

# CORRECTIONAL OFFICER WELLNESS AND SAFETY LITERATURE REVIEW

U.S. Department of Justice Office of Justice Programs Diagnostic Center,  
Jaime Brower, Psy.D., ABPP

July 2013



## Author Note

This literature review was authored by the OJP Diagnostic Center and Jaime Brower Psy.D., ABPP. James Fort of the National Criminal Justice Reference Service provided research support. Dr. Michael White of the Arizona State University School of Criminology and Criminal Justice provided input and conducted a technical edit.

Correspondence concerning this literature review should be addressed to either Jaime Brower or the OJP Diagnostic Center, Office of Justice Programs, 810 Seventh Street, NW, Washington, DC 20531 or via phone at 1 (855) 657-0411 and e-mail at [contact@OJPDiagnosticsCenter.org](mailto:contact@OJPDiagnosticsCenter.org)



## Table of Contents

---

<b>Abstract</b>	<b>1</b>
<b>Introduction</b>	<b>2</b>
<b>Literature Review</b>	<b>3</b>
<b>Sources of Correctional Officer Stress</b>	<b>3</b>
Inmate-Related Stressors	3
Occupational Stressors	5
Organizational and Administrative Stressors	6
Psycho-Social Stressors	8
A Brief Note on Stressors Unique to Supervisors and Female Correctional Officers	9
<b>The Effects of Stress</b>	<b>10</b>
Impact on Work Environment and the Correctional Agency	10
Impact on the Physical and Mental Health of COs	10
Impact on the Home Life of Correctional Officers	11
<b>Correctional Officer Wellness Programs and Their Effectiveness</b>	<b>12</b>
Gaps in Correctional Officer Wellness Programs	12
Employee Assistance Programs (EAPs)	13
Peer Support Programs	14
Wellness Programs Designed Specifically for Correctional Officers	15
<b>Conclusion</b>	<b>18</b>
<b>Bibliography</b>	<b>20</b>

*U.S. Department of Justice Disclaimer.* This project was supported by Contract No GS-23F-9755H awarded to Booz Allen Hamilton, and its partners the Institute for Intergovernmental Research and CNA, by the Office of Justice Programs, U.S. Department of Justice. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

## Abstract

---

Health and wellness among those who work in correctional agencies is an issue that has always existed, but is just starting to get the increasing attention that it deserves. One of the greatest threats to correctional officer (CO) wellness involves the stress they encounter as a result of their occupation. This document reviews the body of literature on the causes and effects of stress for COs, and describes the available research on CO wellness programs and their effectiveness. Research demonstrates that there are four different categories of stressors for COs:

- **Inmate-related:** threat of violence/injury, inmate mental illness, substance abuse, suicide, etc.
- **Occupational (inherent to the profession):** closed work environment, hyper-vigilance, etc.
- **Organizational/administrative:** mismanagement, poor leadership, inadequate resources/ pay, understaffing, etc.
- **Psycho-social:** fear, work/family conflict, media scrutiny, etc.

The categories of stressors pose a serious threat to the mental and physical health of COs. If not properly managed, stress increases the risk for COs to suffer from heart disease, hypertension, diabetes and a host of other physical ailments. Stress also weighs heavily on COs' mental health and can lead to serious psychological distress, emotional disorders, and an elevated risk of suicide. The effects of stress also extend to the correctional agency through reduce work performance, absenteeism, employee turnover and replacement costs for new employees. More research is needed to examine stressors and their effects that are unique to the correctional field.

There is very little research on the prevalence and effectiveness of correctional officer wellness programs. Both the American Correctional Association and the National Institute of Justice have published guidelines for the development of CO wellness programs but neither is evidence-based. The law enforcement literature on Employee Assistance and Peer Support programs represent a good starting point for discussions of CO wellness programs, but the distinct differences between corrections and policing require the development of a specialty field in correctional psychology. The review concludes with several recommendations to advance this agenda.

*Keywords: CO wellness, CO stress, wellness programs, stress management*

## Introduction

Correctional officer (CO) wellness is an important issue that all correctional organizations should address (Marzuki & Ishak, 2011). One of the greatest threats to the wellness of COs involves the stress they encounter as a result of their occupation. In providing the daily management of correctional facilities in the United States, COs face a wide array of stressors that, in many cases, are unique to their profession (Morgan, 2009). Stress can have significant negative consequences for COs individually, as it affects their health and well-being, work performance, the inmates they supervise, their co-workers and their families. These consequences can decrease the safety of a correctional institution, can have substantial financial implications for an agency (e.g., turnover, poor performance, lawsuits) and can reduce the legitimacy of an organization in the eyes of its employees (COs) and those they supervise (inmates).

This review provides an overview of the academic literature on CO wellness and safety. The review first describes the major categories of stressors encountered by COs, as well as the effects or consequences of those stressors. The primary categories of stress include inmate-related stressors, occupational stressors (e.g., related to inherent aspects of the profession), organizational/administrative stressors and psycho-social stressors. The primary effects or consequences of stress range from the physical and mental health of COs, to the impact on the work environment, the correctional agency and COs' home life. Second, the review provides an exhaustive examination of CO stress management and wellness programs, highlighting the scant evidence base on the effectiveness of those programs. The review concludes with a discussion of common themes among the handful of evaluated programs and offers recommendations for next steps to 1) better address the unique stressors facing correctional officers and 2) minimize the negative consequences of those stressors on COs, their families and the correctional agency.

Due to the limited research available on CO wellness and safety, review parameters were not applied to this report. The literature reviewed for this report includes published peer-reviewed articles in professional journals, State and Federal government reports and documents, university reports and white papers, academic think-tank and association-sponsored reports, commercially-published books and trade magazines. An emphasis was to review research from the year 2000 to the present with earlier seminal research included.



## Literature Review

---

Literature was identified primarily through data base searches including the: Applied Social Sciences Index and Abstracts (ASSIA), National Criminal Justice Reference Service (NCJRS) Abstracts Database, PILOTS: Published International Literature On Traumatic Stress, Social Services Abstracts, Sociological Abstracts, EBSCOHost Academic Search Complete, MEDLINE with Full Text and Google Scholar. Emphasis was placed on finding evidence-based literature, empirical research, evaluations and best practices. As there is scant evaluative literature on the effectiveness of various programs, limited criteria were applied to select the studies reviewed and ongoing projects are also described.

### SOURCES OF CORRECTIONAL OFFICER STRESS

This section highlights the available research on four categories of stressors and their effects: inmate-related, occupational, organizational/administrative, and psycho-social. Table 1 provides an overview of the specific stressors within each category.

#### **Inmate-Related**

COs face a number of stressors that are directly tied to the inmates they supervise. Perhaps the most serious of these stressors involves the threat of violence or injury that inmates can pose for COs. The dangers associated with being a CO are real (Konda, 2012). For example, the number of non-fatal violent incidents experienced by COs is higher than for any other profession, with the exception of police officers. Various reports cite such numbers. From 1992 to 1996, there were approximately 216 nonfatal incidents for every 1,000 officers (Finn, 2000). A recent study by the National Institute of Justice (2007) found that inmate-to-staff violence results in 2,000 correctional staff member injuries annually. Moreover, data from the Bureau of Labor Statistics indicate that, from 1999 to 2008, there were 113 occupational fatalities among civilian COs; a fatality rate of 2.7 per 100,000 full time employees. Of these deaths, 40 percent were intentional fatalities, meaning not accidents or suicides.

The potential threat of injury for COs is amplified by the fact that they are required to deal with violent people and conditions on a daily basis (Morgan, 2009). The nature of the threat facing COs is also complex and varied. For instance, correctional staff may be threatened by inmates who create homemade weapons (NIJ, 2007). COs must also deal with other forms of inmate criminality and deviance, such as gang activity, drug use (and other types of contraband), inmate-on-inmate violence, sex (and the potential for rape) and manipulation (Camp, 2003). Moreover, COs must provide care, custody, and control for an inmate population that is often uncooperative (Fix, 2001).

## Literature Review

**Table 1 Summary of Stressor Categories Facing Correctional Officers\***

Inmate-related Stressors	Occupational Stressors	Organizational/ Administrative Stressors	Psycho-Social Stressors
Violence/threat of injury	Closed work environment	Poor leadership/trust/support	Individual: fear, lack of assertiveness, over-aggressive
Gang activity	Role ambiguity (rehabilitation vs. punishment)	Mismanagement / unfair policies and procedures (real or perceived)	Work/family conflict (lack of family support)
Overcrowding	Physicality of the job (standing, equipment)	No input in decision-making	Public misperceptions of profession
Mental illness	Hyper-vigilance	Poor performance evaluation/ disciplinary processes	Media/political scrutiny (scandals, escapes)
Substance abuse	Code of silence/machismo (help a sign of weakness)	Inadequate selection and training of employees	
Suicide		Inadequate pay/benefits	
Other deviance (sex, contraband)		Mandatory overtime/shiftwork	
		Understaffing/turnover	
		Inadequate resources/ equipment	
		Conflict with co-workers and supervisors	
		Few confidential services	

\*Gender-specific and supervisor-specific stressors can emerge in all categories.

## Literature Review

---

The inmate-related stressors placed on COs are exacerbated by increasing prison populations and overcrowding (Hessl, 2001; Swenson, 2008). In a recent survey, CO respondents indicated that crowding led to stress, problems with safety, increased violence and impaired job performance (Martin, Lichtenstein, Jenkot, & Forde, 2012). Further, COs at the most crowded prisons reported the highest levels of stress and fear of inmates (Martin et al., 2012).

While there are natural parallels between the work of correctional officers and police officers, in many ways the daily pressures faced by COs far exceed those experienced by police officers (Armstrong & Griffin, 2004; Lincoln, 2006). For instance, the threat of violence for police officers is periodic (e.g., during citizen encounters only; not while on routine vehicle patrol). For COs, the threat is constant during their work shift. COs, of course, are required to work inside a correctional institution while police are not. In many cases, COs may not be armed (Konda, 2012). Moreover, police officers are often able to develop positive relationships with the residents and business owners on their beat (e.g., community policing), resulting in positive feedback and appreciation for their work. COs rarely receive such positive feedback, and in many cases, even their positive interactions with inmates are brief and fleeting. Garland (2002), for example, found that CO treatment staff often struggle to develop ongoing, positive interactions with inmates, which can increase stress and the risk of burnout.

Another significant source of inmate-related stress for COs involves the psychological and emotional problems of the inmates they supervise. Prisoners are chronically and increasingly mentally ill, suicidal, impulsive and manipulative (Brower, 2013). Studies of jail and prison populations show that more than half of all inmates have mental health problems (James & Glaze, 2006). Many are in need of constant psychiatric care that includes psychotropic medication and intensive therapy. Prisoners also suffer from a range of physical health issues that require medical treatment, from serious, life-threatening disease to sexually transmitted diseases and poor dental care. For example, a recent study in the Maricopa County, Ariz., jail found high rates of sexually transmitted diseases among recently booked arrestees: urinalysis testing determined that 10.5 percent of males and 13 percent of females tested positive for chlamydia or gonorrhea (Choate, 2011). The physical and mental health needs of inmates can place significant stress on COs, particularly among treatment and medical staff.

### Occupational Stressors

Correctional officers must deal with a host of stressors that are tied to inherent aspects of the profession. For example, COs work in a closed, secure work environment with limited freedom of movement and little exposure to outdoors and natural lighting (Brower, 2013). The physicality of the job, which includes carrying equipment and prolonged exposure to walking/standing on concrete, also places stress on COs and can lead to chronic neck, back and knee injuries (Brower, 2013). The inmate behaviors they encounter on a daily basis require COs to display a high level of hyper-vigilance, boundary setting and self-control. The constant state of alertness can be taxing both physically and psychologically. Moreover, like police officers, COs have subcultural taboos regarding the acknowledgement of a need for medical or psychological assistance, as such admissions are perceived as a sign of weakness.

## Literature Review

Correctional officers may find that their professional responsibilities are ambiguous or, at times, even contradictory. COs must balance the punishment goals of incarceration with the rehabilitative goals. Morgan (2009) found that role ambiguity and role conflict placed significant stress on COs (Morgan, 2009). Dowden and Tellier's (2004) meta-analysis also found that role ambiguity and role conflict were strongly linked to job stress.

There has been very little research examining the specific stressors associated with corrections as a profession. Although there are similarities between corrections and policing, broadly applying law enforcement research to the corrections setting has been rejected by correctional leaders and scholars, who suggest that the comparison has the potential to do more harm than good (Brower, 2013). The specific differences between the two professions have not been sufficiently articulated, and there is a need for much more research in this area.

### Organizational and Administrative Stressors

The correctional agency itself, as well as how the institution is managed, serves as a significant source of stress on correctional officers (Finney et al., 2013). Common organizational stressors include: inadequate training, politics, shift assignments, heavy workload, lengthy internal investigations and decision making regarding disciplinary action, excessive disciplinary action, lack of administrative support, and poor supervision/leadership (Brower, 2013).

The National Institute of Justice (NIJ, 2005) found that a high caseload is the main organizational and administrative source of CO stress, followed by paperwork and deadlines. Several other studies have shown that work-related stress is tied to organizational factors such as shift work, job dissatisfaction, overtime, inadequate pay, and conflicts with coworkers and superiors (Keinan & Malach-Pines, 2007; Morgan, 2009; Morse, 2011; Swenson, 2008). Staffing and resource shortages as well as high turnover rates also cause stress for COs (Hessl, 2001; Swenson, 2008; Summerlin & Oehme, 2010).

Studies show that COs' perceptions of the organization, including agency support, policies and practices, can impact work-related stress among correctional staff (Griffin, 2006). In general, COs' negative perceptions of managerial practices, such as poor decision-making and mismanagement (e.g., perceived unfair work assignments) can lead to conflict with the administration and can disrupt the institution (Morgan, 2009). Similarly, Finney (2013) found that unclear goals and policies and a lack of support from the organization can lead to CO stress. An employee who perceives that he or she has a lack of input into decision making or a lack of job autonomy can experience increased levels of job stress (Lambert et al., 2006). In some studies, COs

### Definition: Job Stress and Job Burnout

Many studies use the terms "job stress" and "job burnout" interchangeably. However, job stress is different from burnout (Carlson & Thomas, 2006).

- Job stress can be defined as the relationship between the person and the environment where the environment is taxing or exceeding the person's resources or endangering his well-being (Carlson & Thomas, 2006). Job stress also refers to an employee's feelings of job-related tension, anxiety, frustration, and distress (Lambert, 2004).
- Job stress, in turn, can lead to job burnout, which is the gradual loss of caring or emotional exhaustion about a job, coworkers, or clients (Carlson & Thomas, 2006).



## Literature Review

reported that the corrections administration ignores and denies them the autonomy to be effective at their jobs (Morgan, 2009). Other administrative sources of stress include a lack of positive recognition for work performance, poor opportunities for advancement, and low salaries (NIJ, 2005).

A lack of trust between correctional officers and administrators can be a significant source of stress and can lead to CO burnout (Browner, 2013). Similarly, Lambert, Hogan, Barton-Bellessa, and Jiang (2012) found that levels of burnout were lower when workers trusted their supervisors and management. Brower (2013) suggests that accountability and standardization from the top to the bottom are vital to the development of trust. Ultimately, the responsibility for building trust lies with supervisors and the administration, not the staff (Whitener et al., 1998).

Summerlin and Oehme (2010) found a correlation between CO stress and budget cuts, hiring freezes, and layoffs experienced by the Florida Department of Corrections. The link between CO stress and an agency's fiscal well-being is particularly relevant given the economic recession that began in 2008. Over the last five years, agencies have been forced to do more with less. Fiscal pressures placed on prison administration can have ripple effects on COs, as tightening budgets can lead to inadequate training, additional shift assignments and workload, overall lack of administrative support and poor supervision/leadership (Browner, 2013). These issues can create tension between administrators and officers, which if left unaddressed, can have crippling effects on the collective level of morale of an agency.

The previous section described the social stigma among COs with regard to asking for help. When COs do overcome this occupational taboo, the availability of social services is limited and often inadequate. It is challenging for correctional facilities to find confidential treatment providers who are equipped to address the specific issues and problems facing COs. The difficulty in identifying appropriate services for correctional officers stands in stark contrast to the resources made available to inmates (Browner, 2013). This contradiction has created a perception among COs that there are more services available for those who commit crimes than there are for the ones charged with having to house and manage them (Browner, 2013). Brower suggests that this imbalance flames ongoing stress between employees and administrators.

### Financial Stress of COs

Many times, it is employees—COs in this case—that bear the brunt of an organization's financial stress. For example, COs may experience a lack of raises, the removal of benefits, less comprehensive benefit coverage, and/or higher co-pays for routine medical visits.

## Literature Review

### Psycho-Social Stressors

The last category of stressors includes a combination of individual-level CO attributes and external sources (e.g., social influences) that produce internalized stress responses. There are a host of personality-related attributes that can produce stress among COs. However, these attributes are individualized, in that they may produce stress for one CO but not for another. For example, a CO may display a lack of assertiveness in potential conflicts. Another CO may be too overly aggressive. Situations that instill fear in one CO may produce excitement in his or her colleague. Research has examined the relationship between personal factors (e.g., length of time on the job, educational level, race, gender) and levels of stress, but the findings have been mixed (Griffin, 2006; Finn, 2000) and more research is needed.

Work-family conflict is the primary outside source of CO stress. Stress at home can be caused by features of the job including shift work, dual roles at work and at home, chronic fatigue, cynicism, pessimism, sarcasm, flattened drama/stress response and exposure to trauma and other disturbing behaviors. Withdrawal and isolation at home are two common behavioral changes among COs (Brower, 2013). One reason COs may become withdrawn is because they prefer to leave their work at the office, rather than sharing their day's experiences with family members and friends. This is another area of commonality among correctional officers and the police (Brower, 2013). Moreover, it can be difficult for a CO to override innate and acquired characteristics that are considered functional and professional in the work place, but are not effective at home or in their personal lives (e.g., effective communication in the institution is different from effective communication in the home). This work-family contradiction is often referred to as "dual role conflict." For example, conflict can occur at home when excessive job stress causes a CO to displace frustration onto spouses and children, ordering family members in the same way he or she issues commands to inmates (Finn, 1998; Breen, 1986; Black, 1982). Additionally, work-family conflict can impede a CO's ability to perform his or her job because the CO is not able to handle both family and work demands (Obidoa, 2011). Research has also shown that work-family conflict can significantly impact depressive symptoms in a CO (Obidoa, 2011).

The public's misconception of corrections, and the work of COs, is another source of stress that impacts each correctional officer in a variety of ways. Many mistakenly believe COs carry firearms and fulfill the same duties as law enforcement (Brower, 2013). Others assume that what they view on television shows and in popular movies represents corrections in the real world. The media depictions of the profession are often highly distorted and inaccurate (e.g., HBO's series called "OZ"). Moreover, COs

### Definition: Work-Family Conflict

Work-family conflict is defined as conflict that arises when the roles of work and family are mutually incompatible (Morse, 2011).

## Literature Review



rarely receive accolades from their communities or the media, and when they do receive media attention, it is often negative (e.g., mismanagement, escapes). The lack of appreciation from the community, as well as negative depictions in the media, can affect self-esteem, and consequently reduce CO job satisfaction and morale and can produce stress (Brower, 2013).

### **A Brief Note on Stressors Unique to Supervisors and Female Correctional Officers**

Correctional supervisors experience all of the categories of stress described above, as well as additional stressors tied to their supervisory responsibilities (Dowden & Tellier, 2004). Wardens, deputy wardens and jail administrators may be on-call 24 hours a day, seven days a week. Administrators also must handle relations with the officers' union (including contract negotiations), staff hostility or mistrust, pressures from central administration, political scapegoating and media exposure (Finn, 2000). Line-level supervisors must walk a fine line between being responsive to the agency leadership while also representing the interests of their subordinates. Supervisors also may find themselves in the role of disciplinarian while attempting to provide support, positive feedback and rewards for exemplary work performance. There has been little research on correctional supervisors but at least one study has shown that general supervisory staff report higher levels of job stress than non-supervisory employees (Lambert, Hogan, & Allen, 2006).

Female correctional officers work in a unique and difficult environment, given its historical resistance to the integration of women and its highly masculinized orientation (Griffin, 2006). Although only a few studies have examined this issue, findings suggest that there are gender differences in correctional work environment stressors (Griffin, 2006). For example, Morgan (2009) found that CO gender is one of the most significant predictors of CO stress. Female officers are also more likely than their male counterparts to identify supervisors as a cause of work-related stress (Morgan, 2009). Griffin (2006) reported that female COs experience harassment and discrimination at the hands of colleagues and supervisors in the prison workplace. Griffin (2006) also found that, within correctional organizations, such traits as physical strength and a willingness to use force are viewed as essential job skills and are assumed to be masculine in nature (e.g., female COs are perceived to not possess these important traits). Future research should continue to explore gender-related causes of stress in the correctional environment.

## Literature Review

---

### THE EFFECTS OF STRESS

Stress experienced by correctional officers can have significant, negative effects on the work environment and agency, the physical and psychological health of the COs, as well as the home life of COs.

#### Impact on Work Environment and the Correctional Agency

CO stress and burnout can have serious consequences for the correctional agency and the work environment in the institution. Job stress can negatively affect employees' commitment to the organization (and profession), and can damage the quality of CO-supervisor relationships (Lambert, 2004). Job burnout can cause COs to withdraw from the job and can negatively impact their effectiveness at work. For example, COs have reported that stress often leads to impaired work performance, such as carrying out careless searches and inmate counts (Finn, 1998). Interviews with COs revealed that some went so far as to keep a second, unlisted phone number to avoid unwanted calls pertaining to overtime and other work matters, which can result in staffing shortages (Finn, 2000).

Finney (2013) found that stress and burnout among COs can also lead to unsafe correctional facilities, high turnover rates and lower productivity. Studies on high absenteeism have suggested that COs take sick leave as a means of coping with stress on the job (Finn, 1998; Cornelius, 1994; Ratner, 1985; O'Brien & Gustafson, 1985; Brodsky, 1982; Cheek, 1982; Dahl & Steinberg, 1979). For example, studies in both New York State and California found that correctional personnel use more sick leave than other state workers (Cornelius, 1994). Many studies have linked stress levels to staff turnover, which is chronic in many correctional facilities (Slate, 1992; O'Brien & Gustafson, 1985; Brodsky, 1982). COs who leave the profession voluntarily, or as a result of physical and psychological problems resulting from stress (see below) must then be replaced. The costs of recruitment, selection and training of new staff are considerable.

#### Impact on the Physical and Mental Health of COs

Stress can have severe health and wellness repercussions for COs. Stress can lead to serious medical problems, including heart disease, diabetes, high cholesterol, gastrointestinal problems and hypertension (Adwell & Miller, 1985; Dowden & Tellier, 2004; Morgan, 2009; Swenson, 2008). Cheek (1984) found that the average life span of correctional officers, at 59 years of age, is 16 years lower than the national average. COs may also suffer from chronic sleep deprivation as a result of working long hours (e.g., regular shifts, supplemented by mandatory shifts, special assignments, and extra duty). Shift work is one potential cause of problems in CO physical health. Shift work involves regular rotations (e.g., monthly) through different work shifts (day, evening, overnight). Research has shown that shift work causes disruptions in the biological clock and can have negative effects on cognitive, emotional and motor functions (Swenson, 2008). Other conditions contributing to sleep problems include poor eating habits and food intake, as well as chronic physical injuries from carrying equipment and prolonged walking and standing on cement (Brower, 2013).

Correctional officer stress is also linked to psychological and emotional disorders. According to a study by Morse (2011), 31 percent of COs reported serious psychological distress, which is twice the rate of the general

## Literature Review

public. In their recent national study of more than 3,000 corrections professionals, Spinaris and colleagues (2012) found that 27 percent of respondents indicated that they were suffering from post-traumatic stress disorder (PTSD) (Spinaris et al., 2012). COs who reported suffering from PTSD also cited higher levels of memory impairment, depression, sleep difficulty, obesity and skin conditions (Spinaris, et al., 2012). Occupational stress can also accelerate substance abuse among susceptible individuals (Spinaris et al., 2012; Woodruff, 1993) and research has linked substance abuse problems and stress among correctional officers (Morgan, 2009). Research has also shown that rates of depression and anxiety are higher among prison staff than other occupations (Tiesman, Hendrick, Bell, & Amandus, 2010).

Stress can also lead to elevated rates of severe depression and suicide among COs (Morgan, 2009). Stack and Tsoudis (1997) found that the rate of suicide among correctional officers is 39 percent higher than the rest of the working-age population. A more recent study found that COs have a suicide rate that is twice as high as the rate of police officers and the general population (New Jersey Police Suicide Task Force, 2009). Researchers have devoted significant attention to suicide among law enforcement officers and this research offers insights on suicide among COs (Brower, 2013). For example, research on law enforcement suicide suggests that familial issues, such as divorce and separation, play a significant role in increasing the risk for suicide, particularly when combined with an administrative investigation on an officers' potential misconduct (Brower, 2013). According to the New Jersey Police Suicide Task Force Report (2009), access to firearms was a significant risk factor contributing to law enforcement suicide; the report found that 94 percent of police suicides involved the use of a service weapon.

One of the few studies of CO suicide, the Bureau of Labor Statistics' (BLS) Census of Fatal Occupational Injuries, shows that 38 percent of the intentional fatalities suffered by COs were suicides by self-inflicted gunshot wounds (Konda, 2012). However, using BLS data to study suicide prevalence among COs is complicated because the BLS only reports suicides that occur in the workplace. Suicides that occur at home or elsewhere are classified as non-occupational and are not part of the BLS data (Tiesman et al., 2010). Much more research is needed to develop a better understanding of the prevalence and causes of suicide among COs (Konda, 2012; Morgan, 2009).

### Impact on the Home Life of Correctional Officers

The stressors experienced by correctional officers and the effects of those stressors described above can create significant problems in the family and home life of COs (Maslach, 2001). Workplace stress can negatively affect interpersonal and familial

### Recommendation

Swenson (2008) recommends some ways to facilitate COs' adjustment at home from shift work including:

- Post schedules
- Adopt good sleep habits
- Avoid use of risky coping mechanisms, including medications and alcohol.

## Literature Review

---

relationships, lead to difficulties in developing trust with others, can increase the likelihood of divorce and can leave COs with a lack of connectedness and empathy to human suffering (Brower, 2013). As a result of CO stress, behavioral problems may also arise, including anger with family and friends (Morgan, 2009). In addition, problems in the home can exacerbate many of the emotional and psychological problems highlighted above, such as depression, anxiety and isolation (Morse, 2011; Swenson, 2008).

### **CORRECTIONAL OFFICER WELLNESS PROGRAMS AND THEIR EFFECTIVENESS**

Although there is a fair amount of literature on the sources and effects of stress on correctional officers, few studies have reviewed intervention programs designed to treat COs, or sought to assess the effectiveness of those programs (Armstrong & Griffin, 2004). As a result, this section starts with a general discussion of the gaps in correctional wellness programming, as well as reviews of Employee Assistance and Peer Support programs commonly used in law enforcement, with a focus on lessons learned from research on these types of police programs. The review then examines the results from a handful of studies evaluating the impact of correctional wellness programs.

#### **Gaps in Correctional Officer Wellness Programs**

While the field of police psychology has grown over the last century, the notion of combining psychological principles and methods to corrections has not yet come to fruition. Not only is there no field of correctional psychology, but there are no established professional organizations to address the growing psychological needs of this specialty occupation. Many of the already established associations and societies related to corrections focus on criminology (e.g., causes of crime) and the inmates directly, rather than the correctional officer. The American Psychological Association officially recognized police psychology as a psychological specialty in 2008 and the American Board of Professional Psychology began issuing Board Certification in Police and Public Safety Psychology in 2012. The implications of this certification for law enforcement are significant and likely signal the evolution of graduate educational programs and post doctorate training for this specialty. The already-established professional organizations in the field of police psychology have applied guidelines and best practice modalities from current psychological research to the field of law enforcement. This has generated specialized treatment practices, agency consultation and valuable training.

While some correctional agencies may provide counseling programs that will treat general mental health concerns, it is difficult for facilities to find confidential treatment providers who are adequately abreast of best practices specific to corrections. More times than not, general mental health providers are not aware of pre-employment psychological selection practices and laws, fitness-for-duty evaluations, treatment for stress and PTSD, the benefits of psychological debriefings and knowledge of the various job-specific individual and family issues that come from direct work in the field of corrections. As a result, well-intentioned mental health providers may struggle with the initial legitimacy testing, boundary probing, resistance and rapport building obstacles presented by the corrections client.

While broadly applying law enforcement research and methodologies to the corrections setting has been criticized, there are lessons to be drawn from health and wellness research in law enforcement. For example,

## Literature Review

---

law enforcement research provides useful information regarding the consequences of shift work, the long-term effects of stress and trauma exposure, basic suicide prevention strategies for high stress occupations and the benefits of conducting post-incident debriefs. This evidence base also offers some insights regarding potentially beneficial treatment modalities, trainings and prevention strategies that could be extended to correctional officers. In short, correctional researchers may not necessarily need to “reinvent the wheel.” Clearly, correctional wellness programming will require some significant restructuring, but the parallels between the professions suggest that research findings from law enforcement are relevant as a starting point to improving the overall health and wellness of correctional officers (Brower, 2013).

### Employee Assistance Programs (EAPs)

In general, an EAP is designed to offer professional services to assist 1) work organizations in addressing productivity issues and 2) clients in identifying and resolving personal concerns such as health, marital, family, financial, substance use, legal, emotional or other issues that may affect job performance. Law enforcement (and some correctional) agencies generally offer two different types of Employee Assistance programs: internal and external. Internal EAPs, which are housed within the agency, can be quickly and easily accessed. Internal EAP providers likely have a thorough understanding of the host agency and the current issues impacting the officers. Alternatively, internal EAPs can be seen as an extension of the agency and therefore, may not be as readily used if the employee is dissatisfied with the agency or is concerned about confidentiality (e.g., the social stigma described earlier). External EAPs may be viewed as independent from the officer's agency and may be deemed as more confidential. However, external EAPs have drawbacks including: required travel to an outside location, scheduling problems (e.g., working around different shifts and mandatory overtime) and the external provider's lack of knowledge of current agency issues.

Both internal and external EAPs usually consist of several components. In 2010, the Employee Assistance Professionals Association (EAPA) published updated standards and professional guidelines for EAPs. These standards are meant to promote high quality EAPs and educate purchasers of employee assistance services on the policies, procedures and activities they should expect from their provider. The essential components of a quality EAP as outlined by the EAPA guidelines include:

- 1) Consultation with, training of, the organization's leadership to manage troubled employees, enhance the work environment and improve employee job performance.
- 2) Active promotion of the availability of assistance services to employees, their family members and the work organization.
- 3) Confidential and timely provision of services for employee clients with personal concerns that may affect job performance.
- 4) Use of constructive confrontation, motivation and short-term intervention with employee clients to address problems that affect job performance.
- 5) Referral of employee clients for diagnosis, treatment and assistance, as well as case monitoring and follow-up services.

## Literature Review

---

- 6) Assist organization in establishing and maintaining effective relationship with treatment and other service providers, and in managing provider contracts.
- 7) Evaluation of the effects of EAP services on work organizations and individual job performance.

Brower (2013) identified several other key elements for a successful EAP in a correctional setting. First, the program should be administered by specialized professionals with advanced knowledge of the corrections field; it must be easily accessible; and it must be equipped to treat a wide range of mental health issues, substance abuse and trauma (with 24/7 availability). The EAP staff also should be familiar with the agency, policies and procedures and current issues impacting employees and their families.

Second, a critical incident response team, along with a trauma psychologist, is vital to providing the necessary support to officers who have been exposed to trauma/disturbing behaviors. Members of such a team should be tasked with checking in with COs following critical events. As clinical assessments are necessary for COs and their families in such circumstances, corrections administrators should maintain a referral network of clinical providers that offer critical incident stress management services.

Last, the EAP should also offer specialty, in-service and family trainings addressing stress and wellness issues that impact COs and their families. Many family members and loved ones can benefit from counseling after a specific tragedy and/or life altering issue has occurred. Families may also need help and education on how to support their CO through these issues and to identify red flags should their officer struggle following such an event.

### Peer Support Programs

Peer Support programs have been around in various industries for many years, including law enforcement (originally called "stress units" by police departments). Peer Support programs initially focused on providing aid to officers following critical incidents but many programs have expanded to help officers with the day-to-day difficulties faced both on the job and off. Peers can offer support and are able to bridge the gap between professional services and no service. They offer easy access to assistance, quick response and a level of comfort not easily established with outside professionals. The programs require peer mentors to receive training on basic counseling skills, which is updated through quarterly (or regular) meetings. Program oversight by a psychologist is also common. Peer Support programs are fairly inexpensive for both the agency and the officers, especially compared to formal EAPs (Roland, 2011).

The Defense Centers of Excellence (2011) conducted a comprehensive review of Peer Support programs to identify best practices. The review highlighted five key elements to a successful program:

- Social support
- Experiential knowledge
- Trust
- Confidentiality
- Easy access (Defense Centers of Excellence, 2011).



## Literature Review

---

Other key elements for a successful Peer Support program include clearly articulated policies, role boundaries, careful selection and ongoing training of peer support mentors and pre-established de-selection criteria (for removing peer mentors from the program). Brower (2013) states that, "Giving peer supporters an opportunity to meet as a team, to support each other, and improve their skills through ongoing training and supervision from their team's mental health consultant helps to ensure long-term success of the team."

### Wellness Programs Designed Specifically for Correctional Officers

The general descriptions of EAPs and Peer Support programs provide an important backdrop for discussion of CO wellness. In addition, there is a small body of literature that has described wellness programs specifically designed for correctional officers. Unfortunately, very few studies have sought to evaluate program effectiveness. This literature is reviewed below.

Finn (1998) reviewed the most common types of stress management and wellness programs available to COs and their families as well as some of the limitations of these programs. Finn (1998) noted that many CO training academies provide several hours of instruction devoted to identifying potential stress sources, symptoms and coping mechanisms, though most trainings appear to be generic rather than focused specifically on correctional work. The same can be said of in-service training for COs. Finn (1998) did find that most prisons and large jails have specially trained in-house teams that respond after critical incidents such as hostage taking, riots, the murder of an officer or inmate suicides. Following such an event, the in-house team provides counseling and trauma services to correctional staff. Agencies that do not have such in-house teams typically contract with outside organizations to provide critical incident services (Finn, 1998).

Finn (1998) identified a few prisons and sheriff's departments have in-house units devoted exclusively to treating CO stress as a result of the day-to-day business of their profession. However, this is quite rare. As a result, COs in need of services for stress are typically referred to outside, private counseling organizations. The National Institute of Justice (Delprino, 2001) reported similar findings from their national survey of correctional agencies. Finn (1998) concluded that the chief obstacles to establishing effective and comprehensive stress management programs include the failure of administrators to recognize the need for stress services, the lack of empirical evidence indicating their benefits or effectiveness (for COs and the agency) and the lack of funding to support such programs.

More recently, several leadership organizations in corrections have published "best practice" guides for addressing correctional officer stress, though these guides are not evidence-based. In 2000, NIJ published *Addressing Correctional Officer Stress* (Finn, 2000), which presents seven case studies of well-established, replicable stress management programs. The NIJ guide outlines several keys to successful program implementation including:

- Appoint skilled, dedicated staff who can withstand the pressures of helping others who experience stress.
- Get participation of top administrators, union officers and line officers.
- Maintain confidentiality.
- Provide an array of services, not just critical incident debriefings.

## Literature Review

- Train supervisors to identify and refer officers who may be experiencing stress.
- Involve family members as clients and supporters.
- Evaluate the program's effectiveness and include cost-benefit analysis.
- Change the correctional organization itself in ways that will reduce officer stress (Finn, 2000).

The NIJ publication (2000) also suggests several ways to reduce organizational causes of stress, including making overtime voluntary, improving the shift schedule and showing sensitivity to the work of high-stress correctional units (Finn, 2000).

The American Correctional Association (ACA) published a guide in 2005 called *Stressed Out*. This guide highlights techniques that managers and supervisors can employ to reduce staff stress, such as:

- Emphasize positive, upward communication.
- Remain accessible.
- Avoid the assumption that things are running smoothly if there are no complaints.
- Practice the "management by walking around" (MBWA) method of supervision.
- Be proactive.
- Rotate work assignments frequently.
- Promote teamwork.
- Never discipline a subordinate in front of others.
- Show your appreciation.
- Acknowledge and reward above-average job performance.
- Initiate effective intervention when confronted with a burned-out employee.
- Make basic, self-help recommendations to burned-out employees (Cornelius, 2005).

A handful of other studies have identified factors related to the successful implementation of correctional wellness programs, including widespread marketing of the initiative; and concerted efforts to overcome traditional "machismo" attitudes regarding the need for help as a sign of weakness (Van Fleet, 1992; Ratner, 1985; Brodsky, 1982). Keenan and Malach-Pines' (2007) surveyed more than 300 Israeli correctional officers and asked them to identify work-related factors that would reduce their stress. The COs reported the following: improve the attitude of superiors; increase salaries; reduce workloads; improve the public image; increase

### CO Health Promotion in Oregon

A project currently underway at the Oregon State Department of Corrections could yield useful evidence for improving the health of high-risk COs. This project will assess a team-based, peer-led health promotion intervention, and a one-on-one health coaching intervention based on motivational interviewing. The evaluation is testing whether the program can improve COs' physical fitness, while reducing stress, injuries, rates of absenteeism and healthcare costs. (Oregon Health & Science University, 2013). Results from this study should be available in 2014.

## Literature Review

---

social cohesion; improve the promotion process; improve physical fitness; place prison personnel close to their homes; increase social support; and provide stress management programs (Keinan & Malach-Pines, 2007).

Other general recommendations on ways to reduce CO stress include addressing staffing issues, providing adequate training, as well as appropriate supervisor and social support, improving facilities (including fitness facilities), following proper operational procedures, implementing training and using appropriate protective equipment to protect COs from violent inmates (Brough & Williams, 2007; Nabeel, 2007; Owen 2006). Lambert (2004) found that correctional administrators should look at the work environment to improve job satisfaction of correctional staff and should seek to reduce role ambiguity and clearly define staff responsibilities. Brower (2013) added that correctional agencies should have stringent standards and training for leadership positions in the organization. Also, agency leaders should balance their disciplinary responsibilities with positive feedback, incentives and rewards for exemplary performance. Moreover, COs should be given a voice in determining incentives or rewards for top performance.

In one of the few empirical studies to date, the Institute of HeartMath recently assessed the impact of its "Power to Change Performance" initiative, a stress reduction program for COs based on emotion-refocusing and restructuring techniques (McCraty, Atkinson, Tomasino, & Bradley, 2009). Seventy-five COs from the Northern California Youth Correctional Center were randomly assigned to experimental and wait-list control groups. COs in the experimental group were given positive emotion-focused techniques designed to reduce stress and negative affect, increase positive affect and self-regulation skills, enhance health and improve cognitive performance (Childre & Cryer, 2000; McCraty et al., 2006). The two-day program included five different treatment components: risk factor identification, freeze-frame decision-making, coherent communication, power tools for inner quality and workplace applications. Researchers found the program helped COs manage their stress and reduce its impact on their health. More specifically, findings indicated that COs in the experimental group experienced significant reductions in fatigue, anger, interpersonal sensitivity, hostility and overall psychological distress. COs also demonstrated increases in positive outlook, gratitude, productivity, motivation and goal clarity. Notably, these attitudinal and emotional changes were complimented by significant improvements in cholesterol, glucose, heart rate and blood pressure (McCraty et al., 2009).

A few other studies have also shown promising results. Farbstein, Farling, & Wenner (2010) analyzed the impact of installing a mural with a nature scene in a jail booking/intake area, which was previously painted white. Intake officers experienced notable improvements in heart rate after installation of the mural, including slower heart rates at the beginning of the shift; slower escalation of heart rate throughout the work shift; and significant increases in "log power," which indicates consistent lower heart rate and less stress (Farbstein, Farling, & Wenner, 2010). Correctional agencies in Bosnia and Herzegovina held a series of lectures on psychological support, coping mechanisms and education and attendees experienced reductions in stress levels (Mehmedbasic et al., 2009). Lagassee & McGarthy (2001) evaluated a similar program in the U.S., called the FOCUS program, and reported favorable responses regarding the program content, though COs did express strong feelings of distrust for the correctional administration, especially mid-level management.

## Conclusion

Research demonstrated the correctional environment is a place of unique stressors, stemming from a variety of sources. Table 1 in this review provides a general overview of the categories and specific types of stressors. First, inmates provide a direct source of stress for COs, most notably in terms of the threat of violence/injury. However, constant exposure to inmate suffering, mental and physical problems and inmate-on-inmate violence also weigh heavily on COs. Second, although many of the stressors facing COs are shared by law enforcement officers, others are unique to corrections. The closed work environment, role ambiguity and hyper-vigilance place significant pressure on COs. Third, there are a host of organizational/administrative issues that can place stress on COs, from mismanagement and poor leadership to inadequate resources, training and pay. Last, psych-social sources also generate stress and their effects can be individualized (i.e., the same stressor may affect two COs very differently). Although there is a sizeable body of work on correctional officer stressors, future research should continue to explore this topic and should focus specifically on the issues that confront both female COs and supervisors.

The literature shows that stress takes a heavy toll on COs, contributing to burn out, job turnover, and serious physical and mental health issues. Correctional officers experience elevated rates of heart disease, hypertension, high blood pressure and diabetes. Stress is also linked to high risk of psychological and emotional disorders, including suicide. More research is needed to develop a better understanding of the suicide rate for COs, as well as the causes and correlates of CO suicide (Konda, 2012; Morgan, 2009). CO stress also negatively affects the correctional agency in a number of ways, from reduced work performance and productivity to absenteeism, CO turnover and replacement costs for new staff.

Given the highly stressful environment in which COs work and the serious consequences of those stressors, there is surprisingly little information about the prevalence and effectiveness of correctional officer wellness programs. A few studies highlighted basic principles for supportive managerial styles and modifications to work environment and culture (e.g., ACA and NIJ guides) but these recommendations are not evidence-based. In simple terms, there is little known about the effectiveness of different strategies and programs designed to reduce CO stress and its effects. For two exceptions, see the emotion-regulation techniques highlighted by McCarty et al., 2009; and the peer-driven health promotion strategy being studied in Oregon (Oregon Health and Science University, 2013). While important advances have been made with regard to police psychology, similar developments in corrections have yet to occur. The research on policing offers a good starting point for developing an evidence base in correctional wellness, as illustrated by the research supporting Employee Assistance and Peer Support programs. Nevertheless, the numerous unique features of corrections as a profession require the development of a specialty field of expertise in correctional officer stress and psychology.

### ABPP Standards for Specialty/ Subspecialty

- **Specialty** is a defined area in the practice that connotes special competency acquired through formal education, training, and experience. A specialty must be represented by an examining board which is stable, national in scope, and reflects the current development of the specialty. A specialty board is accepted for affiliation following an intensive self-study and a favorable review by the ABPP affirming that the standards for affiliation have been met.
- **Subspecialty** is an identifiable area of practice that requires special educational, training, and/or professional experiences. A subspecialty is a concentrated area of knowledge, skills, and attitudes that is a focus within at least one existing specialty area. For more information, see: <http://www.abpp.org/i4a/pages/index.cfm?pageid=3279>.

## Conclusion

---

### Recommendations

The review of available literature on correctional officer wellness has identified a number of gaps in our knowledge base. There are several important next steps that will advance a research agenda to fill these gaps.

- More research is needed to improve the understanding of correctional stress, its effects and how it can be effectively managed. Correctional leadership organizations and correctional scholars should work with funding agencies at the state and federal level as well as private foundations to develop funding programs to foster research in correctional officer wellness.
- Leadership organizations in corrections, such as the National Sheriff's Association and the American Correctional Association, should develop (perhaps jointly) a Corrections Section in their organization devoted to issues involving officer wellness, suicide prevention and other key physical and mental health issues as they emerge. Correctional leaders should also collaborate with correctional scholars through the American Society of Criminology and the Academy of Criminal Justice Sciences. This multidisciplinary Corrections Section could lay out a research agenda, identify best practices and offer guidance on pressing issues related to correctional officer wellness and safety.
- Subject matter experts (SMEs) in policing, corrections and psychology should convene a meeting to identify key similarities and distinct differences between the two professions. Correctional SMEs could then establish a set of specific working guidelines and principles for the development of a specialty field in correctional psychology.
- Once the working guidelines have been developed, correctional leaders and SMEs should initiate a dialogue with the American Board of Professional Psychology (ABPP) regarding the creation of a specialty or subspecialty in correctional psychology. The ABPP began issuing Board Certification in Police and Public Safety Psychology in 2012. This certification would have a number of benefits for the correctional field, including specially designed educational and training programs and the advancement of treatment approaches specific to the needs of correctional officers. These developments would significantly advance our understanding of correctional officer stress and its effects as well as interventions that effectively maintain and improve correctional officer wellness.

## Bibliography

---

- Adwell, S. T., & Miller, L.E. (1985). Occupational Burnout. *Corrections Today*, 47, 70-72.
- Armstrong, G., & Griffin, M. (2004). Does the job matter? Comparing correlates of stress among treatment and correctional staff in prisons. *Journal of Criminal Justice*, 32, 577-592.
- Black, R. (1982). Stress and the Correctional Officer. *Police Stress*, 5(1), 10-16.
- Breen, L. (1986, February). *The Forgotten Keepers: Stress and the Correctional Employee*. Ottawa, Canada, Solicitor General.
- Brodsky, C. M. (1982). Work Stress in Correctional Institutions. *Journal of Prison & Jail Health*, 2(2), 74-102.
- Brough, P., & Williams, J. (2007). Managing Occupational Stress in a High-Risk Industry. *Criminal Justice and Behavior*, 34(4), 555-567.
- Brower, Jaime. (2013). Review and Input of Correctional Officer Wellness & Safety Literature Review. OJP Diagnostic Center. Office of Justice Programs.
- Camp, S.D., Gaes, G., Langan, N.P., & Saylor, W.G. (2003). The influence of prisons on inmate misconduct: A multilevel investigation, *Justice Quarterly*, 20(3), 503-533.
- Carlson, J., & Thomas, G. (2006). Burnout Among Prison Caseworkers and Corrections Officers, *Journal of Offender Rehabilitation*, 43(3), 19-34.
- Cheek, F. E. (1982). Reducing Staff and Inmate Stress. *Corrections Today*, 44(5), 72-76, 78.
- Cheek, F. E. (1984). *Stress Management for Correctional Officers and Their Families*. Alexandria, VA: American Correctional Association.
- Childre, D., & Cryer, B. (2000). *From Chaos to Coherence: The Power to Change Performance*. Boulder Creek, CA: Planetary.
- Choate, D. (2011). *Alert on STDs*. Phoenix: Center for Violence Prevention and Community Safety, Arizona State University.
- Cornelius, G. F. (1994). *Stressed Out: Strategies for Living and Working in Corrections*, 1st Ed. Alexandria, VA: American Correctional Association.
- Cornelius, G. F. (2005). *Stressed Out: Strategies for Living and Working in Corrections*, 2nd Ed. Alexandria, VA: American Correctional Association.
- Dahl, J. & Steinberg, S. (1979). Management of Stress in Corrections - Participant's Handbook Washington, DC, National Institute of Justice. Retrieved April 11, 2013 from <https://www.ncjrs.gov/pdffiles1/Digitization/75874NCJRS.pdf>.

## Bibliography

---

- Defense Centers of Excellence: For Psychological Health and Traumatic Brain Injury (2011). Best Practices Identified for Peer Support Programs from [www.dcoe.health.mil](http://www.dcoe.health.mil).
- Delprino, R. P. (2001). Work and Family Support Services for Correctional Officers and Their Family Members; a National Survey, State University of New York at Buffalo/National Institute of Justice Sponsored. Retrieved April 15, 2013 from <http://www.ncjrs.gov/pdffiles1/nij/grants/192292.pdf>.
- Dowden, C., Tellier, C. (2004). Predicting Work-Related Stress in Correctional Officers: A Meta-Analysis. *Journal of Criminal Justice*, 32(1), 31-47.
- Employee Assistance Professionals Association. *EAPA Standards and Professional Guidelines for Employee Assistance Programs* (2010).
- Farbstein, J., Farling, M., & Wenner, R. (2010). Developing the Evidence for Evidence-Based Design: The Impact of Simulated Nature Views on Stress in a Correctional Setting. New York, NY: American Institute of Architects. Retrieved April 4, 2013 from <http://www.aia.org/akr/Resources/Documents/AIAB086133?ssSourceSiteId=null>.
- Finn, P. (1998). Correctional Officer Stress: A Cause for Concern and Additional Help. *Federal Probation*, 62(2), 65 - 74.
- Finn, P. (2000). Addressing Correctional Officer Stress: Programs and Strategies. Issues and Practices. Washington, DC, National Institute of Justice. Retrieved April 16, 2013 from <https://www.ncjrs.gov/pdffiles1/nij/183474.pdf>.
- Finney, C., Stergiopoulos, E., Hensel, J., Bonato, S., & Dewa, C.S. (2013). Organizational Stressors Associated with Job Stress and Burnout in Correctional Officers: A Systematic Review. *BMC Public Health*, 13(1), 82-94.
- Fix, C. (2001). Critical Incident Stress Management Program: Responding to the Needs of Correctional Staff in Pennsylvania. *Corrections Today*, 63(6) 94.
- Garland, B. (2002, December). Prison treatment staff burnout: Consequences, cause, and prevention. *Corrections Today*, 64(7), 116-120.
- Griffin, M. L. (2006). Gender and Stress: A Comparative Assessment of Sources of Stress among Correctional Officers. *Journal of Contemporary Criminal Justice*, 22(1), 5-25.
- Hessl, S. M. (2001). Police and corrections. *Occupational Medicine*, 16, 39-49.
- James, D., & Glaze, L.E. (2006). *Mental Health Problems of Prison and Jail Inmates*. Washington, DC: Bureau of Justice Statistics.
- Keinan, G., & Malach-Pines, A. (2007). Stress and Burnout among Prison Personnel: Sources, Outcomes, and Intervention Strategies. *Criminal Justice and Behavior*, 34(3), 380-398.

## Bibliography

---

- Konda, S., Reichard, A., & Tiesman, H. (2012). Occupational Injuries among U.S. Correctional Officers, 1999-2008, *Journal of Safety Research*, 43, 181-186.
- Kuehl, K. Pilot Program Announcement: *Health Promotion in Correctional Officers*, Oregon Health & Science University, Retrieved April 8, 2013 from <http://www.ohsu.edu/xd/research/centers-institutes/croet/oregon-healthy-workforce-center/projects/health-correctional-officers.cfm>.
- Lagasse, S., & McGarthy, M. (2001). Focus Program, Final Report. East Hartford, CT: Connecticut Dept. of Correction/National Institute of Justice-Sponsored. Retrieved April 11, 2013 from <http://www.ncjrs.gov/pdffiles1/nij/grants/186762.pdf>.
- Lambert, E. (2004). The Impact of Job Characteristics on Correctional Staff Members, *The Prison Journal*, 84(2), 208-227.
- Lambert, E. G., Hogan, N.L., & Allen, R. (2006). Correlates of Corrections Officer Job Stress: The Impact of Organizational Structure. *American Journal of Criminal Justice*, 30(2), 227 - 246.
- Lambert, E. G., Hogan, N.L., Barton-Bellessa, S., & Jiang, S.(2012). Examining the Relationship between Supervisor and Management Trust and Job Burnout among Correctional Staff. *Criminal Justice and Behavior*, 39(7), 938-957.
- Lambert, E. G., Hogan, N.L., Jiang, S., & Jenkins, M. (2009). I Am Fried: Stressors and Burnout among Correctional Staff. *Corrections Compendium*, 34(2), 16 - 23.
- Lincon, J.M., Chen, L-H, Mair, J.S., Biermann, P.J., Baker, S.P. (2006). Inmate-made weapons in prison facilities: assessing the injury risk. *Injury Prevention*, 12, 195-198.
- Martin, J. L., Lichtenstein, B., Jenkot, R., & Forde, D. (2012). "They Can Take Us over Any Time They Want": Correctional Officers' Responses to Prison Crowding. *Prison Journal*, 92(1), 88-105.
- Marzuki, N. A. & Ishak, A.K. (2011). Towards Healthy Organisation in Correctional Setting: Correctional Officers' Wellness, Occupational Stress and Personality. *International Journal of Social Sciences And Humanity Studies*, 3(2), 355-65.
- Maslach, C., Schaufeli, W., & Leiter, M. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422.
- McCraty, R., Atkinson, M., Tomasino, D., & Bradley, R. T. (2006). The Coherent Heart: Heart-Brain Interactions, Psychophysiological Coherence, and the Emergence of System-Wide Order. Boulder Creek, CA: HeartMath Research Center, Institute of HeartMath.
- McCraty, R., Atkinson, M., Lipsenthal, L., Arquelles, L. (2009). New Hope for Correctional Officers: An Innovative Program for Reducing Stress and Health Risks. *Applied Psychophysiology and Biofeedback*, 34(4), 251-272.



## Bibliography

---

- Mehmedbasic, A. B., Salcic, D., Kucukalic, A., Fadilpasic, S., Cakovic, L. Mehmekika-Suljic, E., & Masic, I. (2009). Impact of Psychoeducation on Professional Stress Reduction among Prison Guards. *Materia Socio Medica*, 21(1), 24-26.
- Morgan, W. (2009). Correctional Officer Stress: A Review of the Literature 1977-2007. *American Jails*, 23(2), 33-34, 36-43.
- Morse, T., Dussetschleger, J., Warren, N., & Cherniack, M. (2011). Talking About Health: Correction Employees' Assessments of Obstacles to Healthy Living, *Journal of Occupational and Environmental Medicine*, 53(9), 1037-1045.
- Nabeel, I., Baker, B. A., McGrail, M. P., Jr., & Flottemesch, T. J. (2007). Correlation between physical activity, fitness, and musculoskeletal injuries in police officers. *Minnesota Medicine*, 90(9), 40-43.
- National Institute of Justice. (2005). Justice Stress Among Probation and Parole Officers and What Can Be Done About It. Retrieved April 17, 2013 from <https://www.ncjrs.gov/pdffiles1/nij/205620.pdf>.
- National Institute of Justice. (2007). Improving Correctional Officer Safety: Reducing Inmate Weapons. Retrieved April 17, 2013 from <https://www.ncjrs.gov/pdffiles1/nij/grants/220485.pdf>.
- New Jersey Police Suicide Task Force Report (2009). Trenton, NJ, New Jersey Police Suicide Task Force. Retrieved April 10, 2013 from [http://www.nj.gov/lps/library/NJPoliceSuicideTaskForceReport-January-30-2009-Final\(r2.3.09\).pdf](http://www.nj.gov/lps/library/NJPoliceSuicideTaskForceReport-January-30-2009-Final(r2.3.09).pdf).
- Obidoa, C., Reeves, C., Warren, N., Reisine, S., & Cherniack, M. (2011). Depression and Work Family Conflict Among Corrections Officers, *Journal of Occupational and Environmental Medicine*, 53(11), 1294-1301.
- O'Brien, B. & Gustafson, D. (1985). Stress in Corrections Officers: Iowa Department of Corrections Study. Washington, D.C., National Institute of Corrections. Retrieved April 15, 2013 from <http://static.nicic.gov/Library/004028.pdf>.
- Owen, S. S. (2006). Occupational Stress among Correctional Supervisors. *The Prison Journal*, 86(2), 164-181
- Ratner, A. M. (1985). Administrative Sources of Occupational Stress in a Correctional Setting. Sacramento, CA: AIDE Behavioral Sciences.
- Roland, Jocelyn E. (2011). "Developing and Maintaining Successful Peer Support Programs in Law Enforcement Organizations." *Kitaeff*; 509-524.
- Slate, R. N. (1992, November). *Stress Levels and Thoughts of Quitting of Correctional Personnel: Do Perceptions of Participatory Management Make a Difference?* New Orleans, LA: American Society of Criminology.

## Bibliography

---

- Spinaris, C. G., Denhof, M. D., & Kellaway, J. (2012). Posttraumatic Stress Disorder in United States Correctional Professionals: Prevalence and Impact on Health and Functioning. Florence, CO: Desert Waters Correctional Outreach. Retrieved April 10, 2013 from [http://www.correctionsfatigue.com/images/PTSD\\_Prevalence\\_in\\_Corrections\\_2012.pdf](http://www.correctionsfatigue.com/images/PTSD_Prevalence_in_Corrections_2012.pdf)
- Stack, S. J., & Tsoudis, O.(1997). Suicide Risk among Correctional Officers: A Logistic Regression Analysis. *Archives of Suicide Research*, 3(3), 183-186
- Summerlin, Z., K. Oehme, et al. (2010). "Disparate Levels of Stress in Police and Correctional Officers: Preliminary Evidence from a Pilot Study on Domestic Violence." *Journal of Human Behavior in the Social Environment*, 20(6): 762-777.
- Swenson, D. (2008). Shift Work and Correctional Officers: Effects and Strategies for Adjustment. *Journal of Correctional Health Care*, 14(4), 299-310.
- Thiesman, H., Hendrick, S., Bell, T., & Amandus, H. (2010). Eleven Years of Occupational Mortality in law Enforcement: The Census of Fatal Occupational Injuries, 1992-2002. *American Journal of Industrial Medicine* 53: 940-949.
- Van Fleet, F. (1992). *Correctional Officers and Their Families: Dealing with Stress. The Effective Correctional Officer*. Laurel, MD: American Correctional Association.
- Violanti, M. (1996). *Police Suicide: Epidemic in Blue*. Springfield, IL: Charles C. Thomas.
- Whitener, E., Brodt, S., Korsgaard, M.A., & Werner, J. (1998).Managers as Initiators of Trust: An Exchange Relationship Framework for Understanding Managerial Trustworthy Behavior. *Academy of Management Review*, 23, 513-530.
- Woodruff, L. (1993).Occupational Stress for Correctional Personnel, Part Ii. *American Jails*, 7(5), 71-72, 74-76.