

“Education and Its Potential Relationship with Correctional Officer Stress”

by Brian Evans M.S., Christopher M. Bellas Ph.D., John Hazy, Ph.D., and C. Allen Pierce Ph.D.
Youngstown State University

Abstract

Being a correctional officer is a stressful job for many reasons. There are inconclusive results in the literature regarding job stress and educational attainment. The purpose of this study was to investigate the possible relationship between education level and correctional officer stress. A sample of 228 correctional officers from four correctional institutions within the Ohio Department of Rehabilitation and Correction (ODRC) participated in this study as written questionnaire respondents. Contrary to expectations, level of education did not impact stress among correctional officers. In line with prior studies of stress among criminal justice professionals, the correctional officers in this study expressed major levels of stress with two-thirds expressing medium or high levels of stress. Further research is warranted into the ways in which correctional officers manage their stress and the potential intervening role education has in stress reduction strategies.

Introduction

The World Health Organization (1996) reported that, by 2020, stress-related mental health conditions will be highly prevalent and will be second only to heart disease (Kang, 2010). Additionally, stress is an important precipitant factor in depression and in the impairment of cognitive function (McEwen, 2000). Furthermore, these physical and mental health conditions that are caused by stress are increasing the economic burden on healthcare systems and societies globally (Kang, 2010). In the U.S., stress-related disorders cost more than \$42 billion in 2001, mostly due to the repeated use of healthcare services (Kalia, 2002). Persons suffering from stress-related illnesses are three-to-five times more likely to visit the doctor and six times more likely to be hospitalized than non-sufferers (Kang, 2010).

Factors affecting stress levels

According to a Georgia study, correctional officers have the highest level of stress, followed by police officers, and then probation officers (Patterson, 1989). There are several reasons that account for the high levels of stress that correctional officers endure, some of which include: inmates, organization, administration, and outside sources (Rosefield, 1983). Correctional officers have to deal with inmate acts of violence, such as hostage-taking, riots, homicide, rape, fights, and inmate suicide (Finn, 1998, 2000; Cornelius, 1994). These acts of violence are compounded by inmates using weapons (Black, 2001). These weapons include homemade knives, "shanks" (usually made out of sharpened metal), and ropes made of woven bed sheets, and combination locks that are placed in socks. Correctional officers also have to deal with issues of understaffing, mandatory overtime, and role conflict (Brodsky, 1977, 1982; Cheek, Miller, 1982b; Cherniss, 1980; Childress, Talucci, & Wood, 1999; Delmore, 1982; Finn, 1998, 2000; Gerstein, Topp, & Correll, 1987; Gillian, 2001; Harris, 1980, 1983; Keinan, Malach-Pines, 2007; Lambert, Hogan, & Barton, 2002; Rosefield, 1983; Drory, Shamir, 1982; Stock, Skulley, 1994). Another stressor relates to officers using force to protect coworkers, themselves, and inmates, sometimes without the support of administration. Moreover, in most institutions, inmates outnumber officers by a ratio as high as 100: 1 (Morgan, 2009). Being vastly outnumbered by the inmates leads to stress because officers realize that ultimately they would be helpless in an inmate takeover just due to the inmate numbers involved. Furthermore, correctional officers know that they cannot watch every inmate at all times which means that inmates are getting away with inappropriate behavior. Officers are also expected to take

on multiple roles as custodians, disciplinarians, and rehabilitators (Cheek, Miller, 1982b). Finally, based on reports in the media that portrays correctional officers negatively, public scrutiny pushes officers further into an already closed subculture (Morgan, 2009). All this stress can lead to significant health problems, such as: heart disease, poor circulation, high-blood pressure, and aches and pains of the hands, neck, or back (Abdollahi, et. al, 2002). Furthermore, several behavioral problems have been linked to officer stress, such as: anger towards inmates, family, or friends; impatience; frequent accidents; complacency; and the use of illegal substances (Cheek, et. al, 1984). Interestingly, a study found that the average life expectancy for correctional officers is 59 years old, which is below the life expectancy for other law enforcement personnel, and well below the national average (Childress, et. al, 1999).

Previous studies have demonstrated that stress is related to absenteeism rates, internal conflict, and low employee morale, which have adverse effects on the work environment (Auerbach, Quick, Pegg, 2003; Eugene, 1999). "People who are burned out have not learned to effectively manage stress by relaxing or positively coping with stressors" (Cornelius, 2005, p.16). There are several stressors that can trigger a response in correctional officers: short staffing; inmate demands; substandard equipment; lack of support from supervisors; poor communication; boredom; excessive noise; exposure to body fluids and disease; emergencies; assaults; violence; inmates under the influence; escapes (Cornelius, 2005). The symptoms of stress can include headaches and signs of impatience. The key to a correctional officer being able to put in thirty years of service and be healthy enough to enjoy retirement hinges on the officer's ability to cope with the everyday stressors which are inherent in a correctional officer's work environment. Currently, the Ohio Department of Rehabilitation and Correction (ODRC) does offer some Employee Assistance Programs (EAP's), which are stress-assistance programs that help employees recognize and overcome stress-related problems that interfere with their work performance (Cornelius, 2005). Correctional officers can either call the Ohio EAP office by receiving such information from their supervisor or from the personnel department where guidance is administered, confidentially, to find the employee needing assistance. Additionally, the ODRC offers project H.E.A.L., which stands for Helping Employees through Awareness and Learning. This program was implemented by Director Terry Collins in response to staff suicides in recent years which had become a problem for ODRC in 2004 (Collins, 2005). H.E.A.L. provides a resource guide for employees including suicide education; crisis hotline phone numbers; united behavioral health services; mental health services; addiction services; domestic violence counseling; veterans resources; financial resources; family resources; grief counseling; workplace violence prevention; and critical incident stress management (Collins, 2005). The goal of these intervention programs is wellness, which includes promoting a healthy lifestyle to include a proper diet, exercise, and the utilization of other coping techniques to help prevent the psychological and physiological problems associated with stress.

Goals of This Study

The correctional field is constantly changing and with the influx of younger offenders, the stress level of officers is expected to rise. Each officer feels stress in a different way and responds to it differently. Finding ways to help officers reduce stress levels and cope with stress more effectively is the driving force of this research project, coupled with the fact that there have been no studies conducted in Ohio regarding correctional officer stress. One of the most important goals in managing stress is to be mentally and physically healthy enough so as not to fall into the exhaustion stage (Whittlesey, 1986).

Literature Review

Correctional officers are responsible not only for the custody of prisoners, but also the correction of their misbehaviors and their rehabilitation (Wright, 1993; Armstrong, Griffin, 2004). At times, correctional officers have to manage their workload under very dangerous environments, including formidable organizational and operational roadblocks. Interestingly, a study found that the average life expectancy for correctional officers is 59 years old, which is below the life expectancy for other law enforcement agencies, and well below the national average (Childress, et. al, 1999). All occupations have a certain level of stress inherent in the job; however, the nature of some work environments is found to be more stressful than others. The literature cites the following occupations with high levels of stress: business executives, lawyers, bus drivers, police officers, and correctional officers (Kobasa, 1982; Bartone, 1989; Patterson, 2003; Armstrong, Griffin, 2004; Pollak, Sigler, 1998).

Anatomy of Stress

Several world crises have occurred over the past two decades that have produced a wave of hysteria for everyone world-wide. From deadly terrorist attacks to civil wars to overthrown dictatorships to natural disasters, this world has become a cesspool of fear, anxiety, and stress. Moreover, the media magnifies this human mental state affecting the way we think, feel, and act.

The mental health profession has identified four different forms of stress: acute stress and episodic stress are considered most common; chronic stress and traumatic stress are the most serious of all and often require professional help (Bento, 2012). Stress can contribute to problems such as migraines, anxiety, depression, heart attack, gastrointestinal distress, stroke, and chronic aches and pains (Bento, 2012). There are four main sources of stress: perceived threats of any kind, whether physical, social or financial which are related to needs either being denied or jeopardized. As threats increase, fear becomes evident and the responses of flight, fight, and freeze also become apparent while thwarting peoples' hope for the future (Bento, 2012). These two sources of stress, threats and fear, trigger the amygdala (the sensory part of the brain that produces threat responses) alarm and set off the mindless compulsive activities that are so often destructive, which is at the core of what we have identified as the consequence of Post-Traumatic Stress Syndrome (Bento, 2012). A third source of stress is the experience of cognitive dissonance, which occurs when there is a gap between what we do and what we think, an internal disorientation that can trigger emotional waves of anger, elicit a sense of unworthiness, and result in a lack of self-esteem. Uncertainty is the fourth source of stress, not being able to predict or control the future that fosters an anxiety that can easily become a preoccupation (Bento, 2012). These four main sources are interrelated, and in fact, are so prevalent that it has become the new norm of the twenty-first century (Bento, 2012). Finally, these stressors, which can be regarded as aspects of a vicious cycle of subtle terror, appear in countless forms and varying levels of intensity. Furthermore, it is well known that chronic stress can result in physical disease, as well as, mental illness (Kang, 2010). Moreover, stress has been theorized as a major contributing factor in many physical diseases, including gastric ulcers, gastritis, various types of cancer, and asthma (Goldstein, Kopin, 2007).

Correctional Officer Duties

The term correctional officers refers to many occupational groups including adult or juvenile officers; officers working with day, evening, or night shifts; officers working in rural or urban locations; officers in male or female facilities; and officers working in facilities ranging from

minimum to maximum security (Senol-Durak, et. al, 2006). Furthermore, correctional officers' role includes various responsibilities (Senol-Durak, et. al, 2006). Correctional officers are responsible for not only the custody of prisoners, but also the correction of their misbehaviors, as well as, rehabilitation (Wright, 1993; Armstrong, Griffin, 2004). Their roles vary. First, correctional officers have an important and influential role in the lives of many inmates as they enforce institutional rules, give guidance, and serve as role models for the inmates while teaching effective interpersonal skills and personal conduct. Second, they supervise prisoners, enforce rules and regulations of the prison, prevent disturbances, assaults, or escapes, and maintain security and safety (Cooperstein, 2001; Peterson-Badali, Koegl, 2002). Third, they deal with guiding, mentoring, facilitating, developing, and watching inmates (Hemmens, Stor, 2000). Fourth, they have to control mail and visitors for possible illegal imports (Cooperstein, 2001). Fifth, they are accountable for both creating and maintaining a humane environment within the walls (Hepburn, Knepper, 1993). However, when considering the requirements of their work, correctional officers perceive their roles as, "being impotent key keepers" (Kommer, 1993). Their daily working conditions range from boring to dangerous (Cooperstein, 2001). Evidence shows that those who perceive their work as dangerous have been found to be most susceptible to stress (Triplett, et. al, 1999).

The sometimes physical nature and requirements of a correctional officer are also demanding and can be stressful. This is particularly evident in those physically demanding occupations in which safe and efficient job completion is critical to the protection of life and (or) property (Gledhill, et al., 2001a, Gledhill, et. al, 2001b; Deakin, et. al, 1996; Gledhill, 1995, Gledhill, 1997; Gledhill, Jamnik, 1992a, 1992b; Jackson, 1994; Jamnik, Gledhill, 1992; Marchant, et. al, 1995; Human Resource Directorate, RCMP NHSPC, 1981). A 1999 ruling by the Supreme Court of Canada, commonly referred to as the *Meiorin Decision*, has enabled the development of certain mandatory physical requirements for correctional officers as a condition of employment. Furthermore, this ruling establishes that a pre-employment fitness screening test can only be mandated for physically demanding public safety occupations in which "ineffective or inefficient job performance is a threat to the safety of self, co-workers, the public or property" (Canadian Charter of Rights and Freedoms, 2007; Canadian Employment Equity Act, 1995; Canadian Human Rights Commission, 2007; Criminal Code of Canada, 2004; Supreme Court of Canada, 1999). The occupation of correctional officer fits the aforementioned physically demanding public safety occupation.

The Delphi survey methodology (Thomas, Nelson, 2001) was employed to establish a consensus among 190 incumbent correctional officers (COs) regarding the list of workplace scenarios and specific job tasks which were rank-ordered by importance, from most physically demanding, and most frequently occurring on-the-job to those tasks which ineffective or inefficient completion could compromise public safety (Jamnik, et. al, 2010). There were six scenarios that were selected for testing using the above criteria, which include: an assault on a correctional officer by an inmate which leads to control techniques and application of restraints; two inmates fighting which leads to use of force to control and restrain inmates; an escort to segregation where a resisting inmate is aggressive and unwilling to move from a living unit to segregation; a cell search where there is suspected contraband, or a homemade weapon in a cell and inmates are unwilling to cooperate; an attempted inmate escape which poses a risk to the public; and an institutional fire alarm where smoke has been detected (Thomas, Nelson, 2001). The physical abilities required to handle these scenarios includes at least moderate strength to be able to wrestle and control the inmates, and to sometimes lift dead weight by physically carrying an inmate to a particular destination. Furthermore, a moderate amount of cardio-vascular energy is needed to run to where

the scenario is taking place, i.e. running up and down stairs and hallways, and then being able to assist co-workers in breaking up a fight or de-escalating a disturbance where much of the time pepper spray is being used along with unarmed self-defense techniques. Flexibility is another requirement, as bending and twisting is needed to successfully conduct a cell search or restrain a combative inmate. In summary, the job of a correctional officer is very physically demanding and stress is inherent as officers face a multitude of scenarios on a daily basis; however, this is only part of the story.

Correctional officers are also required to complete additional daily duties, which have been ranked by order of importance. The first requirement is working rotating posts and directing all inmate activity in the assigned area. Also, maintaining security on the perimeter road utilizing vehicle patrol. Officers working the control center have one of the most important, and sometimes most stressful job of monitoring gates and operating security controls such as a base radio system, fence alarms, fire alarms, and utilizing the personal computer for opening doors and gates, and monitoring personal body alarms. Moreover, some correctional officers are assigned hospital duty which entails being in the public eye and ensuring that medical staff and the public are safe from the inmates. Counting the inmates is a crucial assignment as an escape would jeopardize public safety and so inmates are counted several times a day to ensure that all the inmates are documented (Ohio Department of Rehabilitation & Correction, 2011). As is evident, stress can stem from any one of these required tasks for correctional officers, especially on days where several incidents occur; however, there are other stressors that correctional officers face which hinge on the mental health aspect of stress.

Correctional Officer Stress

People who work as employees in a correctional institution, especially as correctional officers, experience a great amount of stress through the course of their daily activities. Stress that is experienced on a daily basis leads to a high turnover rate, as well as, several health issues. The varied stressors that correctional officers face and how some officers cope with these stressors as opposed to other officers, will be explored in the present study.

Generally, correction officer stress is associated with certain realities that are present in the institution, which include the fact that, typically, inmates outnumber officers by a ratio as high as 100:1 (Morgan, 2009). The administrative rules created by the agency are such that the officer has limited authority to act on their own as they manage dorms, cell blocks, mess halls, recreation yards, and other areas of the institution. Moreover, violence can erupt at any place at any time where officers are required to use force to protect a coworker, themselves, or another inmate. Many times the correctional administration has to make a split-second decision as to whether or not to support the use of force (Morgan, 2009). Specifically, the literature organizes correctional officer stress into four areas: inmates, organization, administration, and outside sources (Rosefield, 1983). Several authors have found that officers have to deal with people who have violent records (Castle, Martin, 2006; Armstrong, Griffin, 2004; Drory, Shamir, 1982; Cullen, et. al, 1985; Grossi, Berg, 1991; Triplett, et. al, 1996, 1999). They work in a place where fear, confrontation, and violence are ever present (Finn, 1998; Kauffmann, 1988; Keinan, Malach-Pines, 2007; Long, Vogues, 1987; Martinez, 1997). According to Camp, Gaes, Langan, and Saylor (2003); Finn (1998); and Inwald (1982), increased inmate violence, inmate crowding, inmate density, dangerous gang activity, the physical setting, and lack of recognition of officer authority, all intensify stress levels. Furthermore, both Finn (1998, 2000) and Cornelius (1994), articulate the specific acts of inmate violence that

impact officer stress, including hostage-taking, riots, homicide, rape, fights, and inmate suicide. Also, Black (2001) states that stress may occur because of weapons that inmates may carry and use in violent assaults.

The correctional organization as a whole is also a source of stress with understaffing, mandatory overtime, rotating shifts, low or inadequate pay, role ambiguity and conflict, and problems with coworkers (Brotsky, 1977, 1982; Cheek, Miller, 1982b; Cherniss, 1980; Childress, et. al, 1999; Delmore, 1982; Finn, 1998, 2000; Gerstein, et. al, 1987; Gillian, 2001; Harris, 1980, 1983; Keinan, Malach-Pines, 2007; Lambert, et. al, 2002; Rosefield, 1983; Drory, Shamir, 1982; Stock, Skultety, 1994). Cheek and Miller (1982b) state that correctional officers are expected to wear many hats: custodian, disciplinarian, and rehabilitator. Many become confused when this is coupled with a lack of autonomy leading to role conflict. According to Finn (1998), stress levels rise when a co-worker behaves inappropriately with inmates. Examples of this include officers having sexual relations with inmates, bringing drugs and other contraband inside the institution for inmates, or otherwise showing favoritism towards an inmate or group of inmates. Moreover, job-related stress in a maximum-security institution is higher than other types of institutions (Dowden, Tellier, 2004). As Cullen et. al (1985) noted, maximum-security prisons hold the most serious offenders which presents unique threats to the security of the institution. Furthermore, in a study of 155 front-line personnel, Van Voorhies, et. al (1991) found that officers working in maximum-security placements were adversely affected by workplace stress in comparison to those officers working in other types of security level placements who experienced lower levels of stress. Results are inconclusive from studies conducted on correction officer stress when education is used as an independent variable. However, one thing is true, correctional officer stress is real. Lindquist and Whitehead (1986) found that 68% of correctional officers considered their job to be at least moderately stressful, while approximately 33% reported experiencing symptoms of burnout. Hepburn (1989) observed that education was seen as a mechanism for increasing correctional officer satisfaction by promoting professionalism. Robinson, Porporino, and Simourd (1997) found that the more highly educated correctional officers were, the less satisfied they were with their jobs; however, they reported lower levels of stress. Furthermore, Simpson (1980) contends that, "coping skills and education reduce stress by reducing the probability of a negative life event occurring", and that, "education could (through reducing generalized anxiety and ego involvement), reduce the stress experienced when negative life events occur" (p. 460). Levi (1981) agrees and highly recommends education and training as tools for stress management. Finally, correctional officers with higher education levels were found to report higher levels of personal accomplishment (Morgan, et. al, 2002).

When correctional officers feel stress, several behavioral and physical problems manifest themselves, such as heart disease, poor circulation, high-blood pressure, teeth grinding, and aches and pains of the hand, neck, or back (Abdollahi, 2002; Cornelius, 1994; Mearns, Mauch, 1998; Stinchcomb, 2004; Wells, et. al, 2006). Furthermore, Cheek (1984), Cornelius (1994, 2001), Lambert, et. al (2006), and Wells, et. al (2006) listed several behavioral problems, such as exhibiting anger toward inmates, family, or friends, and impatience, frequent accidents, complacency, and the use of illegal substances. Moreover, a study conducted by Lariviere (2001) regarding federal correctional officers found that the rise in academic credentials had a strong link to more positive attitudes.

Work stress has been investigated by many researchers because of its deteriorating impact on mental and physical health (Chen, et. al, 2001; Tennant, 2001; Lim, Teo, 1999). Specifically, individuals exposed to work-related stress reported behavioral and emotional problems, such as

depression, anxiety, burnout, and alcohol abuse (Tennant, 2001; Patterson, 2003; Curbow, et. al, 2000; Lowman, 1993; Anderson, 2000; Muchinsky, 1997). In addition to mental and physical health problems, work stress can also cause certain organizational problems, such as dissatisfaction, job turnover, high absenteeism, increase in job accidents, and decrease in job performance (Tennant, 2001; Curbow, et. al, 2000; Lim, Teo, 1999; Lu, et. al, 2005; Hills, Norvell, 1991; Frankenhaeuser, 1991). For these reasons, clarifying the sources and understanding the causes of work-related stress are crucial to improve stress reduction interventions, and to increase job satisfaction, job performance, and quality of life (Patterson, 2003; Stanton, et. al, 2001).

When defining stress levels, several factors should be considered, i.e. environmental factors, individual perception, and coping resources available, to include social support (Lu, et. al, 2005; Patterson, 2003; Groot, Brink, 1999). Furthermore, stress is related with such personality characteristics as negative affectivity and hopelessness (Gunthert, et. al, 1999; Dixon, et. al, 1991). Therefore, such personality and organizational factors should be considered in the examination of work stress (Senol-Durak, et. al, 2006). Other factors are noise, career development, organizational climate and structure, efficiency, participation in decision-making, demands of job, security of job, relationship with others in work, physical environment of the workplace, and work-family conflicts (Tennant, 2001; Chen, et. al, 2001; Sahin, Batigun, 1997; Groot, Brink, 1999; Chan, et. al, 2000). Also, the nature of some work environments can be more stressful than others, such as business executives, lawyers, bus drivers, police officers, and correctional officers (Kobasa, 1982; Bartone, 1989; Patterson, 2003; Armstrong, Griffin, 2004; Pollak, Sigler, 1998). In contrast to 10 or 20 years ago, experienced correctional officers have reported greater stress due to cultural diversity, public research, increased civil suits, increased negative advertisement of the job in society, and shift of expectations from the correctional institutions, towards being a treatment facility rather than a punitive mechanism (Cooperstein, 2001; Moon, Maxwell, 2004; Armstrong, Griffin, 2004).

There are some work stressors that are specific to correctional officers related to: prisoners, perceptions of dangerousness, implementations of reforms, unpredictable and traumatizing events, limited opportunity for utilizing talents, shift work, difficulty in scheduling, and isolation from family and co-workers (Goldberg, et. al, 1996; Moon, Maxwell, 2004; Armstrong, Griffin, 2004; Dowden, Tellier, 2004; Van Voorhis, et. al, 1991; Auerbach, et. al, 2003; Bazemore, et. al, 1994; Cooperstein, 2001; Wright, 1993; Triplett, et. al, 1996).

On the basis of a preliminary study, the sources of work stress for correctional officers can be grouped under five different domains, namely, "work overload", "role conflict and role ambiguity", "inadequacies in physical conditions of prison", "threat perception", and "general problems" (Senol-Durak, et. al, 2006). The results from a study conducted by Senol-Durak, et. al (2006) showed, interestingly, that hopelessness was strongly correlated with "inadequacies in physical conditions of prison" while the correlations between hopelessness and other subscales of the Work Stress Scale for Correctional Officers (WSSCO) were not strong to this extent. The possible explanation of the strong relationship between the correctional officers' pessimism and "inadequacies in physical conditions of prison", is that the correctional officers' negative views of the future are especially affected by inadequacies of physical conditions which remain stable, compared to other conditions that are more prone to change (Senol-Durak, et. al, 2006). Also, it was demonstrated that depressive people report more stressful events than those not reporting depression (Hammen, 1991). Consistent with this expectation, the participants with high depressive symptomatology reported more work stress than those with low depressive symptomatology (Senol-Durak, et. al, 2006).

Stress Levels in Police vs. Correctional Officers

A comparison can also be drawn from correctional officers and police officers relating to job stress levels. For example, findings from a survey of 186 police officers contend that the higher the level of education the patrol officer has, the lower the perceived value of the given stressor (Dantzker, 1990). Moreover, patrol officers with a high school-only education did indicate a higher, overall, perceived stressor value while the officers with a master's degree had the lowest overall mean (Dantzker, 1990).

In 2008, the Florida State University's Institute for Family Violence Studies in the College of Social Work, partnered with every major criminal justice agency in Florida to launch the LEFP, a unique initiative created to reduce and prevent officer-involved domestic violence (Summerlin, Oehme, 2010). Small studies suggest that domestic violence occurs at a greater rate in the officer population, with estimates as high as 40% greater than that of the general public (Reese, 1986; White, Honig, 1995).

The literature has focused primarily on various causes of stress among police officers and on the models for stress relief that might be implemented by departments (Summerlin, Oehme, 2010). Conclusions have indicated that officer stressors range from the frustrations of bureaucratic red tape to ambiguity in roles and responsibilities (Violanti, Aron, 1995; Brooks, Piquero, 1998; Harpold, Feemster, 2002). Sources of stress may also include routine daily tasks and critical incident experiences; the latter includes losing a fellow officer and taking a life in the line of duty (Lord, 1996; Gershon et. al, 2002; Harpold, Feemster, 2002; Liberman, et. al, 2002). Moreover, Tewksbury and Higgins (2006) indicated in earlier research that though all criminal justice officers experience many of the aforementioned stressors, especially the bureaucratic red tape, daily challenges, and critical incident experiences, each branch of criminal justice officers (i.e. police, correctional) experienced challenges distinctive to that particular environment.

The devastating impact of these work-related stressors on the individual has been frequently discussed, with estimates suggesting that nearly 80% of all diseases can be attributed to stress; health risks include hypertension, heart disease, and depression (Cooper, Kirkcaldy, & Brown, 1994; Peltzer, et. al, 2009). Ammons (2005) suggests that officers also "bring home" their training, specifically their use of power, force, and authority, and then abuse such skills with intimate partners, committing the very crimes that they are commissioned to stop as sworn officers of the state.

In studies of police officers, 25% to 30% of participants have been identified as struggling with stress-based health problems (Terry, 1981; Lord, Gray, & Pond, 1991; Brown, Campbell, 1994; Van Hasselt, et. al, 2008). These high levels of stress can compromise the safety and well-being not only of the officers themselves, but of those who interact with the officers outside of the job (Van Hasselt, et. al, 2008). Comparatively, studies of work-related stress have indicated that correctional officers as a group also experience high levels of stress (Dowden, Tellier, 2004). Research on correctional officers has further suggested that long-term exposure to job stress is related to illness, health problems, mental health issues, and shortened life spans (Cheek, Miller, 1983; Cheek, 1984; Dowden, Tellier, 2004; Mitchell, et. al, 2000; Woodruff, 1993). Lambert et. al (2009) elaborated on the effect of organizational stressors on correctional staff, linking this to lower job satisfaction, less commitment to the employing agency, and higher levels of attrition.

Stressors for correctional officers can be grouped into two categories, operational and organizational. Operational stressors refer to daily operating tasks, from completing paperwork, to using force, to preventing escapes. Conversely, organizational stressors refers to the leadership, management and supervision of the institution, ranging from a supervisor's management style to

treatment of employees (to include favoritism), to division of responsibilities not being equal (McCreary, Thompson, 2006). There is agreement that both of these types of stress pose heightened concerns in law enforcement and criminal justice occupations (Evans, Coman, 1993). A study conducted in Florida utilized surveys completed by police and correctional officers where respondents were asked to describe how much stress each item, including operational and organizational items, has caused over the past 6 months, using a seven-point scale from one (no stress at all) to seven (a great deal of stress). The responses to operational stressors had strong similarities between the two groups of officers (Summerlin, Oehme, 2010). Overall, both police and correctional officers reported low amounts of stress when handling the daily challenges of operational stressors (Summerlin, Oehme, 2010). Moreover, prior research indicates that departmental politics and challenges with administration and management are often reported as being more stressful than daily (operational) tasks (Toch, 2002). Consistent with Toch (2002), all officers (both in the police sample and in the correctional sample) reported higher stress levels among organizational stressors when compared to the operational questions (Summerlin, Oehme, 2010). However, correctional officers overall reported significantly higher stress levels than police officers when processing certain organizational stressors (Summerlin, Oehme, 2010). Leadership issues, including a supervisor's style, treatment of employees, and division of responsibilities, were part of the organizational stressor list (Summerlin, Oehme, 2010). A total of 46.2% of correctional respondents reported experiencing high stress related to inconsistent leadership styles at work, nearly 18% higher than police officer respondents (Summerlin, Oehme, 2010). Correctional officers reported high levels of stress, 41.2% reporting that the absence or deficiency of resources needed for optimal job performance caused this level of stress (Summerlin, Oehme, 2010). Furthermore, beyond the financial struggles that manifest themselves through lack of resources or inadequate equipment, the most significant fiscal challenge reported by responding officers was staff shortages, with an alarming 73.3% of correctional officers reporting this as causing a high level of stress, compared to only 26.4% of police officers (Summerlin, Oehme, 2010).

Ohio state legislatures will continue to be faced with budgetary challenges over the next couple of years with important decisions to be made directly impacting the ODRC, which will continue to see no marked decrease in inmate population. When making those budgetary calculations, legislators should not ignore the hidden costs of correctional officer stress, which previous research has shown to have a direct impact on officers, their job satisfaction, and their health (Cheek, Miller, 1983; Cheek, 1984; Dowden, Tellier, 2004; Mitchell, et. al, 2000; Woodruff, 1993). Simply downsizing is not the answer, and the adverse effects of stress can have a profound impact on health care costs for the state, thus creating a larger deficit. Even considered strictly as a fiscal matter, the cost of physical and mental health problems associated with stress and the associated erosion of officers' job performance represents a poor bargain for the state's taxpayers (Summerlin, Oehme, 2010). Furthermore, officers may resent what they perceive to be inequitable job responsibilities that result from increased duties caused by funding cuts (Summerlin, Oehme, 2010). Given the potentially destructive impact of stress on officers' health and well-being revealed by previous research, policy makers should proceed with caution when reducing budgets and requiring officers to do "more with less" (Summerlin, Oehme, 2010).

Correctional Officer Turnover

Undoubtedly, many organizations know that employee turnover negatively impacts productivity (Udechukwu, 2009). The study of employee turnover can be conceptually understood

by assessing work attitudes such as job satisfaction (Udechukwu, 2009). Moreover, several studies have found job satisfaction to be related to employee turnover, particularly voluntary turnover (Mobley, et. al, 1979). Other work attitudes that have also been shown to impact turnover include organizational commitment, intentions to leave, and perceived alternative employment (Mobley, et. al, 1979).

Voluntary turnover refers to employees themselves deciding to resign from their employment with the agency either because they do not wish to work for the department anymore, they have found another job, or because their medical condition does not warrant them fit for the job anymore. Previous research on this topic has revealed that voluntary turnover for correctional officers at one state correctional agency in 2002 accounted for 77% of the total correctional officer turnover; and for 2003, it was 76% (Udechukwa, 2009).

The direct and indirect costs of correctional officer turnover are generally classified as separation costs, learning costs, and acquisition costs (Mobley, et. al, 1979). Unfortunately, many organizations fail to either acknowledge turnover as a legitimate organizational problem or challenge, or to even bother assessing the impact and consequences of the turnover costs on their strategic and day-to-day operations (Udechukwa, 2009). Furthermore, jobs are created with knowledge, skills, and abilities (KSA) in mind, and both the position and its associated KSAs subsequently reflect the quality of employees hired (Udechukwa, 2009). The employee will be trained and gain valuable experience over time, which costs money and personal investment, but the organization will lose the dollars and experience when the employee leaves the job (Udechukwa, 2009). Farkas (2001) contends, "Officers attributed their job satisfaction to the extrinsic aspects of the job, including pay and job benefits" (p.26).

Information gathered from one southern U.S. state correctional agency's intranet site indicated that 45% of correctional officers who voluntarily left had a high school diploma, 34% had some college experience, 9% had some technical training, and 6% had a bachelor's degree (Udechukwa, 2009). The highest percentage of those who left, 42%, did so voluntarily because of other job opportunities, and a full 16% of the respondents who voluntarily left concluded that better job offers most influenced their decisions to leave; however, 80% declared that they were willing to work for the agency again (Udechukwa, 2009).

The prison environment in which correctional officers work is a dangerous one as previously noted, and a visit by Udechukwa (2009) at one prison site revealed this dangerousness as unrestrained inmates, with anti-authoritarian behavior, were seen walking around the officers who had no credible means of defending themselves against any unforeseen acts of violence by the inmates, beyond the radios they carry around. Lambert (2001) gives some reasons why there should be more focused research on correctional staff turnover when he states, "Correctional staff are the asset of any correctional agency. In fact, they are the heart and soul of any most important correctional organization. Many staff, however, voluntarily quit. The cost of this turnover is high for correctional organizations" (p.72). As a result, a state correctional agency could potentially undermine public safety if it ignores correctional officers' satisfaction (Udechukwa, 2009).

Approximately 20% of correctional officers employed by the agency under investigation leave their job each year costing at least 150% of an employee's salary for replacement (Udechukwa, 2009). This cost is estimation between the leaving employee's one-year pay and benefits and that person's two-year pay and benefits (Ramlall, 2004). Furthermore, correctional officers must control significant numbers of inmates with limited resources, and do so by making instant decisions with a wide range of discretion; therefore, the nature of this environment is likely to decrease the level of satisfaction of a correctional officer faced with the challenges of incarcerating inmates (Udechukwa,

2009).

The humanitarian perspective of job satisfaction suggests that people deserve to be treated fairly and appropriately, and that the level of satisfaction or dissatisfaction of employees may reflect the extent to which employees experience good treatment in an organization (Udechukwa, 2009). Satisfaction may also be indicative of the emotional and psychological well being of the employees (Udechukwa, 2009). Conversely, the utilitarian perspective of job satisfaction presupposes that the satisfaction or dissatisfaction of employees can lead to behaviors that affect the functioning of the organization (Udechukwa, 2009).

Theoretical Framework

In discussing the issue of satisfaction, it is important to consider the needs hierarchy developed by Abraham Maslow which designates needs in stages of fulfillment, beginning with life (physiological) needs; for safety and security; for belongingness and affection, for respect and self-respect, and finally for self-actualization, whereby the lowest need must be almost fully met before a person can advance to the next level of need (Maslow, 1968). This concept can be related to stress as Maslow (1968) contends, "if this essential core of the person is denied or suppressed, he gets sick sometimes in obvious ways, sometimes in subtle ways, sometimes immediately, sometimes later" (p.4). Furthermore (Maslow, 1968), hypothesizes that the fulfillment of these needs produces a sense of achievement and healthy self-esteem. After several years of research, Maslow discovered that when the deficiencies of these needs were eliminated, so too was the sickness. Regarding motivation, Maslow hypothesizes that healthy people, the ones able to satisfy most of their needs, then are motivated to self-actualize their talents, fate, and destiny. In essence, when correctional officers feel safe in their environment, then they can progress towards other goals which will increase their level of satisfaction with employment.

Given the high and costly turnover rates for correctional officers, it can be argued that the officers' met or unmet needs create the potential for dissonance between their levels of satisfaction and the challenges they face in incarcerating inmates (Udechukwa, 2009). Because some correctional officers may be motivated intrinsically by the need to assert authority over inmates, the dissonance between officers' level of satisfaction and the challenges of incarcerating those inmates is potentially reduced because, for them, some physiological need is being met (Udechukwa, 2009). Conversely, those whose motivation is to pay student loans, pay mortgages, or make car payments, asserting authority over inmates may likely create a high level of dissonance between their levels of extrinsic satisfaction and the tasks of incarcerating belligerent inmates because there is some level of physiological dissatisfaction (Udechukwa, 2009). An unsatisfied correctional officer at the physiological or safety level can potentially lead to them voluntarily leaving the organization, or may lead to misconduct of that officer towards other staff and inmates resulting in inmate assaults on staff and workplace violence involving co-workers.

Maslow (1968) explains how the hierarchy of needs works when a lower level need is met, it is removed from the forefront and instead of resulting in rest, the person realizes that they want to fulfill the need at the next level. "They grow upon themselves and instead of wanting less and less, such a person wants more and more of, for instance, education" (p. 30). In essence, Maslow states that people who have their lower level needs met do not become satisfied, but more motivated to reach the higher levels and to reach the coveted self-actualization lifestyle which sits at the top of the hierarchy. Furthermore, Maslow (1968) explains that people who are self-actualizers place their wishes and plans at the forefront of their lives, not the stresses of their environment. This is significant for correctional officers and all staff because when a person feels safe and secure, and

feel that they belong in their environment, then they can move forward either to advance their educational level, get more involved in training opportunities, or simply to become a better, more efficient correctional officer, which not only is good for the correctional officer, but the organization as a whole. Maslow (1968) goes on to state, "the anxiety-free person can be more bold and more courageous and can explore and theorize for the sake of knowledge itself" (p. 65).

Because promotional opportunities or any real career ladder exists for most correctional officers, officers tend to compete furiously with each other for such opportunities as elevation to captain, deputy warden, and warden which creates a workplace environment of the survival-of-the-fittest within an even larger, even more competitive world of belligerent inmates (Udechukwa, 2009). Furthermore, any feelings of love and belongingness are easily squashed in this situation, and social identity, which also helps explain the lack of teamwork among correctional officers, becomes a figment of officers' imagination. Many officers become disillusioned, and, faced with the reality of a dead-end career, ultimately leave (Udechukwa, 2009).

Udechukwa (2009) contends that the last two levels of needs, esteem and self-actualization, are rarely, if ever met, in a correctional setting by most correctional officers, except for those who, through fate or faith, end up as captains, deputy wardens, and wardens. Unfortunately, each prison studied in one southern state had between 100 and 500 correctional officers who must aspire one day to become the next of a few dozen higher-level jailers (Udechukwa, 2009). The slim probability of realizing such an aspiration leads many correctional officers to conclude they will neither have self-esteem from their career or ever become self-actualized in a correctional setting (Udechukwa, 2009).

Because correctional settings have yet to address the esteem and self-actualization needs of officers, high correctional officer turnover will continue to be a reality (Udechukwa, 2009). When promotional opportunities and a realistic career ladder remain largely unavailable, the officer arrives at a sense of frustration, which more often than not, results in the officer actually leaving (Udechukwa, 2009).

Need for Stress Management

Workplace stress, or occupational stress, as defined by Fitzgerald (as cited in Lancefield, Lennings, Thomas, 1997) is "a disturbance of an individual's physiological, psychological, or social functioning in response to a condition in the work environment which poses a perceived threat to individual's well-being or safety" (p. 206). Interestingly, the actual source of the "stress" that people experience consists primarily of internal emotional unrest, such as feelings of frustration, anger, worry, anxiety, fear, insecurity, depression, or resentment. Moreover, it is notable that police and correctional officers deal with a unique form of stress in the chronic state of emotional dissonance which is required by their job, since they must internally cope with such, often intense, negative emotions while maintaining an outward expression of calm and emotional detachment (Zapf, et. al, 1999). Therefore, successful stress management for employees of ODRC means healthier employees, both psychologically and physiologically, which equates to improved performance of employees, making them more effective at providing public safety and assisting offenders in the reintegration process which is the very essence of correctional work. Without effective stress management for employees, everyone loses: the employees, inmates, and the general public. We cannot afford this risk, and that is why there is an inherent need for effective stress management, which is thought to begin with educational attainment.

Literature Review Summary

Studying stress among correctional officers is very important in combating several

behavioral and physical problems that result from high stress levels. Research has shown that being a correctional officer is a very stressful job for many reasons. There are inconclusive results in the literature regarding job stress and educational attainment. Some studies reported that highly educated officers were less satisfied with their job, but reported lower stress levels. Furthermore, a study showed that correctional officers with more education reported higher levels of personal accomplishment. Other research has shown that higher academic credentials led to more positive attitudes. Finally, studies conducted involving police officers have found that officers with higher education levels reported lower perceived stress levels.

Methodology

A study on correctional officer stress in Ohio is beneficial because such research has never been conducted in Ohio, as in other states. Furthermore, stress is something that everyone has to deal with no matter what a person's job title. Working in corrections is unique in that it ranks among the top most stressful occupations. Moreover, it is important to make leaders aware of important issues especially given the state budget concerns that continue to plague the Ohio Department of Rehabilitation & Correction (ODRC). Stress has been linked to several health problems and remains one of the leading causes of death in this country. As a result, it would be prudent to first examine if there is a stress management problem in the ODRC, and secondly, if there is, what to do about it. To help answer some stress-related issues, there are two research questions that will be examined: do correctional officers with higher education levels feel less stress compared to those with less education? And secondly, do correctional officers with higher education levels cope more effectively with the stress they have compared to their less educated counterparts?

Design

The research design utilized in this study involved distributing surveys to all correctional officers on duty on specified days from four correctional facilities in Ohio. The survey had a cover letter that explained to potential participants that completing the survey was voluntary and that no repercussions would occur for non-participation. Furthermore, potential participants were assured that their responses would remain anonymous as their completed surveys were placed in a locked box. Approval of this research project was granted by both institutions involved (the authors' educational institution, ODRC, and each of the four wardens of the correctional institutions where the survey was administered. Of the four correctional institutions that participated in this study, one was Northeast Pre-Release Center (NEPRC) which houses female offenders only and is classified as a minimum and medium security prison. The second that participated was Grafton Correctional Institution (GCI) which houses only male offenders and is classified as a minimum and medium security prison. The third was Lorain Correctional Institution (LORCI) which houses male offenders and contains three security levels: minimum, medium, and close. The fourth was the Ohio State Penitentiary (OSP) which houses male offenders and is one of only two administrative maximum security prisons, the most restrictive, in the ODRC.

The dependent variable, correctional officer's level of stress, is a single question on the self-administered 15-question survey (see Appendix 1, question number 5). The independent variables measured include educational level, work shift, gender, age, and years of experience. Other items examined included questions involving tenseness, coping abilities, the handling of stress, and the most serious stressors identified. Variables that were expected to affect stress levels included the institution's security level, shift, age, experience, and educational level. Lastly, there was a question to see if correctional officers are interested in a stress management program.

Demographic Factors

While reviewing past research on correctional officer stress, level of education is one of the key variables discussed in many studies which finds that higher levels of education has a very positive impact on satisfaction and professionalism (Hepburn, 1989). Also, lower stress levels were reported among more highly educated officers (Robinson, Porporino, & Simourd, 1997). There is some evidence that education could reduce generalized anxiety and reduce stress when negative life events occur (Simpson, 1980). Some theorists have found that correctional officers with higher educational levels have developed certain critical thinking skills which leads to better judgment and less overall stress on the officer. Furthermore Levi (1981), highly recommends education and training as tools for stress management.

Work shift is an important independent variable because of the varying work levels and inmate contact between shifts. Rotating, overtime, and other variable shift formats produce more fatigue for officers than do more regular, daytime shifts (Neylan, et. al, 2002). Another factor that may be related to correctional officer stress is which shift they work as each shift has its own stressors. During day shift is when inmate contact is the greatest and also when administrative staff are most visible and officers' work is scrutinized more than the other shifts. During afternoon shift there is comparable inmate contact time; however, administrative staff leave by 5:00 p.m. and so correctional officers have less supervision which can affect stress levels. Finally, during the graveyard shift is when the inmates are locked down, meaning no movement, and when most inmates sleep; as a result, inmate contact is very minimal.

Gender is an important independent variable because several studies show that female correctional officers experience significantly more job-related stress than do men. Among the factors that increase female job-related stress are poor supervisory practices and little trust in supervisors, poor co-worker support, male resistance to female correctional officers, safety concerns, fear of victimization, and work-home conflict (Griffin, 2006).

Other identified stressors are also important to consider as a number of researchers found through both qualitative and quantitative means that safety concerns were a statistically significant correlate of correctional officer stress (Cullen, et. al, 1985; Jacobs, Gear, 1977; Lindquist, Whitehead, 1986; Lombardo, 1989; Triplett, et. al, 1996; Veneziano, 1984). An institution's security level is important due to the fact that various institutions have different security measures and the behavior of the offenders, as a whole, is different. The minimum and medium security level institutions, the level 1's and 2's, is where the less violent and more program-oriented inmates are housed. Conversely, the close, maximum, and high maximum security level institutions, levels 3, 4, and 5 are where the more dangerous and predatory offenders are housed. Moreover, it is suggested that correctional officers working at the higher security facilities will report higher stress levels as they have to manage more violent-type offenders. In a study of 155 front-line personnel, Van Voorhis, Cullen, Link, and Wolfe (1991) found officers working in maximum-security placements were adversely affected by workplace stress in comparison to those officers in other types of security level placements who experienced lower levels of stress.

Age and experience may be important variables to consider as it is theorized that as a person ages, they have more prior life lessons to base future decisions on and should have more confidence in the work they do. Studies that included the age of the correctional officer as a predictor found that younger officers reported higher levels of stress, while older employees reported lower levels of stress (Blau, et. al, 1986; Lancefield, et. al, 1997; Rosefield, 1981; Whitehead, Lindquist, 1986).

Hypotheses

The primary hypotheses to be tested in this research project are:

1. Correctional officers with higher education levels will feel less stress compared to those with less education.
2. Correctional officers with higher education levels will be able to cope more effectively with stress compared to their less-educated counterparts.

Additional hypotheses to be tested are:

3. Correctional officers with higher education levels will not be interested in a stress management program.
4. Correctional officers who are older with more experience will report less stress levels.
5. Correctional officers who work in higher security level prisons will report higher stress levels.
6. Correctional officers who work Day Shift will report higher levels of stress than officers working the other shifts.
7. Correctional officers who have received advanced training through ODRC will report lower stress levels than officers who have not received this training.
8. Correctional officers who are currently certified instructors will report lower stress levels than those officers who are not instructors.
9. Female correctional officers will report higher stress levels than males.

Analysis and Findings

Two phases of statistical analyses were used to test these hypotheses. First, descriptive statistics were used to summarize the survey results for all the variables studied. Secondly, expected differences and potential relationships were tested using chi-square and *t*-tests. SPSS version 15.0 was used and given the small sample size, an alpha or significance value of .05 was used. The response rate was 54% with 422 surveys distributed and 228 returned.

Sample Profile

The average age of respondents was forty-three. The majority of respondents work day or afternoon shifts (79%), with most officers reporting that their highest educational level completed was high school (45%), followed by some college (26%). Out of the total respondents, 69% were male, and the average years of experience was twelve (see Table 1).

When asked to cite the top three most serious problems that correctional officers have to face, the responses were: ineffective rules/regulations (36%), conflict with supervisors (33%), and conflict with administration at 31%. When at work, 37% of correctional officers agreed they feel tense or uptight, while 18% did not admit to these feelings. Furthermore, most officers agree (56%) that they are able to cope effectively with the stressors at work, compared to only 8% that disagreed. When asked to rate how stressful their current job is, with "1" being the least stressful and "5" being the most stressful, most correctional officers (35%) reported their stress level a "3" (see Table 2).

When officers were asked what helps them handle their stress, most correctional officers (53%) had a personal philosophy that they live by, followed by exercise (16%), and family/friends (12%). Moreover, when asked if they would be interested in a stress management program offered by the ODRC, most correctional officers (50%) agreed, with 15% disagreeing. Furthermore, most

correctional officers (71%) stated that a college degree should not be a requirement to become a correctional officer (see Table 3).

Stress Levels

Regarding the hypothesis that correctional officers with higher education levels will feel less stress compared to those with less education, 67% of high-school-only correctional officers reported low stress, compared to 68% percent of officers with more than a high school diploma reporting low stress levels, yielding a chi-square p-value of .878, with no significant pattern noted between both items (see Table 4).

It seems regardless of level of education, correctional officers believe they can cope with stress as identical numbers were reported by correctional officers stating that they can cope effectively with work stressors, 74% percent for high-school only respondents, and 74% for the more-than-high-school educated officers. Therefore, education had no effect on coping skills with a p-value of .882 (see Table 5).

When deciding if a college degree should be required for a person to be hired as a correctional officer, 16% of high-school only educated officers stated yes, compared to 39% of the more-than high-school educated officers, with a p-value of .882 suggesting no significant difference between the two (see Table 6).

Regarding the variable shift and stress, there is no significant difference between the shifts, with 69% of correctional officers on day shift reporting low stress levels, followed by 66% on afternoon shift, and 68% on night shift with a p-value of .850 (see Table 7).

With respect to training, relative to stress levels, there is no significant difference between the two groups, with 29% of certified correctional officers reporting high stress, compared to 33% of non-certified instructors reporting high stress levels with a p-value of .691 (see Table 8).

There seems to be no difference in stress level when it comes to gender as well. Female correctional officers reported just slightly higher stress levels than did male officers, 39% and 30% respectively with a p-value of .191, no significant difference (see Table 9).

There is a correlation between being able to cope effectively with stressors at work and stress level, as 72% of officers that stated they can cope effectively reported low stress, compared to 57% of officers who stated that they can't cope effectively reported low stress levels, with a p-value of .038 (see Table 10). One explanation for this correlation might be that officers who report low stress levels never had to test their coping skills.

There seems to be a correlation between wanting a stress management program and stress level. Of those correctional officers who do want a stress management program, 70% reported low stress levels, compared to 89% of officers who do not want a stress management program, with a p-value of .004 (see Table 11). This suggests that, of the correctional officers surveyed, the officers who feel that they need a stress management program were less likely to report low stress levels.

There is no significant difference in stress levels across different prison security levels. At OSP (the Ohio State Penitentiary which houses male offenders and is one of only two administrative maximum security prisons) the most restrictive in the ODRC, 33% of participants reported high stress levels, compared to 25% at NEPRC, Northeast Pre-Release Center, which houses female offenders only, and is classified as a minimum and medium security prison, and 30% at GCI, Grafton Correctional Institution, which houses only male offenders and is classified as a minimum and medium security prison, and 37% at LORCI, Lorain Correctional Institution, which houses male offenders and contains three security levels: minimum, medium, and close respectively, with a p-value of .711 (see Table 12).

The percentages are almost identical when comparing correctional officers who have received advanced training and stress levels. Those officers with advanced training (33%) reported high stress levels, compared to those officers without advanced training (32%) reported high stress levels with a p-value of .818 (see Table 13).

A t-test was computed with the variables age and experience relative to stress levels with no significant differences detected. Correctional officers reporting low stress levels had a mean age of forty-three years, as compared to those reporting high stress levels with a mean age of forty-one years. Also, officers reporting low stress levels had a mean of twelve years experience, compared to those reporting high stress levels with a mean experience of twelve years also with a p-value for age of .234, and for experience .934 respectively (see Table 14).

Conclusion

The goals of this study were to assess the stress levels of correctional officers, and see if stress was associated with educational level. Stress is an important factor to examine in any workforce, but it is particularly important for people working in corrections, which is regarded as one of the most stressful occupations (Kobasa, et. al, 1982; Bartone, 1989; Patterson, 2003; Armstrong, Griffin, 2004; Pollak, Sigler, 1998). Furthermore, the study of stress amongst correctional officers is important because stress has been linked to physical, mental, and economic problems which can burden an already struggling budget in Ohio. Also, this project had another goal in mind and that is to determine the need for another, more intensive stress management program besides the one currently offered by the state.

The first research question was: Do correctional officers with higher education levels feel less stress compared to those with less education? No. The findings were almost identical when comparing the stress levels of both groups. The second research question was: Do correctional officers with higher education levels cope more effectively with the stress they have compared to their less educated counterparts? The answer is "no", as once again both groups recorded similar results for being able to cope effectively with work stressors. Both these findings are contrary to what past research has found which is that lower stress levels were reported among more highly educated officers (Robinson, Porporino, & Simourd, 1997). Moreover, some theorists have found that correctional officers with higher educational levels have developed certain critical thinking skills which leads to better judgment and less overall stress on the officer.

Another interesting finding as displayed in Table 2 was that 35% of the respondents stated that their stress level was "3" on a scale from one to five which indicates a stress level right in the middle and 32% reported high stress, above a "3", while 31% report low stress (below a "3"). Furthermore, there is no significant connection between any of the other independent variables, which include: experience, age, gender, facility security level, shift, advanced training, certified instructors, and correctional officer stress levels. The hypotheses in this research predicted that a pattern would exist between all the independent variables and the dependent variable, stress; however, the results do not support these hypotheses.

There are two hypotheses that were supported in this study. One involves correctional officers being able to cope effectively with stressors at work and their reported stress levels, which suggests that the respondents in this study are able to cope effectively with stress at work. Secondly, the data in this study show that there is a pattern between correctional officers wanting a stress management program and reported stress levels. It is suggested that officers who are interested in the program are less likely to report low stress levels. Additionally, most correctional officers reported that they would be interested in a stress management program.

Contributions

This research project has contributed to the field of criminal justice, especially in Ohio, as this is the first research of its kind conducted where the stress levels of correctional officers were examined. The results of this project has given ODRC leaders and state legislators a baseline from which to make future decisions. Furthermore, the respondents have voiced a need for a stress management program for ODRC, possibly one that could include real-life applications, healthier living, and more positive self-perceptions that would make the correctional officers even more responsive to the mission of ODRC. This research project has fulfilled its intended objectives, which were to bring awareness to the issue of stress and correctional officers, to assess the officers' stress levels, and then determine if education, and the other specified items affect stress levels. These data collected provide a start for future analyses and endeavors.

Limitations

One of the primary limitations of this study is the mere size of the population studied. This was a small study involving only four correctional institutions. Some of the questions may have been confusing, especially the one regarding whether a college degree is necessary to become a correctional officer. The question regarding birth date (i.e. age) was the least answered by respondents (17% missing data) indicating that this question should be altered in the future to make it less exact in the future. Another measurement issue involves the dependent variable, self-reported stress which was merely a rank on a scale of one to five. Other wording may be needed as well as other measures of stress such as job turnover or job satisfaction. Moreover, time, money, and additional personnel and resources were a limitation for this project in the data gathering stage as the first author worked solo with limited resources. Interestingly, although there was a pattern determined between coping ability and stress level, it could be the result of a circular argument because it could be the case that some officers have great coping skills and that is why their stress is low, or some officers feel less stress so there is no reason to cope with anything.

Future Research

Future research in this area should include a larger target population involving more institutions from all over the State of Ohio, possibly including neighboring states. The increased sample size would allow for a more robust statistical analysis that is multivariate. The present analysis was limited by small sample size which demanded a more simplistic analysis that did not go beyond the bivariate level. Furthermore, there needs to be more resources committed to the study of stress given its important effects on the health and productivity of correctional officers. The rewording of some of the questions, and possibly deleting others could make the survey instrument better. Finally, conducting personal interviews allowing for a more rich contextual analysis with correctional officers may be helpful while providing for a more comprehensive study.

Meaningful progress has been made from this project that can be applied to future research. Some important research questions have been addressed in this project, as well as several hypotheses tested. The results from this study relate to the correctional officers who work in the state's prison system, as well as the leaders of ODRC, as there is now an established baseline from which to work from regarding stress, and what is most important to our front-line correctional officers. These results should be used to improve the quality of work that is expected from state employees, and can serve as a guide for future decisions that can affect how the ODRC fulfills the requirements of its mission statement.

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Table 1: Descriptive Profile of the Sample, N=228

Item	Mean/%	Min	Max	Cases
Facility				228
OSP (Youngstown)	40%			
NEPRC (Cleveland)	15%			
GCI (Cleveland)	25%			
LORCI (Cleveland)	21%			
Age (Years)	43	24	72	189
Shift				226
Day (6am-2pm/7am-3pm)	49%			
Afternoon (2pm-10pm)	30%			
Graveyard (11pm-7am)	19%			
Other (7:30am-3:30pm)	2%			
Degree				228
High School/GED	45%			
Vocational/Technical	11%			
Some college	26%			
Bachelor's Degree	16%			
Graduate Degree	2%			
Instructor (% Certified)				226
Firearms	25%			
Chemical Munitions (Pepper Spray)	20%			
USD (Self-Defense)	15%			
Mentor (Coach new staff)	15%			
Other (Baton/CPR)	25%			
Advanced Training				226
SRT (SWAT)	55%			
HNT (Hostage Negotiation)	3%			
CIM Critical Incident)	8%			
Instructor Skills (Prereq Instructor)	5%			
Other (Cell Extract...)	30%			
Sex (% Male)	69%			
Experience (years)	12	.5	29	218

Table 2: Stress-Related Survey Item Information Summary, N=228

Item	Percentage
Nature of Problem: Item is in CO's Top 3 Most Serious	
Ineffective rules/regulations	36%
Conflict w/supervisors	33%
Conflict w/administration	31%
Too little authority	27%
Under-staffing	26%
Not enough CO discretion	23%
Poor working relationships w/co-workers	21%
Inexperienced co-workers	17%
Mental strain	16%
Conflict w/inmates	13%
Physical danger	12%
Maintaining order/security	8%
Too much responsibility	3%
Too few regulations to guide me	1%
When I'm at work I often feel tense or uptight	
Strongly disagree	7%
Disagree	18%
Neither agree nor disagree	27%
Agree	37%
Strongly agree	10%
I am able to cope effectively with the stressors that I encounter at work	
Disagree	8%
Strongly disagree	1%
Neither agree nor disagree	17%
Agree	56%
Strongly agree	18%
On a scale from 1 to 5, how stressful is your current job?	
Least stressful "1"	10%
2	21%
3	35%
4	23%
Most stressful "5"	9%

Table 3: Stress-Related Survey Item Information Summary, N=228

Item	Percentage
What, if anything, have you found to help you handle stress as a CO?	
Individual approach / personal philosophy	53%
Exercise	16%
Family/friends	12%
God/prayer	9%
Time off	8%
No response	16%
I would be interested in a Stress Management Program offered by the ODRC	
Strongly disagree	3%
Disagree	12%
Neither agree nor disagree	36%
Agree	28%
Strongly agree	22%
A college degree should <u>not</u> be a requirement for being a CO	
Strongly disagree	4%
Disagree	9%
Neither agree nor disagree	16%
Agree	24%
Strongly agree	47%

Table 4: Possible Connection between Education and Stress, N=224

Level of Stress	Highest Level of Education	
	<u>High school</u>	<u>More than high school</u>
Low (median or less)	67%	68%
High (above the median)	33%	32%
Cases	101	123
Pearson's Chi-Square p-value: .878	*Note: percentages are column percentages.	

Table 5: Possible Connection between Coping and Education Level, N=227

Coping Effectively	Highest Level of Education	
	<u>High school</u>	<u>More than high school</u>
Yes I can	74%	74%
No I cannot	27%	26%
Cases	102	125
Pearson's Chi-Square p-value: .882	*Note: percentages are column percentages.	

Table 6: Possible Connection between College Requirement and Education Level, N=228

College Degree for CO's	Highest Level of Education	
	<u>High school</u>	<u>More than high school</u>
Yes Should be Required	16%	39%
No Should not be Required	85%	61%
Cases	103	125

Pearson's Chi-Square p-value: .882 *Note: percentages are column percentages.

Table 7: Possible Connection between Shift and Stress, N=222

Level of Stress	Shift			
	Morning	Afternoon	Night	Special Duty
Low (median or less)	69%	66%	68%	50%
High (above the median)	31%	34%	32%	50%
Cases	110	67	41	4

Pearson's Chi-Square p-value: .850 *Note: percentages are column percentages

Table 8: Possible Connection between State -Certified Instructor and Stress, N=222

Level of Stress	State Certified	
	<u>State Certified</u>	<u>Not State Certified</u>
Low (median or less)	71%	67%
High (above the median)	29%	33%

Pearson's Chi-Square p-value: .691 *Note: percentages are column percentages

Table 9: Possible Connection between Sex and Stress, N=218

Level of Stress	Sex	
	<u>Male</u>	<u>Female</u>
Low (median or less)	70%	61%
High (above the median)	30%	39%
Cases	151	67

Pearson's Chi-Square p-value: .191 *Note: percentages are column percentages

Table 10: Possible Connection between Coping and Stress, N= 224

Level of Stress	Can Cope Effectively with Stress at Work	
	Agree (Can Cope)	Disagree (Can't cope)
Low (median or less)	72%	57%
High (above the median)	28%	43%
Cases	166	58

Pearson's Chi-Square p-value: .038 *Note: percentages are column percentages

Table 11: Possible Connection between Want of Stress Program and Stress, N=90

Level of Stress	Desire a Stress Management Program	
	Agree	Don't Agree
Low (median or less)	70%	89%
High (above the median)	30%	11%
Cases	63	27

Pearson's Chi-Square p-value: .004 *Note: percentages are column percentages

Table 12: Possible Connection between Facility Security Level and Stress, N=224

Level of Stress	Prison Facility			
	OSP	NEPRC	GCI	LORCI
Low (median or less)	67%	75%	70%	63%
High (above the median)	33%	25%	30%	37%
Cases	90	32	56	46

Pearson's Chi-Square p-value: .711 *Note: percentages are column percentages

Table 13: Possible Connection between Receiving Advanced Training and Stress, N=222

Level of Stress	Advanced Training	
	Yes	No
Low (median or less)	67%	68%
High (above the median)	33%	32%
Cases	87	135

Pearson's Chi-Square p-value: .818 *Note: percentages are column percentages

Table 14: Possible Connection between Age and Experience and Stress (t-test results), N=401

Level of Stress	Age	Experience
Low (median or less)	43 years	12 years
High (above the median)	41 years	12 years
Cases	187	214
p-value for age:	.234	
p-value for experience:		.934

Appendix 1: Correction Officer Survey

1. Of the following fifteen (15) problems below, **circle** only the top **three (3)** that are the most serious problems for you as a Correction Officer (CO).

- | | |
|--------------------------------------|--|
| 1. Too much responsibility | 9. Conflict with supervisors |
| 2. Too little authority | 10. Conflict with administration |
| 3. Not enough CO discretion | 11. Poor working relationships with co-workers |
| 4. Too few regulations to guide me | 12. Inexperienced co-workers |
| 5. Ineffective rules and regulations | 13. Under-staffing |
| 6. Maintaining order and security | 14. Mental strain |
| 7. Physical danger | 15. Other _____ |
| 8. Conflict with inmates | |

2. When I'm at work I often feel tense or uptight. (check one)

- _____ 1. Strongly agree
 _____ 2. Agree
 _____ 3. Neither agree nor disagree
 _____ 4. Disagree
 _____ 5. Strongly disagree

3. I am able to cope effectively with the stressors that I encounter at work. (check one)

- _____ 1. Strongly agree
 _____ 2. Agree
 _____ 3. Neither agree nor disagree
 _____ 4. Disagree
 _____ 5. Strongly disagree

4. I would be interested in a Stress Management Program offered by the ODRC. (check one)

- _____ 1. Strongly agree
 _____ 2. Agree
 _____ 3. Neither agree nor disagree
 _____ 4. Disagree
 _____ 5. Strongly disagree

5. On a scale of "1" (not at all stressful) to "5" (most stressful), how stressful is your current job? _____ (choose one number from 1-5)

6. BIRTHDATE Month _____ Day _____ Year _____

Continued on other side →

7. A college degree should not be a necessary requirement for being a CO.
(check one)
 1. Strongly agree
 2. Agree
 3. Neither agree nor disagree
 4. Disagree
 5. Strongly disagree
8. Which shift are you currently working? (check one)
 1. Day
 2. Afternoon
 3. Graveyard
 4. Other arrangement (please specify) _____
9. What is the highest degree you have completed? (check one)
 1. High School Diploma or G.E.D.
 2. Vocational/Technical Degree
 3. Associate Degree (2 years of college)
 4. Bachelor's Degree (BA, BS, BBA)
 5. Graduate Degree
 6. Other (please specify) _____
10. If you went to college, what was your major when you pursued your degree?
(example: psychology, criminal justice, sociology...)

11. Are you currently a state-certified instructor? (check one)
 1. Yes (please specify, ex. Firearms, USD) _____

 2. No
12. Have you received any advanced training as a state worker? (check one)
 1. Yes (please specify, ex. SRT, HNT) _____

 2. No
13. SEX: (check one)
 1. Male
 2. Female
14. EXPERIENCE: How many years have you worked as a CO? _____ years
15. What, if anything, have you found to help you handle stress as a CO?

