



National Institute of Justice

Correctional Officer Safety and Wellness Literature Synthesis

July 2017

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This paper was prepared with support from the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice, under contract number 2010F_10097 (CSR, Incorporated). The opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily represent those of the Department of Justice.

**U.S. Department of Justice
Office of Justice Programs
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Washington, DC 20531**

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Introduction

Correctional Officer Job Responsibilities

Correctional officers (COs) play a pivotal role within the wider prison system as they are tasked with numerous responsibilities designed to ensure that their respective facilities are operating efficiently. As the front-line bureaucrats of the prison institution (Lipsky, 2010), COs are charged with supervising the activities of inmates, enforcing rules and regulations, affording offenders access to social services, and perhaps most importantly, maintaining order (Crawley, 2004; Kauffmann, 1989). They are also tasked with responding to administrative demands; searching cells for drugs, weapons, and other contraband; and intervening to resolve potentially violent disputes among inmates (Bureau of Labor Statistics, 2013). COs play such a fundamental role in the functioning of any prison system that Archambeault and Archambeault (1982) remarked that officers “represent the single most important resource available to any correctional agency” (p. 72).

Recent scholarship has suggested that COs work under dangerous conditions that can threaten their general safety and wellness. Following several legislative reforms that started in the 1970s and included “get tough on crime” policies such as mandatory minimum sentences and habitual offender laws (Mackenzie, 2001), correctional institutions experienced dramatic changes in the composition of the inmate population. Not only did the total number of incarcerated offenders skyrocket from roughly 300,000 to more than 1.5 million between 1975 and 2013, but the percentage of offenders imprisoned for violent crimes increased from about 40 percent in 1985 to more than 60 percent by 2013 (Walmsley, 2013). Although incarceration rates have declined in recent years, the modern-day CO is still required to interact with and supervise individuals in a dangerous environment (Glaze & Kaeble, 2014).

Officers are further responsible for maintaining safety in a setting with significant numbers of gang members (Lombardo, 1989), offenders with mental illness (Kupers, 1999; Turner, 1975), drug addicts (Ross, 1981), and even terrorists (Crawley, 2004), all of whom pose elevated safety and health risks to COs. Further compounding these issues is that prisons have long been described as “total institutions,” defined as places “where a large number of like-situated individuals, cut off from the wider society for an appreciable period of time, together lead an ... enclosed life” (Goffman, 1961, p. xiii). As a result, officers are required to interact with and supervise potentially dangerous offenders in relatively unsafe and secluded surroundings. Collectively, these observations have prompted correctional scholars and practitioners to characterize prisons as dangerous environments that carry increased risk of harm to the people working in them (Beck, Harrison, & Adams, 2007; Crawley, 2004; Hensley, Koscheski, & Tewksbury, 2005).

Correctional Officer Health Outcomes

The position of CO carries with it the intrinsic danger of physical injury and mental stress. In terms of the former, figures from Harrell (2011) revealed that between 2005 and 2009, the rate of sustained nonfatal workplace injuries per 1,000 COs was 33.0, which, among 26 different professions, ranked third only to police officers and security guards (77.8 and 65.0, respectively). Harrell (2011) further found that in 2011, COs experienced 544 work-related injuries or illnesses that required absences from work per 10,000 full-time officers — the third highest rate of nonfatal workplace injuries, again surpassed only by police officers and security guards. Additional reports from Brower (2013) and the Bureau of Labor

Statistics (2013) noted that between 1999 and 2008, a total of 113 U.S. COs lost their lives in the line of duty — a fatality rate of 2.7 per 100,000 full-time employees — the 22nd highest among 115 professions.

Concerning mental health, there is evidence that COs experience high levels of stress, burnout, and a variety of other mental health-related consequences as a result of their employment (Brower, 2013; Stack & Tsoudis, 1997). According to the Management and Training Corporation (2011), between 22 percent and 33 percent of COs report high stress levels. Other studies (Lambert et al., 2005; Ferdik, Smith, & Applegate, 2014a) found that more than 35 percent of officers in the sample recorded high stress levels. Together, the impact of negative physical and mental health outcomes for COs can have deleterious effects on the wider prison institution. Staff shortages and officer absences from work can create a cycle whereby low officer-to-inmate ratios and high turnover in officer staffing threaten the effective implementation of a correctional facility’s security mandates (Brower, 2013; Crawley, 2004; Ferdik, Smith, & Applegate, 2014a).

Literature Search Strategy

As previously mentioned, the intent of this report is to offer a comprehensive synthesis of the literature so as to highlight any inherent limitations and offer recommendations for future research and policies designed to enhance the overall well-being of COs. Information from published and peer-reviewed journal articles, state and federal government reports, university and academic think-tank reports, and commercially published books was retrieved and summarized. Emphasis was placed on collecting research conducted since 2000 to account for current safety and wellness concerns

confronting COs, although some earlier research is referenced to provide a baseline understanding of the various issues related to CO safety and wellness. The search phrase “correctional officer” was cross-referenced with the words “safety,” “wellness,” “risk,” “stress,” “burnout,” “depression,” “danger,” “health,” “well-being,” “injury,” and “fatality” in the following literature search engines: JSTOR, Social Services Abstracts, Sociological Abstracts, Criminal Justice Abstracts, EBSCOHost, Academic Search Complete, MEDLINE with full text, Applied Social Sciences Index and Abstracts, Hein On-Line, ProQuest Dissertations and Theses, and Google Scholar.

This initial search led to the dual findings that (1) COs are exposed to unique workplace dangers that can jeopardize their general welfare and (2) exploring CO perceptions of workplace safety and risk is an important and emerging area of research. Using the same search engines, a specialized literary search of specific dangers to which COs are exposed as well as officer judgments of workplace safety and risk was conducted by cross-referencing the search phrase “correctional officer” with “gang,” “disruptive inmate,” “riot,” “mentally ill inmate,” “contraband,” “disease,” “risk perception,” and “safety perception.” Each resulting citation was reviewed by both authors to determine its eligibility for the literature synthesis. Reference pages of all obtained reports were scanned to exhaust all pertinent literature related to the topic of CO safety and wellness.

Several themes emerged that form the basis of discussion for this synthesis. These themes include the dangers and risks confronting COs, CO perceptions of workplace safety and wellness as well as the consequences of their exposure to risk, the policies designed to enhance officer well-being, and finally considerations for future

research. This report will conclude with a discussion of how the safety and wellness issues of law enforcement personnel compare with those of COs and an overview of the salient findings from this literature synthesis and how they can be used to inform decisions regarding CO well-being.

Dangers and Risks Confronting Correctional Officers

Before proceeding to a discussion of the unique workplace dangers and risks that COs face, it is important to note conceptual differences between these terms. Reichman (1986) distinguished risks from dangers in the following manner: “The concept of risk should not be confused with that of danger; dangers are the causes of risk” (p. 151). Reichman added that risks entail the “uncertainty of loss, or the probability that loss will occur,” and that “dangers are those conditions which contribute to the probability of loss” (p. 152). This is a key distinction as this report identifies the risks confronting COs and the dangers that contribute to them.

COs are exposed to a number of safety and wellness-related risks. Most notable are the risks of death or physical injury, but of equal concern are mental health-related risks such as stress and burnout (Dowden & Tellier, 2004; Lambert et al., 2005). These risks can accumulate and place significant pressure on a correctional administration, particularly when a fatigued staff and high turnover rates limit the degree to which officers can effectively engage in the surveillance of inmates. Expanding on Brower’s (2013) typology, the categories of dangers contributing to officer safety and wellness-related risks can be broadly described as work-related, institution-related, and psycho-social. Using this tripartite schema, this report examines

the most salient workplace dangers that threaten CO safety and well-being and their consequences. Exhibit 1 summarizes the identified dangers under their respective categories and the multiple mental and physical health-related risks connected to each danger as identified in extant literature.

Work-Related Dangers

Work-related dangers are directly connected to officer safety and well-being. Under the *work-related* category are the dangers of infectious and communicable diseases (Macalino et al., 2004); the presence of prison gangs, disruptive inmates, and contraband (Bouchard & Winnicki, 2000; Fleisher & Decker, 2001; Garcia, 2008); working alongside inmates with mental illness (Adams & Ferrandino, 2008); and riots (Carrabine, 2005). Each of these dangers presents an elevated risk of

harm to COs in terms of both physical and mental health issues. These dangers are examined in greater detail below.

Inmates with Infectious Diseases

There is ample evidence that inmates disproportionately suffer from infectious and communicable diseases (e.g., Hepatitis B and C; Human Immunodeficiency Virus, or HIV; and tuberculosis) (Alaird & Marquart, 2009; Bick, 2007). For example, Ruiz and colleagues (2002) found that in 2000, of the 5,730 inmates from a random sample of California prisons who received intake physical examinations during a two-month period, 1.4 percent tested positive for HIV, 3.5 percent tested positive for Hepatitis B, 33 percent tested positive for Hepatitis C, and 7 percent tested positive for tuberculosis. According to a report from the World Health Organization (2013), these estimates far surpass those for the general population. Moreover, Alaird and

Exhibit 1: Summary of Dangers and Risks Confronting Correctional Officers

Work-Related Dangers	Institution-Related Dangers	Psycho-Social Dangers	Mental Health Risks	Physical Health Risks
Inmates with Infectious Diseases	Role ambiguity/role conflict	Work/family conflict	Stress	Injuries
Prison Gangs	Demanding work obligations	Media/political scrutiny	Burnout	Death
Disruptive Inmate Behavior	Poor leadership/trust/support			
Contraband Presence	No input into decision-making			
Inmates with Mental Illnesses	Inadequate resources			
Riots	Inadequate employment benefits			
	Extended hours			
	Co-worker conflict			
	Understaffing			

Marquart (2009) noted that, as of 2008, 1.7 percent of the total U.S. custody population was infected with HIV and that between 12 percent and 35 percent had either Hepatitis B or C. Similarly, a 2006 report issued by the Bureau of Justice Statistics found that the rate of confirmed Acquired Immunodeficiency Syndrome (AIDS) cases was between three and five times higher for prisoners than for the general population, with 0.55 percent of inmates and 0.10 percent of the general public having contracted the disease. This represents a serious challenge to daily operations for COs.

COs are susceptible to the risk of contracting potentially fatal diseases on account of occupational mandates that require them to routinely perform pat-down and cell searches, intervene in offender altercations, and respond to medical emergencies, accidents, and other “situations where they may encounter sharp objects, blood, and bodily fluids” (Alaird & Marquart, 2009, p. 441). High-risk behaviors engaged in by inmates, such as unprotected sex, intravenous drug use, and tattooing, make officers particularly vulnerable to risk. Although there are little empirical data on the rates at which COs contract any of the above-noted illnesses, practitioners and scholars consider infectious and communicable diseases among inmates to be a significant threat to the health and safety of COs.

Prison Gangs

Across correctional institutions, officers must interact with noncompliant and potentially violent inmates on a one-to-one basis to ensure adherence to institutional regulations. When inmates merge into groups, such as prison gangs, the threat to security can become even more severe. Fleisher and Decker (2001) opined that “prison gangs are a ... prison manager’s biggest nightmare” (p. 2). A report from the FBI’s National Gang Intelligence Center

(2011) further stressed that gangs are increasing in number across correctional facilities (particularly those found in the southeastern U.S.), and that gang affiliates are escalating in their level of violence and criminal sophistication.

Lyman (1989) defined a prison gang as “a violent organization that operates within the prison system as a self-perpetuating criminally oriented entity, consisting of a select group of inmates who have established an organized chain of command and are governed by a code of conduct” (p. 48). Prison gangs share many similarities with their counterparts on the outside, as one person is usually designated as a leader, and that person oversees the other members and their criminal operations. Gangs have been described as violent, secretive, and abiding by a creed, motto, or constitution that dictates member behavior, and further as organizations that adopt unique symbols to define membership status (Fleisher & Decker, 2001). Several major gangs have been identified as being most problematic or influential in the prison system, including the Mexican Mafia (La Eme), the Aryan Brotherhood, Black Panther groups (e.g., the Black Liberation Army), the Symbionese Liberation Army, the Weatherman Underground Organization, the La Nuestra Family, and the Texas Syndicate (Skarbek, 2014). These groups are motivated by a desire to earn money and exploit often-overcrowded and understaffed prisons, thereby further threatening the safety of COs (Fleisher & Decker, 2001).

Disruptive Inmate Behavior

Disruptive inmate behavior is viewed as violent conduct against staff or other inmates (Rocheleau, 2014). Examples of this type of behavior include, but are not limited to, successful or attempted physical and sexual assault, murder, suicide, and even rape (Byrne, Hummer, & Taxman, 2008). Disruptive inmate behavior has been

shown to increase the rate of CO turnover (Patenaude, 2001), the rate of injury and death sustained by COs (Crawley, 2004), and the prevalence of self-destructive behavior, such as officers resorting to drugs and alcohol as coping mechanisms (Crawley, 2004).

Although Byrne and colleagues (2008) noticed a decline in the national rate of inmate-on-inmate fatalities from 3.2 to 2.4 per every 1,000 offenders between 1995 and 2000, they noted that these rates of violent death remained a major concern for correctional institutions. Between 1995 and 2000, these researchers noted an increase from 27.0 to 28.0 in the national rate of inmate-on-inmate assault per every 1,000 incarcerated offenders. Rates of inmate assault against COs also increased during this period, from 14.1 to 15.6 per every 1,000 officers (Byrne, Hummer, & Taxman, 2008). More recent figures from Wolff and colleagues (2007) showed that across a nationally representative sample of U.S. prisons, the rate of inmate-on-inmate assault ranged from 129 to 346 per 1,000 offenders, and inmate-on-officer assault ranged from 83 to 321 per 1,000 COs. Variability in these rates was largely attributed to variance in institutional characteristics (i.e., some prisons housed more violent offenders than others) and to differences in reporting systems across correctional facilities.

Prison sexual assault has been a topic of considerable importance for correctional administrators and researchers over the past few decades. In their study of a maximum-security prison in the southern U.S., Hensley, Koscheski, & Tewksbury (2005) found that 18 percent of inmates reported inmate-on-inmate sexual threats and 8.5 percent reported that they had been sexually assaulted by another inmate while incarcerated. Moreover, Beck and colleagues (2007) documented 3.75 alleged inmate-on-inmate sexual assaults per every 1,000 inmates in state-run prisons. Younger

inmates and offenders serving longer sentences initiated the majority of these assaults (Beck, Harrison, & Adams, 2007).

The role of place is also important to inmate behavior, suggesting that there are important differences both between and within prisons. Garcia (2008) noted that maximum-security facilities and facilities populated by a higher percentage of younger offenders are more likely to report higher rates of disruptive inmate behavior. Hensley and colleagues (2005) echoed some of these findings by revealing that maximum-security facilities are statistically more likely to report higher levels of inmate sexual assault than are lower security agencies. Since COs are responsible for controlling any type of disruptive inmate behavior and for ensuring that all individuals within the prison are protected, they become more susceptible to the violence in these facilities, thus elevating their risk for physical and mental harm. They must also intervene in incidents that involve disruptive inmate behavior, noncompliance, physical and sexual violence, and aggression. Combined, these issues further compromise the safety and wellness of COs and increase their risk of victimization.

Contraband Presence

Although prison administrators attempt to remove or reduce the presence of contraband, a system of illicit contraband circulation has developed in many institutional facilities, which has led to increased concern among correctional practitioners about the potential for harm associated with this illegal enterprise. Contraband can include weapons, fermented alcoholic beverages, drugs, narcotics, restricted medications, and state-owned equipment, tools, and other supplies (Burke & Owen, 2010). Cellular telephones, a more modern form of contraband in U.S. prisons, have also raised safety concerns for correctional officers and practitioners

(Fitzgerald, 2010). In recent years, inmates have even coordinated the use of drones to import contraband into prisons (Fitzgerald, 2010). Somewhat surprisingly, especially considering the potential for harm associated with contraband, some COs have been found to import contraband items into the prison in the form of cigarettes, drugs, and weapons (Jurik, 1985; Tracy, 2004). According to nationally representative data from 101 U.S. prisons, contraband distribution was connected with more than 200 inmate injuries and 30 CO injuries (Biermann, 2007), further reinforcing the point that contraband circulation represents a considerable health risk to COs.

Inmates With Mental Illnesses

A notable rise in the incarceration rate of people with mental illnesses has been observed across the U.S. over the past several decades. As early as 1972, Abramson coined the phrase “criminalization of the mentally ill” (p. 101) to describe the growing number of individuals with mental illnesses serving time in custody. McLearn and Ryba (2003) attributed much of that increase to the deinstitutionalization movement of the 1970s, which saw large numbers of patients released from psychiatric facilities. Upon their release back into the community, many former patients found themselves under the control of the criminal justice system. These authors commented that this occurred because individuals afflicted with mental illnesses such as bipolar disorder or schizophrenia often suffer an inability to restrain their behaviors and practice self-control. Sometimes, they unknowingly perpetrate acts such as assaults that are classified as legal transgressions, thereby landing them under criminal justice system supervision. Combined with widespread closures of mental health institutions and inadequate services to address the needs of this particular population, this has contributed to a drastic explosion of the

number of individuals with mental illness under custodial control (McLearn & Ryba, 2003; Robertson, 2013). Significant growth in the population of inmates with mental illness made the Los Angeles County Jail (15,000/23,000), New York Rikers Island (5,500/10,000), and Cook County Jail in Chicago (5,000/10,000) the “three largest psychiatric institutions in the country” in 2007 (Adams & Ferrandino, 2008, p. 913). Parenthetical figures reflect the average daily number of diagnosed mentally ill inmates per the average total daily inmate population of all three jail facilities. James and Glaze (2006) further noted that in 2005, 56 percent of state prisoners, 45 percent of federal prisoners, and 64 percent of those in jail reported symptoms of at least one mental health problem.

COs are often ill prepared to address the complex symptomology presented by inmates with mental illness. These vulnerable inmates require expensive medical services such as therapy, detoxification, and medication. They are more likely than other inmates to have histories of drug and alcohol dependency and to suffer from a chronic physical health condition. Research has found that inmates suffering from mental illnesses are more susceptible to physical and sexual assault (Robertson, 2013), present a greater physical threat to themselves and others (McLearn & Ryba, 2003), and are more likely to recidivate than inmates who do not experience mental illness (Robertson, 2013).

Prison administrators and staff are severely limited in their ability to meet the needs of these inmates because of budgetary constraints and insufficient resources (McLearn & Ryba, 2003). COs will typically assist inmates with mental illness when possible; however, officers rarely receive specific training in this area. These inmates may be considered a challenge to the safety and wellness of officers because of the multiplicity and complexity of their needs.

Riots

A prison riot is the most serious threat to the safety and well-being of COs. Fortunately, they are relatively rare occurrences. From 1774 to 1990, the United States witnessed 300 prison riots, 90 percent of which took place during the mid-to-late 20th century (Martin & Zimmerman, 1990). Two of the most notorious examples of inmate rioting in the United States are the 1971 Attica (New York) and 1980 New Mexico prison riots (Carrabine, 2005). Together, those riots resulted in more than 100 officer and inmate casualties, numerous reported physical injuries, and a complete breakdown of state control. The riots also resulted in more than \$30 million in structural damage to the prisons themselves (Carrabine, 2005).

Adams (1992) described a prison riot as “part of a continuum of practices ... that involves dissenting and/or protesting activities by individuals or groups of prisoners that interrupt their imprisonment by means of which they take over all or part of the prison resources and either express one or more grievances or a demand for change, or both” (pp. 13-14). Post-hoc analyses of prison riots typically find similar causes, such as retaliation against inhumane conditions, prison overcrowding, economic factors, racial tensions, the disproportionate presence of young, violent offenders, and poor building design (Carrabine, 2005). Although prison riots are rare, they can quickly become highly consequential and produce numerous physical and mental health concerns for COs.

Institution-Related Dangers

Institution-related dangers pose greater mental health-related risks than physical risks. Many of the institution-related dangers discussed here have been linked to increases in officer stress and burnout,

with the former conceptualized as “a particular relationship between a person and an environment that is appraised by the individual as taxing ... and ... endangering his/her well-being” (Lazarus & Folkman, 1984, p. 19). Job burnout has been defined as a “gradual loss of caring or emotional exhaustion about a job, co-workers, or clients” (Thompson & Prottas, 2006, p. 100). Included in the list of institution-related dangers are role conflict and role ambiguity (Lambert et al., 2005); demanding workloads, a lack of administrative leadership and officer input into institutional decision-making, and inadequate benefits and resources (Brower, 2013; Finney et al., 2013); prolonged work hours, understaffing, and poor recruitment, selection, and training of officers (Hessl, 2001; Lambert, Hogan, & Allen, 2006); and finally co-worker conflict (Morgan, 2009; Morse et al., 2011; Swenson, 2008).

Role Conflict and Role Ambiguity

Lambert and colleagues (2005) defined role stress as “the degree of incongruity of expectations associated with the role of the employee and the results from work roles” (p. 35). Two variations of CO stress analyzed in this report are role conflict and role ambiguity. Lambert and colleagues (2005) explain role conflict as a situation in which “compliance with one set of pressures makes compliance with another set difficult” and define role ambiguity as “uncertainty or a lack of information in carrying out the duties and responsibilities of a given position” (p. 35). For several decades, prisons across the United States have shifted among correctional philosophies, including treatment/rehabilitation, retribution, deterrence, and incapacitation (Lambert et al., 2005).

Fluctuations in punishment ideologies have been shown to negatively impact COs, as they are frequently left questioning their occupational role. Literature has

shown that role conflict and ambiguity significantly impact several outcomes. Lambert and colleagues (2013) found that higher levels of role conflict significantly and negatively affect correctional staff job commitment, which, in turn, increases officer stress. Occupational and general stress measures were significantly increased by higher levels of both role conflict and ambiguity in Castle and Martin's (2006) study. Researchers have linked heightened stress as a result of role conflict and ambiguity to increased officer turnover (Leip & Stinchcomb, 2013; Matz et al., 2013; Minor et al., 2010). Magnified officer stress levels as well as elevated rates of turnover, in turn, can jeopardize the security of correctional facilities by resulting in higher inmate-to-officer ratios and a reduced sense of safety for COs (Leip & Stinchcomb, 2013).

Other Occupational Dangers

A National Institute of Justice (NIJ) study (Finn and Kuck, 2005) reported that high caseloads, combined with demanding paperwork and deadlines, constituted the greatest institution-related dangers affecting CO stress levels. Scholars have found that demanding shift work, extended work hours, poor pay and benefits, elevated perceptions of workplace danger and risk, and insufficient staffing and resources each contributed to increased stress levels (Armstrong & Griffin, 2004; Garcia, 2008; Keinan & Malach-Pines, 2007; Lambert, Hogan, & Barton, 2002; Morgan, 2009; Morse et al., 2011; Swenson, 2008). Many officers are asked to perform additional tasks with limited resources, mostly because of widespread budget constraints that have financially handcuffed correctional administrative officials. As reported by Summerlin and colleagues (2010) and Brower (2013), hiring freezes and terminations have forced many COs to work with outdated equipment and limited training.

These problems have subsequently contributed to higher officer stress and burnout levels as well as low morale. According to Brower (2013), budgetary problems can also lead to strained relationships between COs and correctional administrators. Adding to these issues, Paoline and colleagues (2006) found that officers who perceived American Correctional Association (ACA) directives as confusing, and those who believed that inmates were afforded more social services than COs, were significantly more likely to report higher levels of job-related stress. COs' negative perceptions about managerial decision-making practices can create friction between both sides and contribute to higher levels of CO stress and burnout (Finney et al., 2013; Lambert, Hogan, & Allen, 2006). Lambert and colleagues (2012) found that officer stress and burnout could be predicted by their distrust of the prison administration.

Other institution-related dangers include a lack of administrative leadership and an absence of officer input into decision-making (Lambert, Cluse-Tolar, & Hogan, 2007; Tewksbury & Higgins, 2006a, 2006b). Brower (2013) explained that mistrust can have deleterious effects on the wider prison system, as officers may become more disengaged from their jobs, which can, in turn, increase inmate violence levels as well as the general level of danger in a facility. If administrative officials desire to maintain harmony with correctional staff, it is imperative, according to Brower (2013), that they forge trusting and long-lasting partnerships with their subordinates.

One final institution-related danger that can contribute to CO stress involves the relationships they forge with co-workers. Paoline and colleagues (2006) found that positive relationships with co-workers significantly reduced officer stress and improved officer evaluations of job satisfaction. Dowden and Tellier's (2004)

meta-analysis of CO stress found that strained co-worker relations predict increased stress, and their aggregated findings support many of the results reported in this section.

Psycho-Social Dangers

Psycho-social dangers are issues and challenges that COs encounter as they move between work and community surroundings, including their home environments. These dangers include work-family conflict, public misperceptions, and political scrutiny from individuals possessing limited knowledge of the daily challenges faced by officers.

Work-Family Conflict

The most pressing issue related to work-family conflict for COs is the fact they must balance what is termed “dual role conflict” (Brower, 2013, p. 13). In their professional lives, COs are surrounded by and required to supervise potentially violent individuals as well as people with special needs (e.g., mental and physical health care and drug rehabilitation). Few other professionals work under such demanding conditions. Officers’ daily tasks include using unique communication strategies designed to reinforce behavioral boundaries and compliance when interacting with inmates. The communication style required by the prison environment may be described as assertive, direct, and unemotional. However, this communication style may have no effect or a negative effect on family members at home. What works for communicating in prison may not work at home.

When COs experience dissonance between work and family environments, their level of well-being decreases dramatically (Brower, 2013). This can manifest in the form of “chronic fatigue, cynicism, pessimism, sarcasm, flattened drama/stress response and exposure to trauma and other disturbing behaviors” (Brower, 2013, p. 8).

Finn (1998) suggested that this pattern can be cyclical, as at-risk COs may direct their frustrations at family members who, in turn, redirect more frustration toward the CO. Obidoa and colleagues (2011) add that work-family conflict can also manifest as depressive symptoms.

Of course, the challenge for COs is to balance family demands with the stressors of working in a correctional facility. This requires adaptation to two often incompatible milieus — the prison context versus the family. One of COs’ most common reactions to this incompatibility is to become withdrawn and isolated (Brower, 2013). COs may experience difficulties in discussing daily work events with spouses and loved ones (Crawley, 2004). Devoid of outlets for expressing their work-related frustrations and concerns, COs may experience elevated levels of emotional stress and burnout (Brower, 2013; Crawley, 2004). These issues can contribute to days missed from work, job-related apathy, and increased security risks in their work environments (Crawley, 2004; Lambert et al., 2005).

Public Misperceptions and Political Scrutiny

Apart from an inability to discuss work experiences with loved ones, COs are also often reluctant to discuss their work with the general public because of misconceptions about their profession. The misconceptions are often rooted in the frequently negative characterizations of COs by the news media (Crawley, 2004; Moon & Maxwell, 2004), which often involve negative events such as inmate escapes, inappropriate staff-inmate relationships, and violations of inmate rights. The portrayals of COs in other forms of media, such as movies and music, can be even more damaging. COs are often depicted as brutal, cruel, racist, and educationally deficient. Moreover, because the general public has very little experience with corrections and correctional

employees, they are apt to believe these stereotypes (Schaufeli & Peeters, 2000). These misguided characterizations of COs can influence political figures who are responsible to the public and its concerns. If the public typecasts COs in a stereotypically negative way, the same political figures who are responsible for ensuring that officers conduct themselves appropriately may express little to no support for those officers (Brower, 2013). Absent public or political support, COs may experience a lack of respect and appreciation for their important work, resulting in higher stress levels, isolation, and reduced self-esteem (Brower, 2013). The isolated nature of prisons and jails may exacerbate this negative state of affairs by reinforcing the stereotypes and further amplifying mental health-related consequences for COs.

Correctional Officers' Perceptions of Workplace Safety and Wellness

Given the harms to which COs are exposed, it is surprising that little research has been conducted on their perceptions of workplace safety and wellness. Scholars have discovered that employee perceptions of the work environment can fundamentally shape outcomes such as job performance, co-worker and supervisor treatment, and the intention to voluntarily resign (Ferdik, Smith, & Applegate, 2014a; Konovsky & Pugh, 1994; Schein, 1990). Since COs play such a crucial role in establishing and maintaining order in their institutions, it is vital to understand how they perceive safety. A literature search produced eight studies on this topic. A detailed discussion of each study is provided below, with the accompanying table in the appendix providing a comprehensive breakdown of each study's methodology and findings.

COs were surveyed on a variety of safety-related issues, including their general perceptions of danger (Garcia, 2008), the risk of contracting an infectious disease

(Alaird & Marquart, 2009; Dillon & Allwright, 2005; Hartley et al., 2012), their risk of injury from specific prison-based dangers (Ferdik, 2014), and their fear and risk of victimization by both inmates and co-workers (Gordon, Moriarty, & Grant, 2003; Gordon, Proulx, & Grant, 2013; Lai, Wang, & Kellar, 2012). The officers surveyed worked in a variety of correctional institutions, including juvenile detention facilities and minimum-, medium-, and maximum-security adult prisons. In the studies that surveyed officers' perceptions of their risk of contracting an infectious disease, respondents perceived those risks as moderate to high. Specifically, Alaird and Marquart (2009) reported that 54 percent of respondents believed that they were at risk of contracting HIV/AIDS, and Dillon and Allwright (2005) found that an overwhelming 92.2 percent to 95.2 percent of their sample believed that they were at risk of contracting either Hepatitis B or C, or HIV/AIDS. Another study found that a majority of COs judged their entire work environment to be dangerous, with many officers reporting that they felt physically threatened by both inmates and co-workers (Hartley et al., 2012). Hartley and colleagues (2012) also found that more than half of their respondents perceived an elevated risk of contracting an infectious disease while on the job. Several statistically significant covariates of officer risk perceptions surfaced among the studies, including findings that greater knowledge levels about HIV/AIDS and additional years of formal education reduced perceived risk (Alaird & Marquart, 2009), and older and male officers perceived statistically significant increased levels of risk as compared to their counterparts (Dillon & Allwright, 2005).

Other studies examined COs' perceptions of either fear or risk of victimization by inmates and co-workers, but found lower levels of perceived risk when compared to the aforementioned investigations. For example, Gordon and colleagues (2003) and Lai and colleagues (2012) found that

less than half of the officers sampled feared victimization by either inmates or co-workers. Furthermore, only a few officers in Gordon and colleagues' (2003) study perceived a risk of such victimization. Authors of both studies attributed these comparatively lower rates of perceived risk and fear to the types of inmates that officers were responsible for supervising. For example, whereas officers in Alaird and Marquart's (2009) and Dillon and Allwright's (2005) examinations were employed in higher-security facilities, COs in the latter studies worked in juvenile detention and minimum-security, adult prisons. Those officers worked among inmates who posed reduced health and safety threats as opposed to officers employed in higher-security facilities populated by more dangerous offenders. Even considering this point, however, Gordon and colleagues (2003) and Lai and colleagues (2012) argued that despite being employed in lower-security facilities, officers were still cognizant of the fact that health risks were a part of their job.

In Gordon and colleagues' (2013) investigation, for which COs employed across predominantly medium- and maximum-security facilities were surveyed, between 57 and 73 percent of respondents expressed moderate to high degrees of risk of victimization by inmates. Gordon and colleagues (2003, 2013) and Lai and colleagues (2012) found that statistically significant predictors of officers' risk perceptions held across gender, race, and education levels. Women perceived additional risk, as did non-white COs and those with more formal education.

Two final studies examined COs' perceptions of job-related danger and risk (Garcia, 2008; Ferdik, 2014). Garcia (2008) used multi-level modeling techniques and secondary data from the Prison Social Climate Survey to assess federal COs' perceived levels of danger using an

inventory measure of this outcome. Roughly half of all officers across Garcia's sample expressed some perceived job-related danger. Statistically significant predictors of this outcome, at both the individual and institutional levels, included race, gender, and security level, with non-white, female, and officers employed in higher-security facilities perceiving greater danger levels than their counterparts.

Ferdik (2014) asked a statewide population of COs in maximum-security facilities to rate their risk of injury from six specific workplace dangers, which included the presence of gangs and contraband. Not only did a majority of the sample perceive a high degree of injury risk from each danger, but additional years of job-related employment positively predicted officers' perceived risk of injury.

Assessments of COs and their general perceptions of workplace safety and risk carry a number of important considerations. When COs perceive high levels of any type of risk in their work environments, this perception can adversely influence their job performance and even contribute to high levels of turnover and a poorly managed prison facility (Ferdik, Smith, & Applegate, 2014a). COs' heightened risk perceptions can also elevate their stress and job dissatisfaction levels (Garcia, 2008), which may, in turn, engender hostile interactions between officers and offenders, thereby leading to mismanagement of the inmate population (Gordon, Moriarty, & Grant, 2003; Gordon, Proulx, & Grant, 2013). Since COs play perhaps the most important role in successful prison management, gathering insight into their levels of perceived workplace risk can aid interested audiences in better understanding the specific threats to officer safety and wellness which, in turn, can lead to policies and programs directly related to enhancing the overall well-being of COs.

Consequences of Risks to Correctional Officer Safety and Wellness

Numerous consequences have been linked to the safety and wellness risks confronting COs. For example, contentious relationships between officers and their co-workers and supervisors as a result of increased stress levels were revealed in various studies (Finney et al., 2013; Lambert, 2004). This, in turn, led to many COs reporting decreased work performance and even being distracted while on the job (Brower, 2013; Finn, 2000). Griffin and colleagues (2009) found that higher levels of stress were significant predictors of three variations of officer burnout: depersonalization, emotional exhaustion, and job ineffectiveness. Lambert and colleagues (2002) and Hogan and colleagues (2006) found that stress adversely and significantly impacted the level of commitment of officers to their work. In a rare study that evaluated the influence of stress levels on perceived danger, Garcia (2008) found that higher individual and institutional stress levels significantly increased perceptions of danger in a sample of federal COs.

Many studies have found safety and wellness risks within the correctional environment to significantly influence officers' desire to use administrative sick leave (Lambert et al., 2005; Lambert, Hogan, & Altheimer, 2010), as well as their desire to resign (Ferdik, Smith, & Applegate, 2014b; Patenaude, 2001; Udochukwu et al., 2007). The Management and Training Corporation (2011) estimated that between 2000 and 2008, 16.2 percent of all American COs resigned from their posts after only three years on the job. More troubling figures were reported in individual corrections departments, most notably those of Vermont and South Carolina, where each respectively reported that 35 percent of their COs voluntarily resigned in 2009 alone (South Carolina Department of

Corrections (SCDC), 2013; Vermont Department of Corrections (VDC), 2013). Fiscal problems have been recorded by various correctional administrative officials as a result of losing so many officers, with the SCDC operating at a \$45.5 million deficit in 2009. Budget constraints subsequently forced remaining officers to work with inoperable weapons, radios, and other necessary equipment (SCDC, 2013). Deprived of the most essential resources with which to successfully perform their jobs, COs often find that their health and safety come under additional threat. Elevated rates of officer turnover and absenteeism can lead to higher inmate-to-officer ratios and greater numbers of inmate-on-inmate and inmate-on-staff assault (Lambert, 2004; Steiner, 2008).

Researchers have also found that COs experience disproportionately higher rates of physical health problems such as chronic neck, back, and knee injuries, heart disease, diabetes, high cholesterol, and hypertension, as compared with other professionals such as crisis counselors, teachers, and law enforcement personnel (Dowden & Tellier, 2004; Morgan, 2009). Much of this can be attributed to the demanding nature of this line of work, including prolonged work hours, irregular sleep patterns due to constantly changing shift assignments, and being tasked with extra duties that extend beyond their traditional responsibilities (Brower, 2013). Previously referenced dangers such as role conflict and ambiguity, public misconceptions about the CO's job, and work-family conflict also exacerbate physical health problems for COs (Morgan, 2009; Swenson, 2008). Even life expectancy rates are lower for officers. One seminal study (Cheek, 1984) noted that the average lifespan of individuals in this line of work was 59 years, some 16 years below the national average of 75. A more recent study by the New Jersey Police Suicide Task Force (2009) also found an average 59-year lifespan among COs.

Crawley (2004) and Swenson (2008) expanded on the above findings, noting that the physical demands of this profession can disrupt officers' biological clocks and sleeping patterns; impair their cognitive, emotional, and motor functions; and compromise their eating habits. These problems can manifest as multiple psychological and emotional disorders. For example, Morse and colleagues (2011) found that 31 percent of COs reported serious psychological distress, twice the rate of the general public. Spinaris and colleagues (2012) found in a study of more than 3,000 corrections professionals that 27 percent of officers reported symptoms of post-traumatic stress disorder (PTSD), which surpassed rates of PTSD experienced by combat veterans, who reported just 14 percent. PTSD symptoms among COs have been further linked to memory impairment, depression, obesity, and a higher prevalence of substance abuse (Spinaris, Denhof, & Kellaway, 2012).

Intensive interviews with COs conducted by Crawley (2004) revealed that high levels of stress led more than half of interviewees to resort to self-destructive behaviors such as alcohol and drug consumption to cope with their jobs. The effects spilled over to families, as many officers brought work-related problems home. This led to increased levels of tension between domestic partners and, in some cases, officer suicide. Stack and Tsoudis (1997) found the suicide rate for COs to be 39 percent higher than that of the general working-age population. This finding was supported by research by the New Jersey Police Suicide Task Force (2009), which found the rate of suicide for COs to be double that of police officers and the general population.

Health and safety concerns, as demonstrated by the empirical literature referenced thus far, appear to be attendant consequences of employment as a CO. Officers are tasked with demanding and

often conflicting work responsibilities that increase their risk for physical and mental health problems such as injuries, stress, and even death. Officers must interact with and supervise potentially dangerous individuals such as gang members, inmates with mental illness, and those with communicable diseases, which further complicates officers' health issues. According to the research cited above, officers, regardless of security assignment, recognize the danger to which they are subject as a result of their profession. Many scholars conclude that employment as a CO is among the most dangerous and life threatening of all professions, including law enforcement. Given how COs are heavily relied upon to supervise inmate behavior, establish order in their facilities, and maintain wider institutional security, it is paramount that correctional practitioners, researchers, administrative officials, and other interested stakeholders begin developing more effective and widely used strategies for enhancing the general well-being of this critically important workforce.

Fortunately, changes have begun. Policies that include employee assistance and peer-support programs have been implemented across some prison systems. Despite the well-intentioned purposes of these programs, few have come under scientific scrutiny, meaning little evidence attesting to their effectiveness exists. These programs are few and far between, implemented in only a few prisons. Although for several years researchers have extensively documented the numerous dangers and health risks associated with CO employment, relatively little is known about how to best address these problems. Moreover, with the exception of a handful of studies, little is also known about how COs judge the dangerousness of their jobs and the steps they take to protect themselves from workplace dangers and risks.

The next section of this report describes the policies and programs designed to assist officers from a wellness standpoint,

the empirical literature (or lack thereof) related to their effectiveness, and an argument for why more research on CO safety and wellness is needed. Although much is known about why and how the CO's job is dangerous, we still do not have a foundational understanding of what can be done to enhance their safety — a critical area of research, given the essential role officers play in the functioning of any prison system.

Correctional Officer Wellness Policies and Considerations for Future Research

Policies That Support Correctional Officer Safety and Wellness

Because COs are exposed to many occupational dangers, correctional practitioners, researchers, and administrative officials must develop methods for enhancing officers' well-being. Such efforts have been slow to develop (Armstrong & Griffin, 2004; Brower, 2013). Although some prison facilities have begun to institute mental health counseling and other measures designed to improve the general welfare of COs, many of these programs are in their infancy, have not been evaluated using scientific methods, and exist in only a handful of correctional facilities (Armstrong & Griffin, 2004; Brower, 2013; Morse et al., 2011). Many pundits have remarked that to better address the safety and wellness threats to COs, it is perhaps best to examine the broader law enforcement profession and what it is doing to ensure the well-being of police officers (Armstrong & Griffin, 2004; Brower, 2013; Delprino, 2001; Finn, 1998, 2000; Roland, 2011).

Some scholars have discouraged applying police research and policies to the correctional context because police officers and COs are employed in dramatically different working conditions (Brower, 2013).

For example, although police officers are exposed to many occupational dangers such as gangs and physical retaliation from community members (Anson, Johnson & Anson, 1997; Jones & Newburn, 2002), when compared to the dangers confronting COs, marked contrasts exist. Brower (2013) suggests that the daily dangers and pressures “faced by COs far exceed those experienced by police officers” (p. 5). Whereas the dangers faced by law enforcement personnel are periodic, those faced by COs are constant. In fact, COs experience continued exposure to violent and dangerous offenders throughout the entirety of their work shifts. In addition, although police officers must interact with unpredictable citizens who may pose a risk of harm, they also have multiple opportunities to forge partnerships with prosocial community members who can help law enforcement maintain community harmony (Brower, 2013). For COs, these opportunities are largely absent as they are responsible for overseeing offenders who may be frustrated with their current conditions and may express those grievances against the very individuals charged with monitoring their behavior.

Other differences exist as well. Police officers are permitted to carry lethal and less-lethal devices for protection, whereas COs are not (Farkas & Manning, 1997). In addition, although there are negative portrayals of the police in mainstream media, they are often counterbalanced by positive images of law enforcement officers engaging in heroic acts (Chermak & Weiss, 2005). The same cannot be said for COs, with many media depictions stereotyping them as inhumane figures who have a fundamental disregard for human suffering (Crawley, 2004). All these issues can predispose correctional officers to greater levels of stress, injury, and even fatality when compared with law enforcement (Garland, 2002).

Specific occupational differences aside, it is widely recognized that both police officers

and COs are exposed to various dangers that can threaten their welfare, and some experts have noted the potential benefits to corrections agencies of learning more about law enforcement strategies to protect their officers (Brower, 2013). Police departments are frequently staffed by psychiatrists and other mental health professionals trained to assist law enforcement personnel. Moreover, the mental health field now recognizes police psychology as a discrete area of academic study. The American Psychological Association (APA), for example, now issues board certification to individuals specializing in this field (Brower, 2013). A variety of policies specially designed to protect officers from physical and mental threats, such as peer-support programs, have also been implemented on a mass scale across police agencies (Brower, 2013; Chermak & Weiss, 2005). It appears that the broader policing profession has received the required attention from counselors and other mental health professionals who have been trained and certified to help police officers cope with the dangers inherent in the job. Unfortunately, the same cannot be said for the corrections field.

Currently, no psychological discipline focused on corrections exists. Many prison institutions lack the resources (whether monetary or otherwise) that could be used to introduce mental health counseling for COs, and no established professional organizations address the unique psychological and physical needs of COs (Brower, 2013; Delprino, 2001; Roland, 2011). Much of this deficit can be attributed to difficulties in locating adequately trained treatment providers who are knowledgeable about best practices related to correctional psychology. Additional impediments include mental health treatment providers' lack of awareness of psychological selection strategies and laws specific to corrections, PTSD treatment for COs, and how family matters interact with work problems for COs (Brower,

2013; Finn, 1998; Roland, 2011). As this white paper notes, not only is corrections a dangerous field of employment, but some studies have found that COs experience disproportionately higher levels of injury and stress as compared with other workers such as law enforcement officers (Brower, 2013; Harrell, 2011). Programs and policies designed to address these issues are critical to improving the health conditions of COs, and perhaps lessons can be borrowed from law enforcement.

Despite the professional differences between police and COs outlined above, lessons for the corrections field can be learned from the literature on police officer well-being (Brower, 2013). Like COs, law enforcement personnel are exposed to physically demanding work conditions, constantly rotating work shifts, inconsistent sleep patterns, trauma, and a host of other dangers (Anson, Johnson, & Anson, 1997; Jones & Newburn, 2002). These problems can contribute to increased stress levels, physical problems such as heart disease and diabetes, and even the risk of suicide (Stack & Tsoudis, 1997). Because corrections and police officers experience similar problems, an argument can be made that the corrections field needs to begin to borrow ideas from the policing discipline. Brower (2013) remarked that the policing literature potentially has much to offer in terms of improving health conditions for COs, and that prison systems do not necessarily need to “reinvent the wheel in order to do this” (p. 13). This report describes some specific strategies, largely borrowed from policing, that correctional agencies can implement to improve officer safety and wellness. Also referenced are health improvement recommendations provided by correctional scholars, with critical insight into whether policies are effective and should be adopted.

Some corrections departments have begun instituting employee assistance programs (EAPs) that are borrowed directly from

policing (Sauter, 2001). EAPs are designed to offer specialized services to assist organizations in addressing front-line worker productivity and in identifying and resolving the personal concerns and problems of subordinates. According to Brower (2013), essential components of EAPs include providing consultations to organizational leaders to help manage troubled employees, active promotion of assistance services, confidential and timely provision of services, and referral of employees to treatment providers. Significant numbers of law enforcement agencies across the United States have implemented EAPs for troubled officers, but this has not been observed in corrections departments. A 2013 report issued by the ACA noted that of the more than 4,000 prisons in operation across the U.S., fewer than 100 had any type of EAP. Moreover, very few of these programs have been scientifically evaluated to determine their effectiveness in improving CO well-being.

Finn (2000) identified another strategy that could be used to ameliorate officer stress, and noted that a number of correctional agencies nationwide have adopted this technique, which includes the establishment of peer-support programs. Peer-support programs recruit workforce colleagues who can offer emotional and social support to those who may have undergone traumatic experiences while on the job. Peers offer counseling and recommendations to their colleagues to help them cope with the consequences of their job-related experiences. Successful implementation of peer-support programs involves the provision of social support through colleagues, experiential knowledge, trust, confidentiality, and easy access (Roland, 2011). Examples of these programs can be found in Pennsylvania, which instituted the Critical Incident Stress Management Program, and Massachusetts, which established the Peer Stress Unit Program (Finn, 2000). Military and

policing organizations that have adopted this strategy reported high levels of success. Although some correctional institutions have recently incorporated peer-support programs, those programs have yet to undergo scientific evaluation. Like EAPs, little is known about whether peer-support programs work in the correctional context (Finn, 2000).

Other recommendations for improving CO health have been scientifically evaluated. Two such evaluations come from McCraty and colleagues (2009) and Farbstein and colleagues (2010), who each evaluated mental health treatment programs for officers in four correctional institutions. The first study randomized 88 officers from three prisons into either an experimental stress-reduction program (HeartMath's Power to Change Performance Program) or a waitlist control group. Following program intervention, treatment recipients experienced statistically significant reductions in stress, cholesterol, heart rate, and blood pressure levels when compared to a similarly matched control group. In the second study, after a prison installed a mural depicting a nature scene, significant reductions in CO stress and heart rate levels were observed when compared to the period before the mural was installed. With only two such studies in existence that have empirically assessed these types of stress-reduction programs, additional confirmatory research is needed.

Although limited in scope, studies by Finn (1998, 2000) noted that some prisons and jails across the U.S. have incorporated critical incident stress-reduction units that specifically address the needs of officers who have experienced traumatic events while on the job, including hostage takeovers, riots, or the murder of fellow officers and inmates. Such units provide debriefings and counseling for officers who may have mental health consequences because of these experiences. However, reports from NIJ (Finn and Kuck, 2005)

and Finn (1998, 2000) noted that these programs are not seen on a massive scale across correctional facilities, largely because of correctional administrators' failure to recognize the health concerns of officers as well as inadequate funding to support these programs.

Elliot and colleagues (2015), noting high stress levels present within corrections, recommend the following strategies to officers to improve their well-being: maintain a healthy body weight, exercise for at least 30 minutes per day, consume five servings of fruits and vegetables daily, and visit physicians twice annually. Of course, correctional administrative officials cannot oversee and regulate the dietary intake and exercise regimens of their officers, but they can recommend that officers adopt these lifestyle habits to promote health. An investigation by Triplett and Mullings (1996) that directly questioned officers about the measures they take to improve their health uncovered some interesting information: COs often use a variety of coping mechanisms in response to stress, including seeking social support from others and selectively ignoring stress-inducing stimuli. Moreover, the study found that officers who used these coping strategies reported reduced stress when compared with their counterparts. According to the ACA and Keinan and Malach-Pines (2007), prison administrative officials can follow certain recommendations to increase officer wellness. The study suggested that administrative officials promote greater teamwork among line staff, reduce role ambiguity, improve officers' job satisfaction by rotating their shifts to make them less physically taxing, screen incoming officer applicants to determine their susceptibility to stress, increase officer pay and benefits, better prepare officers to confront workforce dangers, and offer positive reinforcement to productive line staff.

Summary of Policies on Correctional Officer Safety and Wellness

Correctional researchers, administrative officials, and prison systems in general have largely neglected the health and safety concerns of COs, which is a crucial area of focus given the important role that officers play in maintaining order in correctional facilities. Recently, some programs designed to improve CO health, borrowed largely from the broader policing discipline, have been instituted in some prison facilities, but few have been systematically evaluated using social science research methods. More concerted efforts must be undertaken across the correctional field to improve CO health and safety, as a result.

An important first step is recognizing that this field of employment is perilous and accompanied by many threats to CO health. Brower (2013) remarked that policies and programs designed to improve officer health have not been instituted in many prison facilities because administrative officials fail to recognize the dangers attached to the job. Improvement of CO health starts by changing this mindset among not only administrative officials but also other relevant stakeholders in the correctional field. Keinan and Malach-Pines (2007) identified an additional impediment to successful implementation of safety and wellness programs: the widespread attitude known as "machismo" among COs. Machismo prevents officers from requesting any type of assistance because they perceive such requests as a sign of inherent weakness. It is imperative that we begin to change the cultural mindset in corrections and recognize that this is a dangerous field wherein external sources of assistance are sometimes required to improve officer well-being.

Psychiatrists, counselors, and other mental health professionals have made

considerable strides in improving police officers' health, but similar efforts for COs have not been observed. Further study must be undertaken of the sources and consequences of CO stress and other harms to which these front-line prison personnel are exposed. Knowledge of these subject areas can help improve our understanding of CO health and inform policies designed to enhance their overall well-being. On this point, Brower (2013) noted that the American Board of Professional Psychology has begun to consider the idea of creating a subspecialty in correctional psychology. Such a subspecialty could contribute significantly to the development of educational and training programs that are specifically designed to address COs' physical and mental health needs.

Police agencies have incorporated a number of programs focused on improving officer health, including peer-support programs and EAPs. These programs are not seen across correctional facilities, and the few that exist have not been evaluated to determine their effectiveness, so few definitive conclusions can be drawn about whether these programs are applicable to the correctional context. Researchers are strongly encouraged to apply rigorous social science research methodologies to examine whether these programs are effective, which in turn, will help determine whether they should be adopted on a broader scale.

Although much has been written about the mental health risks associated with employment as a CO and some policies have been designed to address these concerns, very little, if any, literature exists on policies tailored to address COs' concerns about physical health. Researchers have noted that dangers such as prison gangs, the presence of contraband, and inmates with mental illness, among others, pose considerable threats to the physical health of correctional officers (Burke & Owen, 2010; Fleisher & Decker, 2001; McLearn & Ryba, 2003). Administrative

officials of the correctional system are therefore encouraged to consider policy interventions designed to minimize the injurious risks connected to such dangers. If these are the very dangers most likely to inflict harm upon correctional officers, then strategies aimed at mediating their threats must be implemented on a mass scale across penitentiaries. Policies could include heightened intake procedures to identify problematic inmates, improved communication channels between correctional line staff so they can discuss potentially threatening offenders and what can be done to handle them, separation of gang members to limit their ability to correspond with one another, ensuring officers always have back-up support when dealing with troublesome offenders, instruction/training for officers on mediation tactics that de-escalate volatile situations, and provision of additional therapeutic services, where possible, for offenders afflicted with mental disorders (Burke & Owen, 2010; Fleisher & Decker, 2001; McLearn & Ryba, 2003). Implementation of such policies targeted at decreasing and addressing correctional-based dangers could have the dual benefits of enhancing officer wellness and establishing wider institutional order. With all of this information in mind, what follows is a discussion of what scholars and researchers can do in terms of future research on the broad topic of CO safety and wellness.

Considerations for Future Research

A considerable body of research on CO safety and wellness has been amassed over the past several decades. Findings have provided important insight into the working conditions of officers and what can be done to improve their general well-being. Although this research is informative, a number of limitations restrict our ability to draw definitive conclusions regarding

officer safety and wellness. This section identifies inherent weaknesses in this literature and recommends directions for future research.

A variety of sources have shown that COs frequently fall victim to workplace injuries and even fatalities (Finn, 1998; Konda et al., 2013). Largely unknown, though, are the contextual factors that influence these phenomena or the specific types of injuries befalling officers. Lacerations, cuts, bruises, and head trauma are some of the many types of harm that COs can experience while on the job, yet researchers have not specifically explored this issue. Furthermore, officers of the prison system are forced to work alongside dangerous offenders such as gang members and inmates who create and distribute contraband. Some officers are assigned to more dangerous units of the prison (e.g., administrative segregation), which can increase their risk of physical and mental health problems (Crawley, 2004). Researchers are therefore encouraged to ask the following questions: What are the specific factors that contribute to fatal and nonfatal workplace injuries experienced by COs? Are there individual and institutional differences in the rates of injury and fatality experienced by COs? Are officers employed in more overcrowded prisons more likely to experience injury and fatality? Are officers who work alongside inmates who have infectious and communicable diseases as well as those with mental disorders more likely to fall victim to physical harm? From a broader institutional standpoint, what are the consequences of officers experiencing injury and fatality while on the job? What specific types of policies, training regimens, or programs can address these dangers? We know from the extant studies on CO safety and wellness that dangers such as the presence of contraband pose physical threats to officers, but we need to better understand how to address them.

The psycho-social dangers inherent in employment as a CO have not been adequately studied. This category includes problems such as work-family conflict and public misperceptions about the CO's job (Crawley, 2004). Researchers should consider the following questions: Is this danger an actual threat to officer well-being? What are the potential consequences of exposure to psycho-social dangers? If this is determined to be of significant concern, what can be done to address the consequences of exposure to psycho-social dangers?

Research has noted that COs experience high rates of stress and other mental health problems because of role conflict and ambiguity, work-family conflict, poor co-worker relations, and other factors (Ferdik, 2014; Lambert et al., 2005). Less known are the strategies that correctional agencies can implement to address these mental health concerns. Future scholars should consider asking the following questions: What policies and programs work best to address the mental health consequences associated with CO employment? Although there is some information regarding the correlates of officer stress, there has not been sufficient research into what can be done to resolve this issue. Applying what is known about the correlates of stress can help answer this question.

Researchers have noted that COs experience significantly higher rates of suicide than both police officers and the general public (Morgan, 2009). Brower (2013) remarked that "much more research is needed to develop a better understanding of the prevalence and causes of suicide among correctional officers" (p. 11). Future researchers should ask: What factors lead to increased suicide rates among COs? What can be done to prevent officer suicide? What impact does officer suicide have on the wider correctional facility?

Various programs and policies designed to enhance officer well-being have been introduced by correctional systems, but few have been empirically assessed (Brower, 2013). Some prisons offer peer-support programs, EAPs, and in some cases, trained mental health professionals, but the greater scientific community still lacks a clear understanding of whether these programs are worthwhile. Rigorous social science research methods (e.g., experimental and quasi-experimental designs) should be used to better understand the efficacy of these programs. Future research questions might include: Do peer-support programs and EAPs help improve CO well-being? What other programs, policies, and larger preventive measures that can effectively address the broader health concerns of COs should be implemented?

Other areas of research that should be explored include the physiological effects of this line of work. Some scholars have noted that CO work can lead to physical health problems such as diabetes, heart disease, and chronic neck, back, and knee injuries (Dowden & Tellier, 2004; Morgan, 2009). Only a handful of studies have investigated this issue, and more research into this area is recommended. Because COs experience high rates of stress and other mental health problems, researchers should also ask whether officers hold negative outlooks on life and humanity as compared with individuals not employed in this field. These negative outlooks could have harmful effects on social relationships, and more research into this area is needed.

Although scholars have devoted considerable effort to exploring the harmful effects of correctional employment on officers (Crawley, 2004; Finn, 1998; Moon & Maxwell, 2004; Obidoa et al., 2011), little is known about the deleterious effects that this line of work can have on the family environment. Domestic partners' reactions to their spouses' employment in the prison industry and the effects such employment

can have on family cohesion are just some of the many research questions that future scholars could explore as we attempt to better understand the intersection between correctional employment and the home environment.

Another area requiring additional scholarship is COs' perceptions of workplace safety and wellness. To date, only eight studies have questioned officers about their perceptions of the correctional work environment; clearly, much more research is needed in this area. For example, we do not have a fundamental understanding of the factors that contribute to the disparate levels of fear and risk reported by officers. Also absent from the correctional literature is a solid understanding of the variables that officers' risk perceptions could influence, such as the intention to voluntarily resign, stress levels, and relationships with inmates. Perceptions of the workplace have been shown to influence a variety of outcomes (Powell & Ansic, 1997); however, much of this research has been restricted to non-correctional settings. Scholars interested in these issues are encouraged to ask: What are officer judgments regarding workplace safety and wellness? What factors influence officers' perceptions of their jobs? What variables are influenced by officers' perceptions of the workplace? With the exception of one identified study (Triplett & Mullings, 1996), no researchers have asked correctional officers for their input about strategies designed to improve their welfare. Triplett and Mullings (1996) discovered that COs use coping strategies, and these strategies are quite effective at reducing stress levels. Future researchers could employ mixed methodologies of data collection in the form of surveys and structured interviews to expand our understanding about CO stress-reduction efforts.

In addition to soliciting COs' input about their jobs, it would also be beneficial to understand what correctional

administrative officials believe needs to be done to address officer safety and wellness. Some scholars have noted that administrative officials have largely neglected the safety issues of their officers (Brower, 2013). Future researchers are encouraged to gather more information about and insight into the viewpoints of administrative officials about CO health. Questions might include: How do correctional administrative officials perceive the dangerousness of the CO's job? Do the officials believe that measures need to be instituted to address officer safety and wellness? If so, what strategies do they recommend for improving CO health?

Countless individual studies on the correlates of CO stress have been conducted, but only one meta-analytic synthesis of this research has been performed, and even that is somewhat dated (Dowden & Tellier, 2004). Approximately 13 years have elapsed since the publication of that study; therefore, another quantitative synthesis of this literature would be a welcome addition to the scholarship on CO safety and wellness.

Conclusion

Synthesis of the Report on Correctional Officer Safety and Wellness

COs are employed under stressful and dangerous conditions that are distinct from other occupational milieus (Ferdik, 2014). Being employed alongside inmates who may be violent, manipulative, or mentally and physically ill requires a strong focus on institutional safety and security (Crawley, 2004). However, over time, correctional employment has been shown to have negative effects on officer safety and well-being. For prison facilities to operate efficiently, it is important that they be staffed with officers who are physically and mentally sound and able to respond

to the numerous challenges that this line of work presents. This report highlighted the high rates of injury and fatality that are inherent in CO work and some strategies designed to enhance their welfare. The report concludes by summarizing its major findings and offering additional suggestions for how these results can be used to improve officer well-being.

This synthesis of the literature on CO safety and well-being revealed three distinct dangers confronting officers: work-related, institution-related, and psycho-social. To date, work-related dangers have received the most attention in the research literature, because these issues are intrinsic to the correctional context. These dangers include exposure to infectious and communicable diseases, prison gangs, disruptive inmate behaviors, the presence of contraband, inmates with mental illness, and riots.

The second category of dangers related to CO safety and well-being encompasses institution-related dangers, which are largely influenced by the prison administration. Examples include role conflict and ambiguity, as well as low pay, extended work hours, and insufficient staffing and resources. In today's correctional environments, as documented by the research on institution-related dangers, officers are being asked to accomplish more with fewer resources, which elevates their mental health risks.

A final category of work-related dangers threatening officer well-being comprises psycho-social dangers, which are arguably the most understudied and underappreciated aspects of correctional work. Researchers know relatively little about the impact of work-family conflict on COs. Some studies have explored this phenomenon (Crawley, 2004), but there is a need for greater academic attention in this area.

Another objective of this literature synthesis was to identify studies that have questioned COs specifically about their perceptions

of workplace safety and wellness. A review produced eight empirical investigations, suggesting that more research is needed in this area. Overall, this research indicates that officers of the correctional system are aware of the perils that accompany this line of work, as even low-level security and juvenile detention facility officers expressed some degree of concern about their general safety and wellness. Given that increased perceptions of harm can elevate officers' stress and burnout levels (Armstrong & Griffin, 2004; Dowden & Tellier, 2004; Ferdik, Smith, & Applegate, 2014a), it is vital that future researchers continue to expand on this body of work to contribute to a more refined understanding of how officers judge the dangerousness of their profession.

Two final objectives of this report were to evaluate the literature on CO wellness programs and identify gaps in the overall body of knowledge on officer well-being. Although some policies to enhance officer safety have been introduced, few have been subjected to empirical scrutiny. It is strongly advised that researchers begin exploring this area through the application of rigorous research methods.

Prisons function efficiently when they are staffed with healthy officers, and understanding ways to improve officers' overall well-being can contribute to safer and more orderly correctional facilities. Given the gaps in the wider scholarship on CO safety and wellness, several unresolved questions remain. Researchers interested in

expanding the knowledge base concerning CO safety and wellness are encouraged to explore some of the focus areas identified in this report. The policing discipline and research on law enforcement officer well-being can provide a starting point for correctional agencies. Although police and COs are employed under different occupational conditions, both are exposed to dangers that can threaten their welfare. Police departments have taken important steps to enhance officer well-being. Although these initiatives (e.g., peer-support programs and EAPs) have yet to be comprehensively evaluated within the corrections context, they offer a stepping stone for better understanding how to address issues that threaten CO safety and wellness (Brower, 2013).

Only within the past few years has attention been directed at examining issues of CO safety and wellness. This report provides a comprehensive synthesis of the most recent and salient studies that explore this topic. Although this review does not constitute the final word on all issues related to officer well-being, it does offer a general perspective of the threats confronting officers and the strategies required to improve their safety. Scholars and practitioners who read this report are encouraged to learn from the research of others, institute best practices designed to enhance officer well-being, and further study the major issues related to CO safety and wellness.

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Hayden P. Smith is an Associate Professor in the Department of Criminology and Criminal Justice at the University of South Carolina. His research interests consist of inmate self-injurious behaviors, the intersection between mental health outcomes and criminal justice processes, correctional officer job satisfaction and turnover intentions, offender behavioral and mental health outcomes, as well as police use of force. He earned his doctoral degree from the University of Central Florida in 2007 in Public Affairs, and to date has published 30 peer-reviewed journal articles, 15 technical reports, two books, two book chapters, and six encyclopedia entries. He also possesses extensive grant management experience, with most of his publications on the topics of inmate self-injury and correctional officer decision-making. His work has appeared in journal outlets such as *Justice Quarterly* and *Criminal Justice and Behavior*. He has won numerous awards for his contributions to research, and is currently working on a handful of projects involving offender mental health.

Appendix

Summary of Literature on Correctional Officer Perceptions of Workplace Safety and Wellness

Study Citation	Methodology	Safety and Wellness Concern	Results
Alaird, L.F., & Marquart, J.W. (2009). Officer perceptions of risk of contracting HIV/AIDS in prison: A two-state comparison. <i>The Prison Journal</i> .	<ul style="list-style-type: none"> • Randomly distributed surveys to medium- and maximum-security officers in two U.S. states (Missouri and Texas) • <i>N</i> = 553 • Logistic regression 	<ul style="list-style-type: none"> • Risk of contracting HIV 	<ul style="list-style-type: none"> • 54% of sample rated their risk of contracting HIV/AIDS as high. • Significant predictors: Greater HIV/AIDS knowledge led to reduced perceptions. Higher prisoner contact increased perceptions. Older and more formally educated officers were less likely to perceive risk, and those working in higher level custody prisons perceived greater risk.
Dillon, B., & Allwright, S. (2005). Prison officers' concerns about blood borne viral infections. <i>Howard Journal of Criminal Justice</i> .	<ul style="list-style-type: none"> • Randomly distributed survey to medium- and maximum-security officers in four Dublin, Ireland prisons • <i>N</i> = 272 • Logistic regression 	<ul style="list-style-type: none"> • Risk of contracting Hepatitis B, C, and HIV • Worry of contracting Hepatitis B, C, and HIV 	<ul style="list-style-type: none"> • 92.2% of sample believed they were at risk of contracting Hepatitis B. • 95.2% believed they were at risk of contracting Hepatitis C. • 94.1% believed they were at risk of contracting HIV. • Significant predictors: Lower ranking and less seasoned officers perceived greater risk of contracting any disease. Older and male officers also perceived increased risk of contracting any of the diseases. Younger and male officers worried more about contracting any of the diseases.
Ferdik, F. (2014). Examining the correlates of correctional officer risk perceptions and decision-making. Doctoral dissertation, University of South Carolina. Proquest Dissertations and Theses Abstracts.	<ul style="list-style-type: none"> • Surveys distributed to statewide population of maximum-security correctional officers (South Carolina) • <i>N</i> = 559 • OLS models 	<ul style="list-style-type: none"> • Risk of injury from six dangers (gangs, disruptive inmates, riots, inmates with mental illness, physically ill inmates, contraband) 	<ul style="list-style-type: none"> • High mean risk rating across all dangers, with a range of 7 to 35 and mean of 26.76. • Significant predictors: Longer tenured officers perceived increased risk of injury. Officers who expressed greater fear and anxiety about dangers perceived increased risk.
Garcia, R.M. (2008). Individual and institutional and organizational climate correlates of perceived danger among federal correctional officers. Doctoral dissertation, Temple University. Proquest Dissertations and Theses Abstracts.	<ul style="list-style-type: none"> • National survey data collected from U.S. federal correctional officers • <i>N</i> = 2,954 • Multi-level modeling 	<ul style="list-style-type: none"> • Composite danger index 	<ul style="list-style-type: none"> • Between low and moderate perceived danger reported by the sample (range of -2.0 to 2.0, with mean of 0.01). • Significant predictors: Individual level: Non-white and female officers perceived greater danger; higher security-level officers perceived greater danger. Institutional level: Institutions with higher percentages of non-white and female officers perceived increased danger; higher security-level institutions recorded greater perceptions of danger.

Summary of Literature on Correctional Officer Perceptions of Workplace Safety and Wellness (cont.)

Study Citation	Methodology	Safety and Wellness Concern	Results
Gordon, J.A., Moriarty, L.J., & Grant, P.H. (2003). Juvenile correctional officers' perceived fear and risk of victimization: Examining individual and collective levels of victimization in two juvenile correctional centers in Virginia. <i>Criminal Justice and Behavior</i> .	<ul style="list-style-type: none"> • Convenience sample of correctional officers in two Virginia juvenile detention facilities received surveys • N = 100 • OLS models 	<ul style="list-style-type: none"> • Fear of victimization from officers and inmates • Risk of victimization from officers and inmates 	<ul style="list-style-type: none"> • Between low and moderate perceived fear and risk of both inmate and officer victimization reported (range of 1 to 5 for each, and means between 2.3 and 2.4 across measures). • Significant predictors: Men less likely to perceive risk. Non-white officers and those with additional years of formal education were more likely to perceive risk.
Gordon, J.A., Proulx, B., & Grant, P.H. (2013). Trepidation among the "keepers": Gendered perceptions of fear and risk of victimization among corrections officers. <i>American Journal of Criminal Justice</i> .	<ul style="list-style-type: none"> • Statewide population of correctional officers employed in all adult prison facilities in an unidentified U.S. state received self-report surveys • N = 1,273 • OLS models 	<ul style="list-style-type: none"> • Fear of inmate victimization • Risk of inmate victimization • Fear of staff victimization • Risk of staff victimization 	<ul style="list-style-type: none"> • 73% of officers at least somewhat afraid of inmate victimization. 57% perceived at least moderate risk of inmate victimization. • Between 85% and 90% of officers perceived low fear and risk of staff victimization. • Significant predictors: Female, more formally educated officers and officers employed in higher security-level facilities perceived greater fear and risk of inmate victimization. • Higher security-level officers perceived greater risk of staff victimization. Older and non-white officers perceived less risk of staff victimization.
Hartley, D.J., Davila, M.A., Marquart, J.W., & Mullings, J.L. (2012). Fear is a disease: The impact of fear and exposure to infectious disease on correctional officer job stress and satisfaction. <i>American Journal of Criminal Justice</i> .	<ul style="list-style-type: none"> • Randomly distributed surveys presented to medium- and maximum-security officers across Texas • N = 2,999 	<ul style="list-style-type: none"> • Composite inventory of perceived dangerousness of the job • Fear of contracting infectious disease 	<ul style="list-style-type: none"> • Officers reported relatively high perceived danger, with a range of 5 to 25 and mean of 19.18. • Officers perceived moderate levels of fear of contracting an infectious disease, with a range of 0 to 5 and mean of 2.80.
Lai, Y.L., Wang, H.M., & Kellar, M. (2012). Workplace violence in correctional institutions in Taiwan: A study of correctional officers' perceptions. <i>International Journal of Comparative and Applied Criminal Justice</i> .	<ul style="list-style-type: none"> • Convenience sample of Taiwanese minimum- and medium-security correctional officers received self-report surveys • N = 348 • OLS models 	<ul style="list-style-type: none"> • Perceptions of fear of victimization from inmates • Perceptions of fear of victimization from co-workers 	<ul style="list-style-type: none"> • Between low and moderate levels of fear of both inmate and co-worker victimization were reported by correctional officers, with respective ranges of 1 to 4 and mean values of 2.53 and 2.06. • Significant predictors: Older officers perceived reduced fear of inmate victimization. Officers exposed to both physical and vicarious victimization perceived increased fear, and officers who reported greater trust in administration perceived less fear of co-worker victimization.

Note: OLS = ordinary least squares.