 2003). It would be interesting in future research to examine the two subscales: Meaning and Existential Aloneness in greater detail to better understand why they stand out as stronger predictors of resilience than do the other subscales of Self-reliance, Equanimitiy and Perseverance.

**Age:**

There were no statistically significant differences due to age in any of the predictors of burnout or resilience. This suggests that for the sample respondents, their age was not a factor in their self-reported sense of burnout or in their reported levels of resilience.

**Years of Service:**

There were two statistically significant predictors of burnout and resilience based on the years of service. These were the burnout subscale Emotional Exhaustion (refer to Models 2a-2f) and the resilience subscale, Existential Aloneness (refer to Models R6a- R6f).

Regressing the burnout subscale Emotional Exhaustion on the demographic variables revealed a regression coefficient for years of service of 0.302 predicting that as years of service increase, so will the score for Emotional Exhaustion. This makes sense intuitively and is borne
out in the qualitative data. The resilience subscale Existential Aloneness regressed on the
demographic variables indicated that as one progresses in one’s career in correction with years of
service, one would experience a greater degree of Existential Aloneness. This suggests policy
implications that will be discussed in the following chapter.

*Occupational Roles*

Occupational Roles were measured as a dummy variable with 0 indicating chaplains and
1 indicating COs. The one statistically significant difference between COs or chaplain’s
regarding burnout was in the subscale Cynicism. Regressing the burnout subscale Cynicism on
the demographic variables revealed a regression coefficient for occupational role (CO or
chaplain) of 1.24 predicting that COs will score higher on Cynicism than chaplains will,
controlling for all other demographic variables used. 20% of the variance is explained in this
model.

This effect disappears in subsequent models suggesting that one’s work role as CO or
chaplain has less of an effect predicting Cynicism than do the spirituality scores.

In the resilience subscales, COs were predicted to be less resilient in Meaning (-0.63) (Refer to
Model R3a) and Perseverance (-0.448) (Refer to Model R5a). There were no statistically
significant differences between COs and chaplains in their Self-reliance, Equanimity or
Existential Aloneness scores.

**Part 2: Qualitative Findings:**

The purpose of the qualitative component of this study was to provide a richer context for
understanding the work environment and challenges encountered by correctional workers. The
process of obtaining and coding the qualitative data was described in Chapter 4. The coding
results are depicted in a series of charts in Appendix 8.
Coding each interview line by line resulted in about 350 codes or units of information. The interviewees’ words and phrases were then organized into categories. For example, referring to the Stress and Burnout chart in Appendix 8, the codes listed in the column under “Causes of Stress” were derived from the master list of codes. Themes such as “work is potentially traumatizing” or “coworkers are a source of negativity” were repeated in several of the interviews. The upward arrow on each chart is meant to indicate that the various repeated phrases in each column formed the category at the top of each column (Causes of Stress, Effects of Stress, Coping with Stress, etc.). Organizing the qualitative data in this manner allowed for discernable patterns and themes to emerge from the interviews.

The interview results proved helpful in highlighting some of the relationships between spirituality, burnout and resilience that the quantitative analysis demonstrated. The responses mirror the theoretical postulates that shaped the survey instruments used to measure these three key variables in this study. The qualitative data substantially support the quantitative data collected in the survey process.

It is striking how many of the testing effects of the IV and DV variables measured in the models were illustrated in the course of interviewing the subjects. In the following pages, the results of the interviews will be presented following five principle categories or themes that emerged from the axial coding of the data.

The coding data categories are:

1. Stress and Burnout
2. Resilience
3. Spirituality
4. Work environment
5. CO Culture
1. Stress and Burnout:

   All of the chaplains and COs interviewed spoke about the difficulty of not bringing their work home with them and therefore feeling their families didn’t fully understand the stressful nature of their work. For example,

   *Sometimes we have a sort of gallows humor. We do a lot of making fun of things that maybe other people might find strange. It’s our way of dealing with what goes on inside, but other people don’t understand that.* OR Chaplain 1

   *If you haven’t ever worked in a prison, people don’t understand what it is like.* NV CO 1

   While all acknowledge in their interviews that they find their prison work stressful, all interviewees described their coping mechanisms center around feeling supported and connected to peers family and/or a spiritual community. Some described how they see themselves as a source of support for their peers:

   *I like to support my coworkers in ways that they find helpful so if they’re trying to work through something and that’s the only tool they have then I do my best to support them.* OR CO 1

   Many mentioned their feelings of connection with inmates in their care:

   *The rewarding part is first of all the camaraderie with staff and second of all some of the relationships with inmates . . . There are inmates that I’ve known over 30 years and over the years we have taught each other different things so that interaction is rewarding because we have come to an understanding with each other and there is a certain amount of respect.* OR CO 3

   The COs and chaplains interviewed focused on different sources of stress. For chaplains, the workplace stress originates in heavy administrative paperwork demands and an overwhelming sense of need on the part of inmates. Unlike COs who comprise the majority of the prison work force, chaplains are much fewer in number, usually no more than 2 or 3 full time employees in any given prison.
COs describe their principle sources of stress come from fears for personal safety, the lack of predictability of each work day, negative co-workers and a feeling that they are not supported by their supervisors:

_I don’t let it get to me as much as when I first started, but the negative attitudes of staff members and their lack of work ethic is troubling._ NV CO 1

Consistent with the MBI inventory results, a common complaint of both chaplains and COs interviewed was a feeling of emotional exhaustion. One CO describes it poignantly:

_There’s kind of a profound sadness in seeing people at their absolute worst. They’re so far down that they’re not really who they are. And you know that, and so there’s a profound sadness associated with that for me – it doesn’t last a long time, but when I’m in it with them, I’m in it with them._ OR CO 1

Both chaplains and COs described becoming desensitized to violence, a phenomenon that became manifest in the kind of gallows humor used by both groups of prison workers.

_Sometimes we have a sort of gallows humor. We do a lot of making fun of things that maybe other people might find strange. It’s our way of dealing with what goes on inside, but other people don’t understand that._ OR Chaplain 2

A Nevada CO echoed this:

_I guess you kind of get a sick sense of humor in this line of work, it’s just stuff that would be disgusting to most people, we end up finding a way to joke about it among ourselves and the best way for me to explain it is that it’s a way for us to uh, downplay the fears of what just happened to us._ NV CO 2

The COs and chaplains interviewed all acknowledge some degree of feeling burned out at times. Three of the 5 COs expressed a desire to have more on-site support resources for COs to deal with daily stressors and the not-infrequent experiences of witnessing violence at work.

_You just dread going in, you just sit in your car and you just kind of drop your head and you say, "I just need 5 more minutes before I go in." Everything is a chore, it’s difficult to go to meetings, you feel that you have nothing more to give but everybody wants something from you, so you just go home and you are exhausted and fall on the couch._ OR CO 2
One chaplain explained how his own hopeful outlook helped him to cope with what he perceived to be rampant cynicism among the COs in his institution:

*I feel there is in a prison environment a degree of breeding a cynical mentality – I make a conscious effort to kind of combat that – and the fact that you have to make a conscious effort to counter that is kind of telling . . . But part of my faith tradition teaches that learning to deal with those challenges is a humbling process to remind you that in all ways God is in charge of the world and it pushes you to depend on God, and to turn to prayer to help deal with these challenges. OR Chaplain 6*

Despite the presence of Employee Assistance Programs at all their institutions, the COs interviewed indicated that their colleagues do not use these resources as much as they could because of the CO culture in their prisons. This is consistent with Pittaro’s (2015) observation,

*Correction employees were not supposed to appear emotionally vulnerable or fragile . . . emotional vulnerability often equates to emotional instability, which is perceived to be a weakness within the profession (2015:1).*

2. Resilience

As with the interviewees’ rich descriptions of areas of burnout and stress in their work, there were also similarities in both chaplains’ and COs’ reports of their experiences of resilience. As presented earlier, resilience was defined as the ability to adapt and cope successfully despite threatening or challenging situations (Agabi & Wilson 2005:198).

The responses of the interviewees paint a rich description of men and women who have managed to thrive in their work despite the stresses and dangers of prison work. Illustrating an aspect of spirituality theory, their comments are in line with Schneider’s observation that “[Spirituality] is the experience of conscious involvement in the project of life-integration through self-transcendence toward the ultimate value one perceives” (Schneiders, 2003).
Indeed, one chaplain respondent stated,

*I like the um, it sounds weird, but I like the starkness of the trauma, I mean, like everyone was bleeding and you couldn’t deny it, you can’t hide it when you’re in prison, at least in my experience, I just enjoy the environment I enjoy the intensity of conversation, the type of conversations I get to have.*

OR Chaplain 3

A CO said,

*There have been many times in the several places I’ve worked where I’ve felt I have walked through the valley of the shadow of death, however, I know I don’t fear any evil because I believe God is with me, so I carry that every day.*

NV CO 3

The student coder who analyzed the interview data was not privy to the quantitative findings of this study. Nevertheless, her coding revealed a structure of responses that closely mirrored the elements of resilience scale used earlier in the study. For example (refer to Appendix 8, section 8:2), some respondents described their own experiences of self-reliance in terms of their making conscious efforts to avoid becoming cynical, setting clear work goals for themselves, and recognizing their own limitations.

*I went through some phase here – there were times when I carried anger with me, but over time in dealing with inmates and counseling them, I’ve learned from my own words trying to counsel them that some of this stuff affects me the same way and I no longer carry anger with me, I can be angry at a situation, but generally within twenty to thirty minutes that is totally gone.* NV CO 1

Respondents characterized their own perseverance in the ways that they coped with daily stressors. One described the work of maintaining one’s physical and emotional balance vividly:

*We call it pulling the pedals off a flower (Makes gesture of outline of a large daisy or sunflower) - pulling the pedals off a flower. When you start working in corrections your flower is full, but by the time you get done, if you don’t work at keeping it full, you’re gonna [sic] be without relationships, without much of anything.* OR Chaplain 3
Both chaplains and COs interviewed recognized the need to maintain balance and equanimity in their work and their lives outside of work.

*I convinced myself that if I don’t care for somebody or care for what they did, it’s a terrible waste of energy because it takes a lot of energy to carry anger with you. And I, to me, if I feel negatively about somebody, they’re not worth that much energy.*  OR CO 4

As noted earlier, meaning, as measured in the resilience scale is the realization that life has a purpose and recognition that there is something for which to live. The phenomenon of existential aloneness is the realization that one’s life path is unique and that there are some experiences in life that must be faced alone. The hypothesis that correctional chaplains have greater resilience and less burnout than corrections officers was supported in this study by the chaplains interviewed.

3. **Spirituality:**

By virtue of their spirituality and training, chaplains had predictably high scores on spirituality, and their spirituality was shown in this study to predict increased scores in all the subscales of resilience. In their comments about how their work gives them a sense of purpose and meaning, all the chaplains spoke of being drawn to their work by a sense of vocation, or a calling by God or a higher power. This is consistent with wellness theory’s postulate that the search for meaning is a core psychological and spiritual motivation in life (Frankl, 1959).

The responses of all those interviewed affirm quantitative findings that those who reported having a stronger sense of a connection to others and those who described themselves as optimistic or hopeful, reported less cynicism in their work. Qualitative coding revealed a consistent pattern of responses concerning spirituality, which also mirrored the quantitative findings.
Another research question posed by this study asks “Do correctional chaplains score higher on resilience and lower on burnout than COs?” The quantitative modeling indicates that spirituality is what mediates the relationship between being a chaplain and burnout and resilience. This was expected, given the nature of chaplain’s interest and training in spirituality. The responses of the chaplain interviewees strongly supported the centrality of spirituality in their lives. Many expressed feelings of gratitude for their work. For example, one chaplain stated,

*I am glad I was able to be used by the Lord for this good purpose. I have a certain background, in training and education and personal experiences with God that equip me for this moment right now. But I’m not the answer and I don’t provide all the answers, what I try to do is create an environment in which they can find answers for themselves through their own spiritual path. OR Chaplain 6*

As mentioned, spirituality is the key independent variable in this study and was operationalized according to the U.S. Army Chaplains’ Spirituality Index (Wester, 2010). This index has three subscales: “connection to others”, “religious identification” and “hopeful outlook.” This was mirrored in the qualitative data where interviewees reported feelings of being connected to others both at work and at home and having a hopeful outlook toward both work and life outside of work.

*Connection to others*

Quantitative analysis revealed that for every indicator of burnout and resilience, the spirituality subscale “connection to others” provided a statistically significant predictor of lower self-reported levels of burnout and higher self-reported levels of resilience after controlling for gender, age, years of service in corrections and occupational role variables. The theme of the importance of connection to others was strongly reinforced in the interview responses.
Religious Identification

Predictably, all the chaplains interviewed belong to a specific faith group. They all expressed a sense of calling to their work. They described this calling not merely as religious identification based on denominational affiliation, but as a living spirituality that includes a sense of connection with others and a hopeful outlook.

The majority of the COs interviewed for this study (3 of thee 5) reported having no faith group affiliation. This is consistent with the overall survey results showing 60% of the CO respondents claim “none” as their faith group affiliation.

Religious Identification does not appear to be a significant predictor of the subjects’ sense of professional efficacy. Professional efficacy measures the subjects’ sense of or expectations about their effectiveness at work. None of the interviewees cited denominational religious affiliation as an essential aspect of their sense of their own accomplishments or effectiveness in their work. One CO, who did not belong to a specific faith group stated,

*I don’t think that there isn’t a God, you know I do pray, but it’s not like a traditional prayer or anything, It’s just something I say to create a little bit of calm over a bad situation. I’ll say something in my head, I don’t really say anything out loud, um and I wear a correctional officer’s prayer tag every day I go to work, I put it on, it’s sort of like superstition, but it’s not just a superstition. NV CO 2

Some of the COs interviewed however did explicitly mention the importance of spirituality in their lives. For example, one CO stated:

*I think the everyday sort of little earthquakes, the shocks that you go through . . . I think for me, uh, definitely my belief, my faith, my ability to go to Church. I think that has definitely been my crutch." NV CO 1
As hypothesized, chaplains by virtue of their training and the nature of their work, expressed the value of their spirituality in terms of helping them cope with workplace stressors:

*I think the biggest piece that I struggle is with cynicism and despair. And if it wasn’t for connection to a religious community and my connection to a religious practice, um, I mean those are my primary coping strategies, I mean that’s why I’m in ministry I guess because religious experience is how I cope with life.*  
OR Chaplain 2

*Meaning and hope*

The final aspect of spirituality that emerged consistently in the coding process for both COs and chaplains was the way they found meaning in their work and how they expressed hope and optimism. This was borne out in the responses of those COs and chaplains interviewed for this study. The responses of the interviewees affirm the importance of feeling hopeful and feeling connected to others, supporting Banks’ (1980) and Ram’s (1998) contention that spiritual health seems to provide the individual with life purpose and ultimate meaning and Hawkes (1994) observation that spiritual health fosters a sense of connectedness with others. The respondents in this study, both COs and chaplains, expressed their pride in their work and in terms of integrity, compassion, and service.

*The thing I like the most is just being able to see and be a catalyst for people to change their lives.*  
OR Chaplain 1

*In the grand scheme of things I think God has a plan for me and once I get past this chapter of my life, whatever that is, but whatever, when I leave the earth, I’d like people to say that I helped somebody.*  
OR CO 5

The chaplains and COs interviewed affirmed what Bandura hypothesizes, “Most people acknowledge a spiritual aspect to their lives, in the sense of seeking meaning and social connectedness to something greater than oneself without being tied to a formal religion or deity” (Bandura 2003:170).
4. **Workplace Environment:**

Both COs and chaplains described themselves as concerned for the welfare of others (both inmates and peers) and all expressed empathy for the suffering they observe in prison work.

*The interaction, I think that’s the draw to coming to this place every day, It’s the interaction with people, it’s always different, you know.*  
*NV CO 1*

*Having to deal with things that aren’t easy, having the chance to deal with the stories of some of these guys who have made great changes in their lives, makes you step back and realize all the blessings you have had and appreciate them.*  
*OR Chaplain 3*

While COs described themselves as more cynical than chaplains, both groups interviewed expressed similar desires to find meaning in their work and to make their workplaces safer and better for both inmates and staff. This supports Sundt’s and Cullen’s (2002) findings that COs support the goals of both custody and treatment. This is also consistent with the quantitative data analysis of this study that showed while COs scored higher in cynicism than chaplains, after controlling for all other variables, work roles (CO or chaplain) had less of an effect on predicting cynicism than did the respondents’ spirituality scores.

A common concern voiced among COs was that chaplains did not really understand the security aspect of prison work:

*I don’t always know if the chaplains view the situation from the standpoint of security. Security has a job to do in order to keep the inmates safe, the chaplain has a job to do from the standpoint of spirituality, sometimes from the spiritual side of things they might see security as a conflict cuz [sic] they’re looking at it specifically from the spiritual side.*  
*OR CO 1*

*The inmates tend to get what they want, you know, he’s kind of too, he doesn’t think from a security standpoint, he thinks from a chaplain’s standpoint.*  
*NV CO 1*
The chaplains interviewed all expressed awareness of the importance of security yet all but one spoke of concerns that at times security was overbearing:

For the most part I’m lucky, our officers are a pretty professional, well-trained appropriate…but there’s always one, there’s always one asshole, and sometimes, it’s the abuse that this officer can continue to get away with, or what appears to be..., And the staff know that this officer is like this and the inmates know and management knows and they do what they can but she continues to abuse inmates. And it’s just, maddening. OR Chaplain 1

Other chaplains complained that COs did not really understand their work:

It's difficult because they [COs] don't want what you're doing because everything that you're doing creates more work for them, and they want to do a minimal amount of work. They want to do their eight hours and go home, so you always have this tension OR Chaplain 6

All of the interviewees described difficulties and challenges they experienced working in prisons. The interviews reinforced the contention that prison work is stressful. Respondents identified bureaucracy (in the form of administrative paperwork for both COs and chaplains) as a constant source of stress and anxiety. For example, two chaplains described the burden of paperwork in the context of feeling burned out at times:

It’s the overwhelming grind of paperwork that you never get done with, ever. You can never come to the end of your day and think, wow, that was great and I’m all done. It just never gets done. OR Chaplain 1

I probably spend 60% of my time on the computer doing administrative stuff and 40% of my time actually with people doing people stuff. OR Chaplain 2

In addition to the administrative/bureaucratic work, all the chaplains describe the emotionally difficult aspects of their work:

I just had to tell a guy that three of his kids died in a fire, and he had never been able to even meet the youngest one. OR Chaplain 3

We had a woman in our facility who just passed away from lung cancer and she was three months from the gate and they denied her early release – Why? Why the fuck [sic] did they do that? Three months. Really? She’s on hospice!
Really, she’s a danger to society? It’s things like that. And sometimes it’s just the reality of the terrible things that people do to each other and the terrible things that have been done to them. OR Chaplain 1

The COs interviewed also described their work as emotionally difficult at times. All the COs reported two competing sources of difficulty. One is working with difficult inmates, particularly those suffering mental illnesses. For example, one CO stated,

“We’ve got a lot of mentally ill people that do some of the weirdest things to themselves that the only way you can look at it – I mean, you can look at it and be completely repulsed by it, shocked and quit the job. NV CO 2

The other complaint was a perceived lack of support on the part of the COs interviewed from their correctional supervisors and administrators. This complaint was unique to the COs interviewed as all the chaplains interviewed report feeling supported and appreciated by their administrators.

I have all the confidence in the world that I would be supported by my peers. Now, administration and management, um, now that’s a loaded question, but most of the time, no, I don’t, honestly I don’t feel supported by them. NV CO 1

All but one of the chaplains reported feeling supported by their administrators, the one who did not felt that his administrations talked about support, but did not follow through with needed training,

“The department needs to do more with trauma and burnout. I feel like they want to talk good talk, “staff wellness” is a big thing, but I don’t feel it is trickling down, not to the level we need. The department won’t spend money on the kind of treatment we really need. OR Chaplain 3

A common complaint of the COs interviewed was that administrators often are promoted from non-custody positions and thus do not fully understand the COs’ work:

Over the years, the way that they’ve hired administrators has changed, uh dramatically. It used to be that you worked your way up through the ranks and um now it isn’t so much that way. We have people that um came from education, there are doctors; they don’t understand the impact of the decisions they make. OR CO 5
Four of the five COs interviewed, consistent with Farkas (2001:20) findings, expressed the difficulties they encounter working with large numbers of often anti-authority and “anti-rule” inmates in situations that often require lightning-speed judgment and physical reactions. All spoke of the inherent dangers they feel each day:

*When you walk into a place like this where you know if you make a mistake, or if someone else makes a mistake, it could possibly cost them their lives or their welfare – or possibly your own life.* NV CO 1

*The CO who fired the shot has fired shots at other institutions and wounded inmates before. He did what he had to do, he followed protocol and what are you supposed to do, stand by and watch them beat someone to death? So there were some staff, the ones who had the most difficulty dealing with it were the non-security staff who witnessed the blood spurting everywhere.* OR CO 2

Both chaplain and CO interviewees also described how their work environment shapes their own behavior, both in terms of stress reactions and in coping mechanisms. This is consistent with the central theory behind this research: Bandura’s contention that environment shapes behavior and behavior shapes the environment and that these socially learned behaviors are the result of a dynamic interaction with the prison environment. For example, one chaplain observes,

*You're dealing with officers whose job is 90% boredom and 10% fear and I've had them react at me, I've been at the state pen where we had 75 guys fighting on the yard, we've had major lockdowns for two weeks at a time, where at gunpoint every inmate was pulled out of his cell, the cell searched, the inmate strip searched, and I've seen several staff suicides, I've been to their funerals. I listen to their denial talk like "we're just doing our job" - like Bullshit, you're doing your job and you're going home drinking and you're taking drugs and you're beating your wives, and it's not affecting you? It is bullshit ... it's all denial, no one wants to face the reality of it.* OR Chaplain 4

The phenomenon described by Bandura as “social verification by peers” (1986:513) where behavior and attitudes are reinforced by co-workers is evident in some of the responses of the interviewees. For example, even if individuals began work as corrections
officers with benign attitudes toward prisoners, it is likely their peers will shape their workplace views to fit the institutional mold (which may not be benign at all). Both chaplains and COs interviewed describe this workplace socialization:

"I realized I was headed down the road to being negative like a lot of the other officers that I was seeing that I didn’t like but I was turning in to them . . . it kind of made me grow up when I was 23 or 24 years old. And I just stopped letting those little things that the inmates do that they’re gonna [sic] do for the rest of my career get to me because they’re not important – I just started, you know changing myself slowly, my supervisors noticed it and started acting different towards me and one of my supervisors in particular he gave me the chance to become [a CO trainer] and once I got that certification, I just flourished because you don’t get very many, you know, good jobs, in this career. NV CO 2

I have a network of other chaplains- some more than others, that I do meet with for support. I see them on a consistent basis – I still study with my teachers so I see them regularly, and that helps a lot. OR Chaplain 5

5. CO Culture

The interviews conducted in this study further support the findings of Farkas’ 1997 qualitative study that confirmed Kaufman’s earlier (1988) findings of a cohesive CO culture. All the chaplains and COs interviewed agree that there is a culture among COs. However, while literature on police and prison officer culture often refers to negative aspects of staff attitudes (Liebling, 2010), the responses of the chaplains and COs in this study paint both a positive and a negative picture of the culture. Chaplains tend to be more critical of what they perceive to be the CO culture they observe:

"There’s a culture in this prison, and not just here, particularly among correctional officers that probably are burned out after a few years dealing with inmates and they end up not engaging purposefully with the idea of helping them become better human beings. OR Chaplain 3

While two of the COs complain the most difficult part of their work is dealing with other officers, all of the COs express a measure of camaraderie and pride among their peers.
One CO describes her perception of COs as:

They have to carry that tough guy image on the outside, but when they get outside the doors, most corrections officers are totally different, they’re very soft, they’re softer spoken, um they’re loving and caring towards their families. OR CO 2

The interview results also support Chenault’s (2010) thesis that new COs are taught competing cultural scripts by more experienced COs. Chenault described two scripts: an “empathetic script” that views inmates as human beings who made a mistake and a “dehumanizing script” that views inmates as untrustworthy, manipulative, and “dirty” (2010:183). The COs interviewed in this study describe this phenomenon in their own words. Two of the COs spoke with some empathy toward prisoners:

I think once you really get down to the nitty-gritty of it, people are people, no matter what their sentence is, no matter what crime they committed, people are people. They made some really really bad choices, along the way, but people are people. NV CO 3

No matter what people say about their fears about dealing with inmates and being behind the wall, inmates are just people who made bad decisions at one time or another – as we all have at one time or another. OR CO 4

The other COs describe more the dangers they perceive in the inmates. Their responses are closer to what Chenault describes as the “dehumanizing script.”

When I was working in the SHU the guys who were in the SHU were throwing urine and feces on our staff and, threatening to kill us every day. And so, the thought process or cynicism that I carried was that these guys out here walking around at any given moment these guys have the potential and the capacity to cause all this harm and chaos. NV CO 1

There are some inmates here – all they know is trying to get over which is either gaining the upper hand or acting in such a way to get the best results – and they couldn’t tell you the truth if they wanted to (laughs) because that wouldn’t be in their best interest. OR CO 3

In his research, Chenault discovered that COs tend to use a dehumanizing script based on fear of the inmate, and tend to use an empathetic script when they believe inmates deserve
respect. The COs interviewed for this study all indicated that they respected inmates who treated them with respect. One CO described a rather chilling incident where an inmate’s behavior elicited fear:

There was an inmate who was pretty well known as one of the most dangerous individuals who walked through these walls. I got to know him and we talked and there’d be a little pause in the conversation and he’d kind of smile a little bit and he’d tell me “by the way, you know that if I get the chance I’ve got to kill you!” And I told him “Yeah, I know that.” OR CO 3

Another aspect of COs’ and chaplains’ work that creates stress is the inherent role conflict they encounter in their daily work (Dowden & Tellier, 2004; Morgan, 2009). This conflict can be summarized as the tension between the need to maintain control, custody and security of the institution while at the same time “correcting” or participating in the rehabilitation of offenders. As Spenaris-Tudor notes, these requirements are often seen as contradictory by staff (Spenaris-Tudor, 2008:25). This conflict was echoed in the responses of several of the CO’s interviewed in this study. Their comments were consistent with Sundt’s (1998) report that role conflict is one of the most constant predictors of CO stress, dissatisfaction with work and stress:

In my work, I want to make it a better place, a better place for the officers. The inmates, I really don’t care about them. As far as I’m concerned their lives are too liberal as it is…NV CO 1

You may have, the day before had a decent conversation with the guy, you may have recommended him for a program but he wakes up on the wrong side of the bed and he’s a different guy and then you have to deal with him as a different guy. I think that’s probably the most challenging parts of working in a place like this. OR CO 3

The next chapter will review the basic findings and offer some discussion about possible future research and policy implications of this study.
CHAPTER 6: DISCUSSION, LIMITATIONS, IMPLICATIONS AND CONCLUSIONS

Major findings and contribution to the literature

A growing body of literature concerning correctional officers affirms that corrections work is difficult and stressful, however a significant gap remains in the literature regarding the understanding of effective means of helping correctional staff cope with their challenging work environments. Despite their key role in the functioning of correctional institutions, COs have tended to remain an afterthought in contemporary prison research. By centering the focus of this research on COs, this research attempts to fill this gap.

This final chapter summarizes the quantitative and then the qualitative findings of this study and describes some of the strengths and limitations of the research. It offers recommendations for further research and considers implications for policy and some recommendations for policy makers.

Quantitative:

Findings offer support for each of the three hypotheses posed at the beginning of this study. The first hypothesis that correctional workers scoring higher on spirituality would report less burnout than workers who scored lower on spirituality was supported by the data. Controlling for several demographic variables, analysis of the data found that higher spirituality scores (measured with a Spirituality Index developed by U.S. Army chaplains), predicted lower levels of burnout reported among participants in the study. Burnout was measured using the Maslach Burnout Inventory, a well-validated index widely used in social science research. Chaplains were predicted to be less cynical, and thus less likely to experience burnout than correctional officers.

The second hypothesis, that correctional workers who scored high on indices of spirituality would demonstrate greater emotional resilience than workers who scored lower on
spirituality was also supported by the data. Again controlling for several demographic variables, analysis of these data showed that having a higher spirituality score did predict greater resilience as reported by the respondents to the study’s online survey. Resilience was measured using the Resilience Scale, another well-validated and widely used index.

The third hypothesis, that correctional chaplains would report less burnout and greater resilience than correctional officers was included not because chaplains were the focus of this study, but because it was theorized that correctional chaplains, by virtue of their professional training and calling, would be expected to score higher than COs on spirituality. They served as a comparison group to the main population of interest, correctional officers. Analysis of the data found some evidence supporting this third hypothesis.

Taking a closer look at the findings, the quantitative data revealed that in regard to spirituality and lower burnout scores, two of the spirituality index subscales measuring connection to others and a hopeful outlook proved stronger predictors of lower burnout. The third spirituality subscale measuring religious identification was a weaker predictor of burnout.

This suggests that correctional workers who feel connected to others in both their personal and professional lives are more likely to have less burnout from work stress than those workers who feel alone or isolated in their personal and professional lives. This supports Durak, Durak & Gencoz’s (2006) findings that COs perceptions of social support were negatively correlated with precursors to burnout such as work stress, depression and anxiety. The importance of having a connection to others also supports Bandura’s theory that spirituality is a socially grounded phenomenon (2013:171). It also lends support to his idea that social verification by peers plays an important role in shaping one’s views and behavior (1985: 519).
The fact that the third element of spirituality measuring religious identification proved to be a slightly weaker predictor of burnout suggests that the subjects’ personal religious affiliations were not as important in resisting burnout than were their experiences of connection to others and hopefulness. In other words, one’s religious preference (or lack of affiliation to an organized religion) is less important than one’s overall outlook and perceptions of social support from family and peers.

This is not to say however that religious identification had no predicting power; it did. But unlike connection to others and hopeful outlook that predicted statistically significant effects on all three subsets of burnout: Cynicism, Emotional Exhaustion and Professional Efficacy, religious identification only predicted changes in cynicism and emotional exhaustion. It did not predict any change in one’s sense of professional efficacy, suggesting that one’s sense of professional accomplishment working in a prison environment is not affected by whether or not one considers oneself “religious” or not. This is consistent with the fact that only 40% of the COs who participated in the survey reported having any religious affiliation with a faith group.

Regarding spirituality and resilience, the data revealed consistent and statistically significant evidence that higher spirituality scores predict higher levels of resilience, controlling for all other relevant variables in this study. The Resilience Scale has 5 subsets: Self-reliance, Meaning, Perseverance, Equanimity and Existential Aloneness.

Having a hopeful outlook accounted for the greatest percentage of variance explained by the models and provides the best overall predictor for resilience. Having a connection to others and religious identification were also shown to be statistically significant predictors of resilience, though not as strong as a hopeful outlook.
Of the three spirituality subscales, religious identification is the weakest of the predictors of resilience. This is most likely because across all the models, religious identification is perhaps more highly correlated with factors associated with spirituality that on its own, it is a much weaker predictor of resilience. Again, like the findings on burnout, this suggests that one’s religious affiliation with a faith group is not as important to one’s emotional resilience as are one’s connection to others and a hopeful outlook.

In summary, the major findings and contribution to the literature from this study are:

- Higher spirituality scores predict lower levels of burnout reported by participants in this study.
- Higher spirituality score predict greater resilience as reported by participants in this study.
- Correctional chaplains report less burnout and greater resilience than correctional officers surveyed in this study.
- Correctional workers who feel connected to others in both their personal and professional lives report in this study a greater ability to resist the effects of burnout from work stress than those workers who feel alone or isolated in their personal and professional lives.
- Having a hopeful outlook provides the best overall predictor for resilience in this study.
- Among those participating in this study, religious preference is less important in predicting either burnout or resilience than having a hopeful outlook and feeling connected to others.

Limitations:

The survey instrument proved an efficient method of collecting data. It was created by combining three instruments designed originally for use with populations other than correctional workers. While these instruments have all been demonstrably valid and reliable, there is always the problem that their use in a correctional context weakens their validity and reliability.
However, factor analysis of the survey data collected in this study suggests that the instruments were appropriate for this population and the data met acceptable thresholds of reliability.

While large enough to provide the statistical power needed for analysis, the sample size is admittedly very small. This is the greatest limitation of this study. The major challenge of this project was gaining access to an adequate population of correctional officers. Collecting data in prisons is difficult. This researcher approached the corrections departments of Massachusetts, Vermont, Maryland, California and Washington State for permission and all denied access to their employees for the survey. Lack of interest and lack of resources were the main reasons for denial. The two departments that did provide generous access were Oregon and Nevada, however these states have relatively small corrections departments and both are the western part of the United States. This limitation poses a challenge to any attempt to draw generalizable conclusions from this study.

Another limitation of this study is that in any study of correctional officers, ideally one should establish a baseline of pre-existing characteristics (such as intelligence, personality, emotional traits and ethical views) inherent in the person before he/she begins training as a correctional officer. Since this study was a one-time cross sectional study of a specific population, it did not provide an opportunity to test for changes. While the correlation of the variables suggests a relationship between spirituality, burnout and resilience, without more data, preferably longitudinal data, it is not possible to demonstrate causality.

Related to this is another limitation caused by the lack of ability to differentiate between workplace stress and stressors occurring outside of work. More data about specific sources of stress – would be helpful to determine if the stress is work related or from some other cause not related to working conditions.
Response rates also pose a challenge to the overall reliability of the survey data. This is not a problem unique to this project. Johnson & Wislar (2012) write that there is no scientifically proven minimally acceptable response rate (2012:1805). Indeed they caution that surveys with relatively high response rates (when non-respondents are different from respondents), “might produce far more biased results than a survey with a lower response rate from a truly random and representative group of respondents” (2012:1805).

Given the nature of this research’s emphasis on spirituality, it was expected that chaplains would respond given their professional expertise in this area. The fact that OR chaplains had a response rate of over 90% to both the general survey and the request for follow up interviews may suggest a higher motivation to respond than COs from their department. As discussed in Chapter 2 regarding CO culture, it would be expected that COs would have a lower response rate because of a cultural resistance to talk with people “outside” of the profession. Intra-departmental cultural differences in OR and NV, something not measured in this research, might explain the lower response rates of the NV chaplains to the request for interviews. This would be a useful area to investigate in subsequent research.

Another limitation is that in order to get access to the whole population of COs in each corrections department, it was necessary to survey across each state’s institutions. Respondents worked in a variety of institutional settings, with differing security levels, different inmate populations (male or female inmates) and different ethnicities. No one prison is the same as another and each depends to a great degree on the quality and policies of the administrators managing each institution (Dilulio, 1987). Given the small sample size and the geographically limited area of the survey population, as well as the variations in prison security and inmate populations, the results of this study must be interpreted with these limitations in mind.


**Qualitative:**

Interviews conducted with correctional workers who participated in the online survey provided qualitative data that further supported these quantitative findings by offering vivid personal illustrations of their lived experiences of burnout and resilience in their workplaces. Their responses provided rich and insightful reflections on the challenging nature of correctional work.

The qualitative data collected add depth to the study and help provide a context for interpreting the quantitative data. The coding of the interview data revealed five categories or themes: Stress and Burnout, Resilience, Spirituality, Work Environment and CO Culture.

The interview responses support Finney, et al., (2013) findings that the organizational structure and climate of correctional institutions has the most consistent relationship with COs’ job stress and burnout (2013:11). Feeling isolated and unappreciated were common themes in the CO interviews. A feeling expressed by all of the COs interviewed can be summed up in the observation of one interviewee:

*You know, in law enforcement, in corrections, we never get the spotlight.* NV CO

Regression modeling predicted that Years of Service are more likely to affect the Emotional Exhaustion score than age, gender or professional role (CO or chaplain).

This seems intuitively logical and was borne out in interviews as those who were in service longer had experienced far more dangerous or disturbing experiences over the course of their careers for example,

“In my 25 years, I’ve seen things that most people couldn’t handle” OR CO 3

One of the chaplains and three of the COs interviewed also spoke of feeling tired out or depleted from their work and did not anticipate staying in the work much longer. For example,
I have my VA pension so I plan on just cashing out my pension so I’ll just be done. I can’t do this for 20 years - I’m not even sure I can do it for another 6 years.

NV CO 2

Despite a common perception of the lack of social recognition, the COs interviewed all expressed pride, meaning and purpose in their work. This supports Lieblings’ (2010:108) critique of extant literature on police and prison officer culture emphasizing only the negative aspects of staff attitudes.

This also supports Ferdik’s observation in the wellness literature that, “Correctional researchers, administrative officials and prison systems in general have largely neglected the health and safety concerns of officers” (2016:38).

The interviewees expressed a lack of social recognition and social status as contributing to a lack of feeling accomplishment (professional efficacy) with work. This is consistent with Bandura’s theory in that motivation is driving how COs experience satisfaction with their work. Bandura posits that people are more likely to exhibit modeled behavior if it results in valued outcomes than if it has unrewarding or punishing effects (1986:68).

This is also consistent with Bandura’s notion of self-efficacy. As noted earlier, self-efficacy presumes that an individual has personal agency and some ability to exert control over events in his/her life. Self-efficacy gives people the perseverance to remain focused on their goals even when challenged with severe difficulties (Bandura, 2003:168).

The quantitative data suggest one’s religious identification is not a predictor of one’s level of professional efficacy. This is also borne out by the fact that only 40% of COs reported a religious affiliation or identification with a faith group. This was echoed in the interviews of COs whose sense of professional accomplishment working in a prison environment did not appear to be affected by whether one considers him/herself “religious” or not.
This supports Wester’s operationalization and definition of spirituality not in religious terms, but as “a process transcending self and society that empowers the human spirit with purpose, identity and meaning” (Wester, 2010:8). It also suggests that the construct of spirituality used in this study is able to distinguish between spirituality as operationalized and religion in the lives of the respondents. It also reflects Bandura’s insight about spirituality, “Most people acknowledge a spiritual aspect to their lives, in the sense of seeking meaning and social connectedness to something greater than oneself without being tied to a formal religion or deity” (Bandura, 2003: 170).

Approaching spirituality in terms of the three components: Connectedness to others, Religious Identification, and a Hopeful Outlook, helps address complaints that have been raised about research on religion and spirituality concerning the use of overly simplistic constructs that failed to recognize the multi-dimensional quality of spirituality. (Haber et al., 2007:266).

**Limitations:**

The use of either Skype or telephone to interview the respondents was less preferable than face-to-face interviews would have been. However, given the great distances between the researcher and the various correctional employees interviewed, it was not possible to conduct interviews in-person.

There is always the problem of bias. Given the small population and the difficulties inherent in obtaining responses to online surveys, there is likely a process of self-selection that occurs. Those COs who are most interested in the area of wellness and stress are more likely to respond to such a survey than COs who are already burned out and stressed by their work. There is also the problem of researcher bias in that this researcher has many years of experience as a professional correctional employee. In designing the research, methods to reduce bias were
introduced, such as having another trained person do the qualitative coding of the data, but it is not possible to guarantee complete objectivity.

**Strengths**

Despite these stated methodological imitations, there are a number of strengths in this research. This study addresses an aspect of the correctional system that has been given little attention in the field to date. This study is unique in that it compares correctional officers and correctional chaplains; two professional groups that share an intimate access to prisoners’ daily lives. It helps fill a continuing gap in our understanding of correctional workplace challenges.

While the methodological limitations pose a challenge to any attempt to draw generalizable conclusions from this study, the results of the analysis provide compelling evidence to warrant future research. The data support aspects of Bandura’s social learning theory and thus contribute to this theoretical dimension of criminology.

The use of mixed methods in both a survey instrument and qualitative interviews lent strength to the findings. The online survey proved effective in reaching a large number of correctional personnel quickly and efficiently. For prison personnel, online surveying offers a particularly useful way to reach otherwise very difficult to access samples (Best & Krueger, 2004).

The use of in-depth interviews added to the base knowledge generated by the survey data by offering the rich descriptions of lived experiences of correctional personnel. The use of qualitative research also addressed the recommendations of several previous researchers who called for greater use of ethnographic study in the examination of correctional officers’ work (Maahs & Pratt, 2001; Chenault, 2010).
Recommendations for future research

As indicated, the greatest limitation of this study is the lack of generalizability. The cross-sectional nature of the survey and the small sample size should be addressed in future research by using a much larger population to draw from, in prisons across the United States. Future research should also include cross-cultural study of correctional systems in countries other than the U.S.

The data revealed that chaplains are predicted to be more resilient than COs, particularly in regard to finding their work meaningful and more persevering in their work than COs. It might be helpful in future research to examine these two subscales: Meaning and Perseverance in greater detail to better understand why they stand out as stronger predictors of resilience.

A longitudinal study would be useful to study how the traits that a correctional officer brings to the job (age, gender, race, education) are shaped by the prison environment itself over time. While obviously the prison environment is not going to change immutable qualities such as age, and gender, it would be expected that the effect of the prison environment would have different effects on individuals depending upon their age and gender. Ideally, a study using both quantitative and qualitative data together would follow the careers of new correctional officers starting from the time they apply for the job. Data from their qualifying exams might be very helpful to establish baseline characteristics and abilities. The experiences of the recruits as they go through the training academy would be important to observe and document. This could best be accomplished as a participant observer. With the permission of the department of correction, the researcher could accompany a class through the twelve-week training academy. Ethnographic research involving conversations with recruits and perhaps their own written or oral narratives of their experience would enhance such a study.
Future research might also begin with a clearer understanding of the interactive effects of the environment on different *types* of people hired as correctional officers. If not already used, the Minnesota Multiphasic Personality Inventory (MMPI-2) would be a useful tool for evaluating the personality characteristics of potential correctional officers. The MMPI-2 can provide insights on several work-related aspects of personality such as openness to evaluation, social facility, addiction potential, and stress tolerance.

Additional study of spirituality is needed. The data suggests in this study that spirituality, particularly operationalized as connection to others and hopeful outlook may serve to promote increased resilience and greater resistance to burnout among correctional workers. As Bandura theorizes, “To alter how people behave, one must alter how they think” (1985:519). Further study of this phenomenon might suggest ways of enhancing CO wellness by helping them develop a more hopeful outlook and strengthen their sense of connectedness to others.

*Policy implications and Recommendations*

While much attention has been given to the socialization of inmates and “inmate culture” within prisons, surprisingly little has been added to the literature of corrections theory regarding prison managers or corrections officers. “Correctional officers are arguably the key actors in any prison setting” (DiIulio, 1987: 4). Any attempt to reform the prison system will likely fail if it does not address the concerns of the correctional officers. This study contributes to the field by providing some empirical evidence to support such reform by helping correctional officers cope with stress at work.

The results of this research support the hypothesis that spirituality can play a significant role in both resisting burnout and in increasing the resilience of correctional workers. This has some important policy implications for correctional officials tasked with the well being of
correctional employees. One change could involve a recognition of the role spirituality can play in helping COs. It is generally accepted that spirituality is employed to help change inmates’ behavior. It would follow, based on the results of this research, that spirituality can also change CO’s behavior, and in so doing, change the environment of the prison in a positive way.

Social learning theory, with its behavioral, cognitive and social-interaction components has been applied to treatment programs in prisons to bring about behavioral change in both juvenile and adult offenders. The same principles of social learning theory might be applied to correctional officer training, supervision and professional development precisely because they afford tools for preventing the formation and perpetuation of cultures of cruelty within prisons.

One does not have to look very far to find recent and disturbing prison environments such as Abu Ghraib prison in Iraq and the detention center in Guantanamo Bay, Cuba. Haney notes, “Cruel policies do not require cruel people.” (Haney, 2006:12). He observes among prison administrators and security staff there is a tendency to accept conditions and practices that would have been considered unreasonably cruel in this country prior to the 1970’s and which are still considered cruel by most of the world’s developed societies. (Haney, 2008). Understanding how dysfunctional and cruel attitudes are formed might indicate ways they can be corrected and prevented in the future. This would serve not only the benefit of prisoners, but also would help those who work every day in the prisons to ensure safety and security for staff as well by creating a more humane work environment.

The findings suggest some concrete steps policy makers can take to assist their correctional workers on the job. For example, one CO in Oregon observed,

We don’t have a quiet place to go where we feel safe, you know, hanging out where there’s a comfortable place to talk about what’s going on... like in situations where something comes up at home, like someone calls you to tell you there’s been a death. That’s happened to me, and I
couldn’t cry in front of the inmates, so all I could do was go and sit in a cubicle – in the back of the control point. I really just need someplace where I can go and spend a few minutes to deal with my emotions. OR CO 2

At nearly every correctional facility there is some sort of room set aside for inmates to attend religious services. With either dedicated chapels or more commonly, multi-faith, multi-purpose rooms, correctional departments provide for the constitutionally protected religious/spiritual needs of prisoners. What is telling however is that as two COs complained, there is no comparable go-to place for correctional staff to have their spiritual and religious needs met in the same prison environment:

*I wish we had a meditation room for the staff, because we provide it for the inmates.* OR CO 2

*You know, as much as they have support groups for ex-offenders outside, that’s what officers definitely need too-the same thing.* NV CO 1

Providing an area away from inmates for correctional employees to go to during stressful moments at work when they do not have the ability to leave the institution would be one recommendation for policy makers to consider. This would be more than a “break room” and more like a meditation room accessible only by and for COs.

The data analysis revealed consistently that having a connection to others and having a hopeful outlook are significant predictors of resisting burnout and increasing resilience. Policy makers could consider ways to enhance CO perceptions of social support through various programs designed to develop camaraderie and trust among COs. The wellness literature offers a number of suggested ways COs can be helped at work. Spenaris & Morton (2013) for example offer a number of strategies for correctional professionals to enhance wellness among COs using cognitive behavioral skill building to reinforce positive behaviors and outlooks among correctional staff. Employee Assistance Programs are useful, but the enhancement of Peer Support
Networks might provide a more immediate level of support to COs while still at work. As Roland (2011) observes, they not only provide quick responses for support and assistance, but in addition, because they are not outside professionals, they are more likely to be trusted by their fellow officers in the institutions.

Another recommendation based on the evidence in this study that demonstrates the positive effects of spirituality on resisting burnout and increased resilience, would be to establish a volunteer-based interfaith chaplaincy within each prison dedicated specifically to the spiritual needs and wellness of the staff. Such a chaplain would need to be clearly differentiated from those chaplains who minister to the inmate population. The CO chaplain/spiritual advisor would ideally have both law enforcement and ministerial training. Using volunteers from the community (as is the practice in most police and fire departments in the U.S.) would not require diversion of resources from the corrections departments.

Conclusion

Social learning theory, with its behavioral, cognitive and social-interaction components has been applied to treatment programs in prisons to bring about behavioral change in both juvenile and adult offenders. The results of this study suggest that social learning theory could also be used to bring about positive, stress-reducing changes in the work lives of correctional personnel. Correctional officers must cope with both the tedium of daily prison life and the ever-present potential of violence. It is hoped that this research, in some way might contribute to the well being of Correctional Officers and thus contribute to the creation of more humane correctional institutions for all who live and work in them.
Table 15: Descriptive Statistics of Sample

Note: Percentages may not add to 100 due to rounding.

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>f(%) All Surveys</th>
<th>Gender</th>
<th>Work Role</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>All COs</td>
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<tr>
<td>Gender</td>
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</tr>
<tr>
<td>Male</td>
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</tr>
<tr>
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<td>Age</td>
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<tr>
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<tr>
<td>30-40</td>
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<td>.25</td>
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<td>40-50</td>
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<td>50-60</td>
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<td>.26</td>
<td>10</td>
</tr>
<tr>
<td>60+</td>
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<td>.15</td>
<td>11</td>
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<tr>
<td>Years in Corr Service</td>
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<td></td>
</tr>
<tr>
<td>1-5 Years</td>
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<td>.23</td>
<td>19</td>
</tr>
<tr>
<td>6-10 Years</td>
<td>25</td>
<td>.19</td>
<td>13</td>
</tr>
<tr>
<td>11-15 Years</td>
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<td>.22</td>
<td>18</td>
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<tr>
<td>16-20 Years</td>
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<td>.21</td>
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<td>21-25 Years</td>
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<tr>
<td>BA</td>
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<td>.28</td>
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<td>MA</td>
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<td>PhD</td>
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<td>.05</td>
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Table 15, continued

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<tr>
<th>Demographic Characteristics</th>
<th>f(%) All Surveyed</th>
<th>M</th>
<th>F</th>
<th>All COs</th>
<th>All Chaplains</th>
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<tr>
<td><strong>Work Role</strong></td>
<td></td>
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<tr>
<td>Chaplains</td>
<td>23 (.17)</td>
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<tr>
<td>COs</td>
<td>111(.83)</td>
<td>76</td>
<td>35</td>
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<td><strong>Security Level of Workplace</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Maximum</td>
<td>32 (.29)</td>
<td>22</td>
<td>10</td>
<td>23 (.21)</td>
<td>9 (.40)</td>
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<td>Medium</td>
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<td>19</td>
<td>56 (.50)</td>
<td>9 (.40)</td>
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<tr>
<td>Minimum</td>
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<td>14</td>
<td>5</td>
<td>14 (.13)</td>
<td>5 (.20)</td>
</tr>
<tr>
<td>Other</td>
<td>18 (.13)</td>
<td>8</td>
<td>10</td>
<td>18 (.16)</td>
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<td><strong>Perceived Danger</strong></td>
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<td>11</td>
<td>14</td>
<td>16 (.14)</td>
<td>9 (.39)</td>
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<tr>
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<td>26</td>
<td>69 (.62)</td>
<td>11 (.48)</td>
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<tr>
<td>Frequently</td>
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<td>15 (.14)</td>
<td>3 (.13)</td>
</tr>
<tr>
<td>Always</td>
<td>11 (.08)</td>
<td>7</td>
<td>4</td>
<td>11 (.10)</td>
<td>0</td>
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</tbody>
</table>
Table 15: Descriptive Statistics, continued:

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<th>Demographic Characteristics</th>
<th>f(%)</th>
<th>Gender</th>
<th>Work Role</th>
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<tr>
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<td>F</td>
<td>COs</td>
</tr>
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<td><strong>Military Service:</strong></td>
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<tr>
<td>Never in Military</td>
<td>102 (.76)</td>
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<td>41</td>
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<tr>
<td>Served and Discharged</td>
<td>31 (.23)</td>
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<td>3</td>
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<td>Still in Military</td>
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<tr>
<td><strong>Perceived support (of Co-workers)</strong></td>
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<td></td>
</tr>
<tr>
<td>Never</td>
<td>4 (.03)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Sometimes</td>
<td>36 (.27)</td>
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<td>10</td>
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Table 16: Correlations:

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(All significant at p < .05 two-tailed)

Higher spirituality scores correlated strongly with negative cynicism, negative emotional exhaustion and positive professional efficacy (all correlations were above 0.400 indicating a moderate to strong correlation.

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(All significant at p < .05, two-tail- except for Existential Aloneness & Religious ID)

Higher Spirituality Scores correlated strongly with meaning, equanimity and perseverance, moderately with self-reliance and existential aloneness. Consistent with this, Spirituality scores correlated strongly with the Total Resilience score (summation of th. 5 subscales of resilience)
APPENDIX 1: RESILIENCE SUBSCALES REGRESSED FOR COS AND CHAPLAINS

Bold Black numerals = COs only, Red italicized numerals = Chaplains Only  only p<.05 listed

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Fifteen items relating to spirituality were included in the survey of the soldiers. These items were selected from well-established surveys and were formatted using a five-point Likert scale. The fifteen items came from these 6 sources:

- Brief Multidimensional Measure of Religion and Spirituality, Fetzer Institute/National Institute of Aging;
- Development and Validation of the Spiritual transcendence Scale: A Measure of Spiritual Experience, R. L. Piemont
- The Spiritual Well-Being Scale, by C.W. Ellison
- Religious Orientation Scale of Allport and Ross.
- Religion/Spirituality Motivation, Devotion and Coping Haber
- And finally two questions that were designed by the Military researchers of the Multi-National Forces-Iraq Chaplain Corps.

The Army chaplains used a 5-point Likert scale:
Strongly Disagree/ Disagree/ Neutral / Agree / Strongly Agree

The items as adapted by the Army chaplains and their sources are as follows:

**1. I feel that on a higher level all of us share a common bond.**
- Question source: Piedmont-Spiritual Transcendence Scale

**2. Although there is good and bad in people, I believe that humanity, as a whole is basically good.**
- Question source: Piedmont-Spiritual Scale

**3. There is an order to the universe that transcends human thinking.**
- Question source: Piedmont-Spiritual Scale

**4. Although individual people may be difficult, I feel a bond with all of humanity.**
- Question source: Piedmont-Spiritual Scale

**5. My spiritual life is an important part of who I am as a person.**
- Question source: Allport's Extrinsic Religion

**6. I feel deep inner peace or harmony.**
- Question source: Spiritual Well-Being Scale

**7. I feel a sense of well being about the direction in which my life is heading.**
- Question source: Spiritual Well-Being Scale

**8. I have the sense of a larger of purpose in my life.**
- Question source: Spiritual Well-Being Scale
9. I go to my place of worship (Chapel, Church, Synagogue, Temple) because it helps me to connect with friends.
   - Question source: Fetzer/NIA

10. I believe my personal prayers help me during this deployment.
   - Question source: Haber, Religion/Spirituality Motivation, Devotion, & Coping
   Reframed question for Corrections workers: I believe my personal prayers help me at my workplace.

11. I believe the prayers of my family and friends back home help me.
   - Question source: This question was created by the MNIF Chaplain Corps to determine the recognized level of spiritual support from home.
   Reframed question for Corrections workers: I believe the prayers of my family and friends help me at work

12. I believe the presence and ministry of my unit chaplain brings value to the mission.
   - Question source: the MNIF Chaplain Corps created this question
   Reframed question for Corrections workers: I believe the presence and ministry of the institutional chaplains supports the mission of the (corrections) department.

13. I feel good about my future.
   - Question source: Existential Well-Being

14. I have forgiven myself for things that I have done wrong.
   - Question source: Existential Well-Being

15. If I have a problem or difficult situation, the people in my spiritual Community will comfort me and get me through it.
   - Question source: Fetzer/NIA
APPENDIX 3: THE MASLACH BURNOUT INVENTORY

MBI-General Survey

The purpose of this survey is to discover how staff members view their job, and their reactions to their work.

Instructions: On the following page are 16 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write the number “0” (zero) in the space before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>A few times a year or less</td>
<td>Once a month</td>
<td>A few times a month</td>
<td>Once a week</td>
<td>A few times a week</td>
<td>Every Day</td>
</tr>
</tbody>
</table>

1. ______ I feel emotionally drained from my work.
2. ______ I feel used up at the end of the workday.
3. ______ I feel tired when I get up in the morning and have to face another day on the job.
4. ______ Working all day is really a strain for me.
5. ______ I can effectively solve the problems that arise in my work.
6. ______ I feel burned out from my work.
7. ______ I feel I am making an effective contribution to what this organization does.
8. ______ I've become less interested in my work since I started this job.
9. ______ I have become less enthusiastic about my work.
10. ______ In my opinion, I am good at my job.
11. ______ I feel exhilarated when I accomplish something at work.
12. ______ I have accomplished many worthwhile things in this job.
13. ______ I just want to do my job and not be bothered.
14. ______ I have become more cynical about whether my work contributes anything.
15. ______ I doubt the significance of my work.
16. ______ At my work, I feel confident that I am effective at getting things done.

MBI-General Survey © 1996 Wilmar B. Schaufeli, Michael P. Leiter, Christina Maslach & Susan E. Jackson.
APPENDIX 4: THE RESILIENCE SCALE© FOR ADULTS

Please read the following statements. Using the seven numbers on the top, ranging from "1" (Strongly Disagree) on the left to "7" (Strongly Agree) on the right. Choose the number that best indicates your feelings about that statement. For example, if you strongly disagree with a statement, write "1" in the box after the statement. If you are neutral, write "4", and if you strongly agree, mark "7", etc. You must answer every question to submit the test for scoring.

1. When I make plans, I follow through with them. _____
2. I usually manage one way or another. _____
3. I am able to depend on myself more than anyone else. _____
4. Keeping interested in things is important to me. _____
5. I can be on my own if I have to. _____
6. I feel proud that I have accomplished things in life. _____
7. I usually take things in stride. _____
8. I am friends with myself. _____
9. I feel that I can handle many things at a time. _____
10. I am determined. _____
11. I seldom wonder what the point of it all is. _____
12. I take things one day at a time. _____
13. I can get through difficult times because I've experienced difficulty before. _____
14. I have self-discipline. _____
15. I keep interested in things. _____
16. I can usually find something to laugh about. _____
17. My belief in myself gets me through hard times. _____
18. In an emergency, I'm someone people can generally rely on. _____
19. I can usually look at a situation in a number of ways. _____
20. Sometimes I make myself do things whether I want to or not. _____
21. My life has meaning. _____
22. I do not dwell on things that I can't do anything about. _____
23. When I'm in a difficult situation, I can usually find my way out of it. _____
24. I have enough energy to do what I have to do. _____
25. It's okay if there are people who don't like me. _____

(Wagnild and Young, 1987)
APPENDIX 5: INFORMED CONSENT

Northeastern University, School of Criminology and Criminal Justice
George Williams, Doctoral Candidate
Resisting Burnout: Correctional Staff Spirituality and Resilience

Dear Colleague,

My name is Fr. George Williams. I am a chaplain at San Quentin State Prison in California, with 23 years’ experience working in corrections. I am also a doctoral student of Criminology at Northeastern University.

I am studying how correctional workers can be better supported in their day-to-day work. For example, most police and fire departments have their own chaplains who understand the nature of their work. You probably see how inmates have access to chaplains in the prisons. Have you ever wondered why you and your peers don’t get the same level of spiritual support?

Your responses are confidential and I will only use the results for my doctoral dissertation. I would like to use this research to find ways to better support corrections officers in particular in their work.

All you need to do is click on the link to the survey – the whole survey should take you 5 minutes to do. I appreciate your willingness to participate. I hope that the information I gather will contribute to the well-being of correctional workers.

Please read the following consent form - completing the survey indicates your informed consent to participate in this study.

Informed Consent to Participate in a Research Study

You are being invited to take part in a research study. You may ask the researcher any questions that you have. When you are ready to make a decision, you may tell the researcher if you wish to participate or not.

Why am I being asked to take part in this research?
You are being asked to take part in this research because you are either a Correctional Officer or a correctional chaplain working at a State Prison.

Why is this research study being done?
This research is to better understand the positive effects of spirituality (Not Religion) on COs and chaplains working in State Prisons, to see if those who have a spiritual dimension to their lives are less likely to experience burnout and more likely to be resilient in their work in prison.

Where will this take place and how much of my time will it take?
The online survey will take approximately 5 minutes and can be completed on any Internet
connected computer.

As part of the online survey, you can indicate your willingness to participate in a follow-up interview with the researcher at a later date by sending him your email contact info in the survey. In the interview, you would be asked questions about the experiences you have had in your career as either a CO or a chaplain. The researcher wants to know as much as possible about what has helped you resist getting burned out with your work and how resilient (able to bounce back from problems) you feel that you are. He is also interested in how you experience and practice your spiritual life – such as if you pray, attend a house of worship regularly, feel connected to your community and your higher power.

The researcher would prefer to record the interview on a digital audio device, but if you do not wish to be recorded, the researcher will proceed with the interview taking notes by hand. None of the interviews will be conducted at workplaces.

Will there be any risk or discomfort to me?
None of the questions posed are of such a personal nature that they would cause you discomfort. It is unlikely that this research would pose an emotional risk.

During the interviews the researcher will be asking you to talk about your work experiences, interactions with colleagues and inmates and your general attitudes about your work. You will never have to talk about any subject you are not willing to talk about and you may decide not to continue with the interview at any time. The researcher will protect your confidentiality and your identity by never recording your real name either on the questionnaire or in any of the notes he takes during the interview. If the interview is recorded on a digital audio device, then once the interview is complete, the researcher will put the script of the interview through a process of transcription, which will remove all identifying names by changing them. Your identity and that of anyone you mention will never be connected to you in any published or unpublished documents relating to this research.

Will I benefit from being in this research?
The information collected from this research may add to an understanding of ways your career and that of your fellow correctional workers could be enhanced by providing helpful support to reduce burnout and increase resilience. Your participation could influence and improve the work and life experiences of current and future corrections professionals like you.

Who will see the information about me?
Your part in this research will be confidential. Only the researcher and his supervisor will be able to see information about you. And the only information about you will be what you disclose in the questionnaire or the interview. No reports or publications will use information that can identify you in any way.
In order to ensure that your information remains confidential, the information from the interviews will go through a process of coding. After the interview is completed, the researcher will transcribe the interview, into a typed document.
During this process, all names of people and places will be changed to prevent mention of any person or place that could identify you. Once the interview has been transcribed, if it had been recorded, the digital recording of the interview will be completely erased. The transcribed interview will then be used for the duration of the research.

If, having read this consent form you would like to take the survey, follow this link to the Survey by clicking on it: (click on it and wait about 10 seconds for it to load – otherwise, you can cut and paste this URL to your browser to open it)

http://northeastern.qualtrics.com/SE/?SID=SV_0oiDz7JFK56YGMd

By completing the online survey you are indicating your informed consent to participate in this survey. By your willingness to participate in an optional follow-up interview, indicated by your submission of your email contact information in the space provided in the online survey, you are giving your informed consent to participate in the follow up interview portion of this study.

Please feel free to email me or call me to ask questions about anything you do not understand before deciding whether or not to participate. My email is: williams.g@husky.neu.edu, my phone: 781-786-1319.

Participating in this study is completely voluntary and you may withdraw from the study and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

Contact Information: If you have questions about this research project, you can contact Dr. Jack McDevitt, Northeastern University College of Social Sciences and Humanities, (617) 373-3482. His email is j.mcdevitt@neu.edu.

If you have questions regarding electronic privacy, please feel free to contact Northeastern University’s Director of Information Security via phone at (617) 373-7901 or via email at privacy@neu.edu.

If you have questions or concerns about your rights as a research participant, you can contact Northeastern University’s Office of Human Subject Research Protection at (617) 373-4588 or irb@neu.edu. You may call anonymously if you wish. This study has been approved by the Northeastern University Institutional Review Board (#14-02-11)

Thank you for your help,

George Williams SJ
APPENDIX 6: ONLINE SURVEY

The purpose of this survey is to discover how spirituality influences correctional work.

Instructions: On the following page are statements of feelings. Please read each statement carefully and decide if you ever feel this way.

If you have never had this feeling, write the number “0” (zero) in the space before the statement.

If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

Example:

How often:

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>A few times a year</td>
<td>Once a month</td>
<td>A few times a month</td>
<td>Once a week</td>
<td>A few times a week</td>
<td>every day</td>
<td></td>
</tr>
</tbody>
</table>

How often Statements:

(0-6)

Example: 1. __________ I feel depressed at work.

If you never feel depressed at work, you would write the number “0” (zero) under the heading “How Often.” If you rarely feel depressed at work (a few times a year or less), you would write the number “1.” If your feelings of depression are fairly frequent (a few times a week but not daily), you would write the number “5.”

Part 1: Please answer the following using the 0-6 scale:

1. _________ I feel emotionally drained from my work.
2. _________ I feel used up at the end of the workday.
3. _________ I feel tired when I get up in the morning and have to face another day on the job.
4. _________ Working all day is really a strain for me.
5. _________ I can effectively solve the problems that arise in my work.
6. _________ I feel burned out from my work.
7. _________ I feel I am making an effective contribution to what this organization does.
8. _________ I've become less interested in my work since I started this job.
9. _________ I have become less enthusiastic about my work.
10. _________ In my opinion, I am good at my job.
11. _________ I feel exhilarated when I accomplish something at work.
12. _________ I have accomplished many worthwhile things in this job.
13. _________ I just want to do my job and not be bothered.
14. _________ I have become more cynical about whether my work contributes anything.
15. _________ I doubt the significance of my work.
16. _________ At my work, I feel confident that I am effective at getting things done.

Part 2:
Instructions: The following 15 statements are also about feelings. Please read each statement carefully and decide if you agree or disagree with the statement.

If you strongly disagree, write 1, if you just disagree, write 2, if you feel neither agreement nor disagreement, write 3 for neutral, and so on.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. _______ I feel that on a higher level all of us share a common bond.
2. _______ Although there is good and bad in people, I believe that humanity, as a whole is basically good.
3. _______ There is an order to the universe that transcends human thinking.
4. _______ Although individual people may be difficult, I feel a bond with all of humanity.
5. _______ My spiritual life is an important part of who I am as a person.
6. _______ I feel deep inner peace or harmony.
7. _______ I feel a sense of well-being about the direction in which my life is heading.
8. _______ I have the sense of a larger of purpose in my life.
9. _______ I go to my place of worship (Chapel, Church, Synagogue, Temple) because it helps me to connect with friends.
10. _______ I believe my personal prayers help me during my work.
11. _______ I believe the prayers of my family and friends help me.
12. _______ I believe the presence and ministry of chaplains brings value to the mission.
13. _______ I feel good about my future.
14. _______ I have forgiven myself for things that I have done wrong.
15. _______ If I have a problem or difficult situation, the people in my spiritual community will comfort me and get me through it.

Part 3:
Please read the following 25 statements. Using the seven numbers on the top, ranging from "1" (Strongly Disagree) on the left to "7" (Strongly Agree) on the right.

Choose the number that best indicates your feelings about that statement. For example, if you strongly disagree with a statement, write "1" in the box after the statement. If you are neutral, write "4", and if you strongly agree, mark "7", etc. Please answer every question.

164
1. ________ When I make plans, I follow through with them.
2. ________ I usually manage one way or another.
3. ________ I am able to depend on myself more than anyone else.
4. ________ Keeping interested in things is important to me.
5. ________ I can be on my own if I have to.
6. ________ I feel proud that I have accomplished things in life.
7. ________ I usually take things in stride.
8. ________ I am friends with myself.
9. ________ I feel that I can handle many things at a time.
10. ________ I am determined.
11. ________ I seldom wonder what the point of it all is.
12. ________ I take things one day at a time.
13. ________ I can get through difficult times because I've experienced difficulty before.
14. ________ I have self-discipline.
15. ________ I keep interested in things.
16. ________ I can usually find something to laugh about.
17. ________ My belief in myself gets me through hard times.
18. ________ In an emergency, I'm someone people can generally rely on.
19. ________ I can usually look at a situation in a number of ways.
20. ________ Sometimes I make myself do things whether I want to or not.
21. ________ My life has meaning.
22. ________ I do not dwell on things that I can't do anything about.
23. ________ When I'm in a difficult situation, I can usually find my way out of it.
24. ________ I have enough energy to do what I have to do.
25. ________ It’s okay if there are people who don't like me.

In the following 10 statements, please select the answer that best fits you

26. I have felt depressed in the past 2 weeks:
   Never   Sometimes   Frequently   All the time

27. I rate my health as generally:
   Excellent   Very Good   Good   Fair   Poor

28. I am at my ideal body weight: (±5 pounds)   Y   N
29. I exercise 30 minutes or more most days   Y   N

30. I feel the workplace I work in is dangerous
   Never   Sometimes   Frequently   All the time
31. I feel supported by my co-workers
Never  Sometimes  Frequently  All the time

32. I feel supported by my family and friends
Never  Sometimes  Frequently  All the time

Please answer the following:

Your Gender:  M  F

Your age  ______

Years of Service in Corrections  ______

Education Level:  Circle one  High School  Some College  Bachelor’s  Master’s  PhD

The security level in the facility in which I work is:  Minimum  Medium  Maximum

Prior or current military service:  Prior  Current
APPENDIX 7: QUALITATIVE INTERVIEW PROTOCOL

The following questions represent important themes to cover during each interview session. They do not have to be asked or answered one after the other as in a survey. The questions are meant to facilitate a conversation – and are a guide or outline for the researcher.

The interview will take about one hour.

Part One: General Questions:

Name, Age. Years on Job.

Describe to me your career thus far as a CO [Chaplain]

How did you get involved in this profession?

What do you see are the most positive things about your work/profession? i.e. What do you like most about your job?

What would you say is the most challenging aspect of your profession?

What do you like the least about your profession?

How would you describe (in your own words) the working conditions at your prison?

How would you describe the relationships you have at the prison with:
Your immediate colleagues – other COs [or other chaplains]
   with inmates?
   with your immediate supervisor
   with the prison administration?

Do you tell people outside of work what you do for a living? If not, why?
If you do, how do you describe to them what you do?

What is your educational background? What other jobs (outside of corrections) have you had as an adult before this one?

Part Two: Spirituality

Do you consider yourself to be a spiritual person? What does that mean to you in your own words?

Do you feel that people are basically good? Do you believe people can be evil?

Do you believe in (a) God or some Higher Beings? Do you believe in a devil or some evil force in the world?
Do you have a spiritual or a faith community to which you belong? (Like a church, synagogue, mosque or temple of some sort?)

Can you describe how actively you participate in this spiritual or faith community? (How often do you go to church, take part in the activities or mission of the faith community?)

Why do (don’t) you go to a church or house of worship?

Do you pray? Can you describe to me how often and how do you pray? (What does prayer mean to you?)

Do you think there is an ultimate purpose and reason for your life?

Do you feel that you are living your life as you were meant to?

Do you think praying makes a difference in your life or other’s lives?

Who in your life do you feel most connected to? Can you describe those connections?

How do you picture your future for the next 10 years? Next 20 years? After retirement?

What is your experience with forgiveness in your own life?

**Part Three  Burnout**

Tell me the hardest thing about your work – Mentally, Emotionally, and Physically

How much overtime do you work?

What do you do to wind down from work and to relax? Do you take enough time off from work, in your own opinion?

Is it hard to let go of things from work when you are home? How would you say that your work influences your personal life? Your relationships with your family – spouse, significant other, children, friends?

Do you have friendships with people outside of corrections?

Do you feel supported in your work by your peers, supervisors and administration?

What’s it like working for the Department of Correction? Would you recommend your job to a young person seeking a new career?

Do you feel a sense of accomplishment or pride with your work or a sense of frustration? Can
you tell me more about that?
If you had to do it over, would you have gone into this work?
What would you change about your job if you were able?
Do you feel more or less cynical about your job than you used to be?
Why is that, do you think?

Do you consider your job to be something of value for society?

Anything else you would like to say about stress and your work?

Part Four: Resilience

How good are you at bouncing back from a problem in your life? Can you give me some examples of this?

What do you see as your personal strengths?

Have there been any situations at work that you felt helpless to change?

What are your interests outside of work? Hobbies? Pastimes?

Do you like to be alone?

Do you have many close friends? Can you describe some of them?

Do you stress about the future, or are you more focused on one day at a time?

How do you deal with colleagues who are experiencing problems or crises, either at work or in their home life?

Do you ever see the humor in your work? Can you give me some example?

How would you describe yourself when faced with emergencies at work?
How do you usually cope with problems in your life?

Do you consider yourself self-disciplined? Can you give me an example of this?

Suppose you’ve had a bad day at work. Can you tell me how you deal with it?

Can you think of some examples of stressful events at work and how you managed them?

How do you deal with people at work - colleagues, supervisors or inmates who are troublesome or irritating?
APPENDIX 8: QUALITATIVE CODING STRUCTURES

8.1 Stress and Burnout

**Causes of Stress**
- Work is potentially traumatizing
- Coworkers source of negativity
- Hypervigilance
- Unpredictability of workdays
- Mixed Feelings/Role Conflict
- Threats from inmates
- Chronic Fear
- Witnessing Violence/Suffering

**Effects of Stress**
- Feeling Frustrated with work
- Believes people are or can be evil
- Cynicism about work and life
- Paranoia
- Home life negatively impacted

**Coping with Stress**
- Biking/Exercise
- Chaplain support for COs
- Seeking out counseling
- Cussing/Swearing as coping
- Gallows humor

**Burnout**
- Burnout prevention training desired
- Desensitized to violence
- Indifferent to suffering
- Feeling isolated
- Work never feels finished

- Feels peers are supportive
- Supportive Family
- Has informal support system
8:2 Resilience

- Resilience
- Optimism/Hope
- Dealing with Stress
- Pride in work

- Conscious effort against cynicism
- Laughter/humor / jokes
- Importance of exercise/biking
- Camaraderie

--feels fulfilled
- Sees diversity as positive
- Spends time outside in nature
- Proud of work accomplishment

- Has work goals for self
- Believes most people are good
- Able to decompress after work
- Enjoys work

- Recognizes not all can be helped
- Believes people can change
- Sees therapist regularly
- Believes in efficacy of work

- Has good emotional boundaries
- Helps others to cope
- Has friends and community outside of work
- Finds work interesting

- Has friends outside of work
- Sympathetic/ empathetic
- Has hobbies
- Feels there are options for promotion

- Recognizes own limitations
- Enjoys helping others
- Prayer helps coping with stress
- Wants to improve system

- Acknowledges their own successes
- Belongs to religious group
- Listens to music to relax
8:3 Spirituality

- Spirituality/Connectedness
  - Connection with God/Higher power
  - Connection with other people
  - Belief in the goodness of people
  - Concern for others
  - Sympathetic/Empathic
  - Has positive relationships at work
  - Feels fulfilled

- Prayer/Religious
  - Personal and Liturgical prayer
  - Prayer as coping strategy
  - Prayer to calm self
  - Prayer to avoid becoming cynical
  - Rituals
  - Meditation
  - Religion as a source of comfort

- Vocation/Calling
  - Work seen as a “calling”
  - Work seen as public service
  - Feels “meant to do this work”
  - Being good at what you do
  - Sense of oneself as leader/role model
  - Work influences spiritual life

- Finding Meaning
  - Sense of bringing hope to work
  - Being a source of support
  - Desires to make work better
  - Recognizes personal benefit from work
  - Feels profession is important to society
  - Finds religion a source of meaning

- Feels useful

- Spiritual life influences work

- Feels fulfilled

- Concern for others

- Connection with God/Higher power

- Connection with other people

- Belief in the goodness of people

- Sympathetic/Empathic

- Has positive relationships at work
8:4 Work Environment

- Bureaucracy
  - Paperwork time consuming
- Danger
  - Post-traumatic stress
- Emotional Toll
  - Coworkers are negative
- Feels Appreciated
  - Lack of organized support for COs
- Busywork a challenge
  - Desensitized to violence
- Dangerous work
- Frustrated
- Feels peer support
  - Administrative Support
- Feels lack of Administrative support
  - Gallows humor
- Too much Computer work
  - Feeling Isolated
- hypervigilance
- Positive view of administration
- Does not see result of work
  - Job too intense for some
- Fear for personal safety
- Positive relationships at work
- Feels work is never done
  - Work makes them less trusting
- Impacted by work related events
- Feels family support
- Witnesses traumatic incidents
- Comfortable with Management
8:5 CO Culture

- Camaraderie
- Friendship among COs
- Staff Morale
- Informal Peer support
- Suicides at work
- Covering up for other COs
- Suspicious of non-CO workers
- Need for rigid emotional boundaries

- Pride in work
- Takes pride in work
- Enjoys challenges of workplace
- Feels unappreciated
- Feels COs undervalued in law enforcement
- Finds history of prison fascinating

- Role Conflict
- Competing interests/mission
- Fear for personal safety
- Threats from inmates
- Witnessing violence at work
- Mistrusts institutional confidentiality

- Stress at Work
- Staff needs counselors too
- Cynical from job experiences
- Desensitized to violence
- No one to talk with about work outside of work
- Tries not to take work home
- Feels need for burnout prevention classes
- Work impacting personal life

- Staff Morale
- Enjoy challenges of workplace
- Fear for personal safety
- Cynical from job experiences

- Informal Peer support
- Feels unappreciated
- Threats from inmates
- Desensitized to violence
- No one to talk with about work outside of work

- Suicides at work
- Feels COs undervalued in law enforcement
- Witnessing violence at work
- No one to talk with about work outside of work

- Covering up for other COs
- Teaches others how to handle job stress
- Mistrust of Administration
- Tries not to take work home

- Suspicious of non-CO workers
- Finds history of prison fascinating
- Mistrusts institutional confidentiality
- Feels need for burnout prevention classes

- Need for rigid emotional boundaries
- Work impacting personal life
REFERENCES:


Chenault, S. (2010). An Ethnographic Examination of Correctional Officer Culture in a Midwestern State. Doctoral Dissertation, University of Nebraska at Omaha. ProQuest.


Sampson, R., & Laub, J. *Shared beginnings, divergent lives: Delinquent boys to age 70.* Boston: Harvard University Press.


