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An Assessment of Individual and Organizational Characteristics and Their Impact on Correctional Officers' Perceptions of Professionalism and Treatment Orientation

Jennifer L. Lasswell

Indiana University of Pennsylvania

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AN ASSESSMENT OF INDIVIDUAL AND ORGANIZATIONAL
CHARACTERISTICS AND THEIR IMPACT ON CORRECTIONAL OFFICERS'
PERCEPTIONS OF PROFESSIONALISM AND TREATMENT ORIENTATION

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Philosophy

Jennifer L. Lasswell

Indiana University of Pennsylvania

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Indiana University of Pennsylvania
School of Graduate Studies and Research
Department of Criminology

We hereby approve the dissertation proposal of

Jennifer Leigh Lasswell

Candidate for the degree of Doctor of Philosophy

Daniel Lee, Ph.D.
Associate Professor of Criminology, Chair

Erika Frenzel, Ph.D.
Assistant Professor of Criminology

Dennis Giever, Ph.D.
Professor of Criminology

Jamie Martin, Ph.D.
Associate Professor of Criminology

ACCEPTED

Timothy Mack, Ph.D.
Dean
The School of Graduate Studies and Research

Title: An Assessment of Individual and Organizational Characteristics and Their Impact on Correctional Officers' Perceptions of Professionalism and Treatment Orientation

Author: Jennifer L. Lasswell

Dissertation Chair: Dr. Daniel Lee

Dissertation Committee Members: Dr. Erika Frenzel
Dr. Dennis Giever
Dr. Jamie Martin

The study sought to explore correctional officers' attitudes toward inmates, rehabilitation, and work environment by specifically focusing on individual and organizational predictors that potentially related to their perceptions of their own levels of professionalism and ideological orientation (custody versus treatment). Data were collected through survey administration at five State Correctional Institutions in the Pennsylvania. The final sample included 202 completed surveys from correctional officers employed at these institutions.

Univariate, bivariate, and multivariate analyses were employed to assess the impact of individual and organizational attributes on ideological orientation and perceived level of professionalism. The results indicated that older officers and officers who entered the field of corrections at an older age were more rehabilitation-oriented; however, greater levels of experience as a correctional officer did not seem to significantly impact ideological orientation. Results also indicated that correctional officers employed at a higher security level institution perceived themselves as more professional than officers employed at a lower security level. The impact of supervision style requires further clarification and research to determine if it could be a stronger predictor of orientation and perceived professionalism. Further, the inherent personality trait utilized in this study, conservatism, proved to not have any real statistical impact and the validity of the conservatism measures came into question. Finally, ideological orientation and

professionalism appeared to be unrelated with regards to influencing factors, individual or organizational.

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CHAPTER I

INTRODUCTION

Throughout the past several decades, research in corrections has evolved from focusing nearly exclusively on inmate behavior to evaluating the organizational practices of prison administrators (Maahs & Pratt, 2001). As a result from such extensive coverage, substantial changes have been made within the field of corrections to include increased training of correctional officers (Crouch & Alpert, 1980; Jurik, 1985; Toch & Klofas, 1982; Whitehead & Lindquist, 1989), improvements in organizational management (Farkas, 1999; Gerstein, Topp, & Correll, 1987), and rehabilitation-oriented programming for inmates (Cullen, Lutze, Link, & Wolfe, 1989; Shamir & Drory, 1982; Robinson, 2008; and Antonio, Young, & Wingard, 2009). As important as these changes have been within the industry, they have also potentially exacerbated other stressful aspects of the environment. For example, although correctional officers may be better trained now than in the past, they are now often relied upon to perform a variety of tasks. The increasing expectation for officers to multi-task as well as the perceived lack of control over their work environment may contribute greatly to stress and potential burnout (Gerstein, Topp, & Correll, 1987; Garland, 2002). Slate, Vogel, and Johnson (2001) attributed much of the high absenteeism and job turnover among correctional officers largely to be due to higher stress levels; however, they further suggested that improving certain aspects of their environment, such as managerial feedback to officers or authorizing line-level decision making, may help relieve some of the stress. The current study suggests that these organizational and role changes for the correctional officer are linked to the growth of the profession from strictly security to treatment

provider. The body of research in corrections is continuously emerging with constant exploration into a variety of areas to provide the impetus for positive change. One such area that receives attention in the literature is the goal of inmate rehabilitation.

Rehabilitation programming has not consistently been an accepted goal of corrections. Some research, however, has identified the inherent conflict between the goals of corrections: to punish or to rehabilitate (Lipsey & Cullen, 2007). This conflict has paved the way for a battle that continues to exist about whether successful rehabilitation is possible. Even before Martinson (1974) claimed that very little worked in the way of rehabilitation, questions about its effectiveness were being asked. Many corrections administrators were quick to cancel all rehabilitation programs based on Martinson's conclusion (Palmer, 1975), which served as a confirmation for the belief that rehabilitation efforts were not effective; however, Martinson's statement regarding rehabilitation also provoked some researchers to prove otherwise (Palmer, 1975). In an address to the American Society of Criminology's Annual Meeting in 2004, Cullen (2005) presented several prominent corrections researchers who have contributed extensively to saving rehabilitation efforts. These researchers devoted a substantial amount of time and effort to prove there are positive aspects to rehabilitation. Now, more than 30 years after Martinson's conclusion, prison administrators and academicians seem to believe rehabilitation efforts are effective. Rehabilitation efforts remain an acceptable goal of corrections, but much of the research is presently focusing on the role of the correctional officer in successful rehabilitation implementation. If correctional officers are being called upon more frequently to shift from security to treatment provider, it is

important that the research persists in these areas to solidify rehabilitation's place in the corrections environment.

Effective rehabilitation efforts require effective treatment providers (Duffee, 1974) to include the broad range of personnel employed within a prison. Research in this area has turned to the important interaction between correctional officers and inmates (Tracy, 2004). Historically considered an adversarial relationship (Duffee, 1974), correctional officers' attitudes toward treatment versus security continue to be a primary focus (Cressey, 1959). In the most traditional sense, correctional officers are charged with the custodial goals of the institution, such as maintaining security within the institution and over the inmates (Josi & Sechrest, 1996; Tracy, 2004). Despite the average public perception of the job description of correctional officers, little is known about the emotional investment of the correctional officers (Tracy, 2004). As mentioned previously, over time, the perceived role of the correctional officer has steadily been changing to that of primary treatment provider, which is largely due to consistent interaction with inmates (Frank, 1966). Assigning trained treatment staff specifically for rehabilitation efforts has proven to be difficult due to the inherent role conflict between treatment and security issues within a correctional institution; further facilitating an adversarial relationship between treatment and non-treatment staff (Josi & Sechrest, 1996). Therefore, a focus that was for solely providing security over the inmates has shifted to better preparing correctional officers for their role as treatment providers. Throughout this shift of focus research efforts have extensively assessed correctional officers' attitudes toward inmates, rehabilitation, and work environment (Whitehead & Lindquist, 1989; Antonio, Young, & Wingard, 2009). These assessments have attempted

to isolate traits and characteristics of correctional officers to further understand what may make an officer more punitive- or treatment-oriented (Philliber, 1987).

Historically, correctional officers are considered a difficult population to study due to the nature of the organizational structure within a prison environment which promotes a general unwillingness to work with researchers. Yet, over the past 40 years, research on correctional officers and the correctional environment has been prolific. Particularly throughout the 1970s and 1980s, research focused on which factors may contribute to such broad areas as job stress, role conflict, job satisfaction, and attitudes toward inmates (Philliber, 1987). Additionally, much of the research has proffered that administrative and organizational policies within a prison may mirror that of the outside world (Paboojian & Teske, 1997; Toch, 2008). Indeed, however society feels about the treatment of prisoners is likely to be what the administrative policies within a prison will reflect. Thus, adding to the difficulty of studying this particular population, correctional officers may also be influenced by such administrative policies. On the other hand, administrative policies may positively influence officer orientation by implementing management strategies that facilitate improved interactions between officers and inmates. Such innovative strategies as direct supervision exemplify this effort in correctional administrative policy (Bordenaro, 1992; Saxton, 1990; and Wener & Farbstein, 1994). A focus of the current research is to explore the changes and new directions of the organizational environment with regard to the present role of the correctional officer.

Comprehensive coverage of all of the major research areas in corrections can never be exhaustive as it is a constantly changing environment. Therefore, as research persists, it just as quickly becomes out-dated. It is this aspect of constant change that

allows for research to continue and always be considered new. Philliber (1987) performed a comprehensive literature review of correctional officer research up to the mid-1980s. This review focused on research that was the first to identify some of the primary areas worthy of study and subsequent research that continued to deliberate on these points. Many aspects such as correctional officer stress, satisfaction, role conflict and demographic factors such as gender, age, and race are considered to be greatly inconsistent in many of the findings (Jacobs & Kraft, 1978; Teske & Williamson, 1979; Toch & Klofas, 1982; Crouch & Alpert, 1982; and Jurik, 1985). Sims (2001) updated Philliber's (1987) review on the research from the mid-1980s into early 2000. Considering 20 more years of continued research in this area, much of the results are still considered to be inconsistent and the difficulties of studying the characteristics of this particular population continue to persist.

One of the difficulties cited with researching correctional officers is a phenomenon called pluralistic ignorance. Pluralistic ignorance is a systematic misperception of attitudes and behavior that correctional officers have of each other (Kauffman, 1981). Similar to that of any established subculture; correctional officers appear to follow an unwritten code or pattern of behavior (Kauffman, 1981). This phenomenon is relevant to the corrections literature because it not only helps to explain why it can be difficult to study this population, but it also implies a high improbability that correctional officers can behave independently and achieve full levels of professionalism. Likewise, the nature of their misperceptions of each other could potentially interfere with efforts to improve their attitudes toward inmates, rehabilitation, and work environment. Some research indicates that even though many officers are

amenable to treatment efforts for inmates but their perceptions of their coworkers as anti-treatment sabotages the likelihood of success both in research and in improving their profession (Toch & Klofas, 1982).

Literature on job stress, burnout, cynicism, and role conflict of correctional officers identifies that the correctional environment is likely to be more conducive to holding increasingly negative attitudes. It has been proffered that few choose to become correctional officers, which suggests attitudes may be impacted by several important individual characteristics such as age, race, gender, and educational level (Philliber, 1987). Even today, officer attitudes within the institutions still seem to reflect their grim perception of society (Dvoskin & Spiers, 2004). Similarly, attitudes may be further impacted by organizational characteristics such as administrative goals of the institution, management styles, security level, shift assignment, and longevity within the field of corrections (Philliber, 1987; Sims, 2001). Although the research on these potential predictors of correctional officers' attitudes has not been exhaustive, it has been extensive. Chapter II discusses these attributes in further detail. Preliminary findings assert that there are individual and organizational attributes that seem to impact officers' attitudes; however, most results have been inconsistent and inconclusive (Philliber, 1987; Sims, 2001).

Certain methodological issues have plagued much of the research with regard to conclusively identifying what impacts correctional officers' attitudes. Some of the difficulty in studying correctional officers is that there is a heavy reliance on thematic approaches. Job stress, job satisfaction, role conflict, and attitudes toward inmates seem to be the primary themes that the correctional literature focuses on. The difficulty lies in

the fact that many of these areas and many of the factors that contribute to these areas overlap conceptually (Jurik, 1985). Therefore, attempting to assess all of these areas at once may contribute to the high likelihood of inconsistent findings. Both Philliber (1987) and Sims (2001) attributed much of these inconsistencies to the lack of analogous data collection. That is, variables are often conceptually and operationally defined differently, research questions vary greatly, dependent and independent variables are often interchangeable, and design limitations are in abundance.

A relationship between ideological orientation (treatment vs. custody) and perceived professionalism may exist among correctional officers. This is grounded in the idea that the correctional officers must perform simultaneous functions of being punitive, protective, and rehabilitative; furthermore, officers who manage their simultaneous roles effectively can both succeed at furthering the rehabilitative function while remaining custodial (Dvoskin & Spiers, 2004). In other words, if correctional officers perceive themselves to be professionals, they may be more amenable to accepting a treatment-oriented focus for their job but remain vigilant in security. Seeing themselves strictly as custodians (non-professional), may reduce their amenability based on a limited viewpoint of their job requirements. Professions such as attorneys, doctors, and psychiatrists can be considered marquee examples of this concept of professionalism (Williamson, 1990). However, correctional officers are not considered to have reached full levels of professionalism due to the paramilitary environment in which they work (Williamson, 1990). In addition to the above-mentioned criteria, professionalism can also be established by the degree of autonomy and individual decision-making. It is in these areas

that correctional officers do not meet the criteria of being a full-fledged profession (Williamson, 1990).

Research on correctional professionalism is limited, but parallels can be drawn with the push for professionalism of police officers in the late 1960s. With the help of a funding surge from the Law Enforcement Assistance Administration in 1968, extensive training and educational programs were implemented in police departments to raise the level of individual awareness of their officers (Thibault, Lynch, & McBride, 2001). Although the professionalism movement for police officers was essentially abandoned when the funding ran out in the 1980s, similar approaches have been attempted with correctional officers on a much smaller scale (Jurik, Halembe, Musheno, & Boyle, 1987).

The research can be furthered by assessing the interactions of individual and organizational attributes with correctional orientation and paralleling those results with that of their interactions with professionalism (Ortet-Fabregat, Perez, Lewis, 1993). One of the primary differences in this study is the assessment of psychological ideology that correctional officers may have prior to even entering the correctional workforce. Inherent personal philosophies correctional officers possess as they enter the field, such as how liberal or conservative they are may help to provide more of an understanding as to why the other more commonly assessed individual and organizational attributes are found to be inconclusive.

Chapter II presents an extensive literature review on the role of rehabilitation, to include a brief history and the importance of correctional officers in treatment roles. A detailed discussion of the extant research on individual and organizational attributes is also included. The pluralistic ignorance phenomenon is also presented. This chapter

contains a discussion on professionalism, to include relevant parallels drawn from police literature. Chapter II concludes with the presentation of research questions for the current study. Chapter III begins by detailing the hypotheses that accompany the larger constructs derived from the research questions. From there, the research design and sampling procedures are discussed. Definitions of each of the variables are provided as well as an overview of the construction of the survey, followed by an in-depth discussion of the human subject protection issues.

Chapter IV presents the statistical analyses performed at the univariate, bivariate, and multivariate levels. Descriptive statistics and frequencies illustrate that the sample was sufficient to perform higher level statistical analyses. Correlations between the independent variables and the dependent variables are examined for potential collinearity. Finally, the multivariate statistical processes and results are presented. Chapter V discusses the statistical results in greater detail by highlighting any acceptance or rejection of the hypotheses and the overall application to the research questions as well as identifies any limitations of the research design and subsequent interpretation of the results. Conclusions are presented for the current study and suggestions are provided for further study.

CHAPTER II

REVIEW OF THE LITERATURE

The correctional environment can be a diverse and dynamic subject for study. Research in corrections has struggled to maintain consistent data collection and interpretation because it seems that once an element of the correctional environment is understood, it changes (Philliber, 1987; Sims, 2001). One example of this phenomenon that Philliber (1987) and Sims (2001) each identify is the constantly changing role of the correctional officer. Over time the role of the correctional officer has changed from primarily a security role to being more responsible for providing rehabilitative treatment to inmates (Cullen, Link, & Wolfe, 1989). Although the source of the dynamic correctional environment remains unclear, what is clear is that the changes make it difficult to assume anything will remain stable long enough to allow for consistent observation. To exhaustively review every aspect of the correctional environment at one time would be difficult to both organize and to make valid conclusions. Yet, Sims (2001) suggested the dynamic nature of the environment may be more conducive to more research within that environment than allowing for a potential pattern of consistency over time. Components of corrections such as inmate-guard relations, environmental issues, rehabilitation effectiveness, and job stress/satisfaction have been researched extensively (Whitehead and Lindquist, 1986; Maahs & Pratt, 2001; Philliber, 1987; Jurik & Winn, 1987; and Lambert, Hogan, & Griffin, 2007); yet, these reviews have often resulted in vague or inconsistent conclusions.

Much of these inconsistent results may be due to the inclusion of too many components at one time. Instead, following Sims' (2001) suggestion that the correctional

environment can be studied over time and produce valid conclusions through consistency and repetition, an exhaustive review of the research pertaining specifically to the role of the correctional officer may be an effective approach. Previous research has focused on many aspects of the correctional environment, all which may be relevant to understanding the role of the correctional officer and therefore easier to understand the correctional environment. For instance, relevant research has helped to carve the path of rehabilitation and its development throughout correctional history as well as how it may progress into the future (Cullen, 2004). Understanding the history of rehabilitation in corrections research is relevant to understanding how the role of the correctional officer fits into that research. Therefore, to use these relevant relationships effectively, this review focuses on the role of the correctional officer as it pertains to each of the broader areas of corrections research.

Focusing on relevant research regarding correctional officers requires an understanding of the historical background of corrections. To fully understand the importance of professionalizing the correctional officer, a review of both modern corrections and the history of correctional rehabilitation is necessary. This includes the major accomplishments and setbacks that have shaped rehabilitation efforts today. This review begins by addressing the development of rehabilitation in corrections so as to highlight the evolution of the correctional officer from security guard to potential treatment provider.

In a related discussion of the development of correctional institutions and rehabilitative efforts, this review presents a discussion on supervision style such as direct supervision designs. These new generation institutions represent a potential

administrative acceptance of rehabilitation, and more specifically, the role that correctional officers play in facilitating a rehabilitative environment. As more and more institutions adopt a direct supervision style, correctional officers are more likely to evolve into treatment providers, rather than strictly prison guards.

Much of the literature about correctional officers has focused solely on the perspectives of inmates with the hope that a better understanding of this population would yield a better understanding of the correctional environment as a whole (Fink, Martin, & Burke, 1972). Although information about and from inmates may yield quite a bit of information about the correctional environment, it is only half of the equation. To fill the void, researchers have determined that subtle and complex secrets may lie within the correctional officer population and should be researched more directly (Duffee, 1974). This review focuses primarily on research dedicated to understanding correctional officers' attitudes toward inmates and their work environment.

Correctional officers have always been and continue to be a difficult population to understand; the relationships they have with each other, with inmates, with administrators, and with the general public can, at best, be described as complex (Tracy, 2004). Referring to correctional officers, Duffee (1974) suggested that those who have the most interaction with inmates are the keys to understanding more about correctional service. Indeed, correctional officers may be the only experts within this work environment (Dvorskin & Spiers, 2004). It is important to understand the role of correctional officers simply because of their direct and daily interactions with inmates (Farkas, 2000; Dvorskin & Spiers, 2004). One primary reason for this argument is that correctional officers, often called line-officers because of their front-line status, may very

well be the foremost experts on inmate behavior (Duffee, 1974; Dvorskin & Spiers, 2004). Some have suggested that the success or failure of tasks and duties within a correctional organization relies heavily on correctional officers (Lambert, Hogan, & Tucker, 2009). Therefore, it seems reasonable that a treatment-oriented correctional officer may influence the outcome of treatment efforts for inmates. In contrast, a custody-oriented correctional officer may unknowingly, or possibly with purpose, sabotage every effort to rehabilitate inmates. With this in mind, every interaction within the correctional environment should center on the relationship between the correctional officer and the inmate (Frank, 1966; Gilbert, 1997). There are many obstacles, such as conflicting ideologies, individual and organizational characteristics, and a lack of a professional status within their occupation, that sufficiently block attempts at understanding this population enough to direct improvements. Attempts have been made at changing and improving correctional officers over many years, but present-day institutions continue to exhibit prevalent and enduring custodial traits (Hemmons & Stohr, 2001). This review looks in-depth at role conflict and conflicting ideology as it pertains to the role of the corrections officer. Additionally, a phenomenon called pluralistic ignorance is thoroughly discussed to address a common obstacle that exists when researching the correctional officer population.

A correctional officer's orientation within their work environment may help determine what type of service they provide and how that service is provided. Indeed, orientation can be impacted by a variety of factors including personal characteristics and institutional culture (Antonio, Young, & Wingard, 2009); however, researching the correctional environment involves understanding that these different factors ultimately

shape an officer's orientation. For example, most correctional officers must embrace two seemingly contradictory punishment ideologies: incapacitation and rehabilitation.

Although other punishment ideologies (e.g., deterrence or retribution) may also impact the correctional environment, the battle over what the primary service of a correctional institution is between custody and treatment. In general, the custodial approach is considered important, while treatment is often only considered optional or available as resources may allow (Josi & Sechrest, 1996). Therefore, a custody-orientation may be necessary, but it may be able to coexist with a treatment-orientation.

To successfully implement treatment and rehabilitation efforts within correctional institutions may require substantial assistance from correctional officers. To achieve this increasingly important role, the correctional officer may need to undergo a significant change in their job status. Although an official professionalism movement is not considered a new idea, perhaps successful implementation of rehabilitative efforts relies too heavily on correctional officers and therefore an improvement in their professional status may be warranted (Farkas, 1990). An exploration into correctional officers' individual characteristics as well as the organizational environment in which they work may reveal a propensity for professionalism (Ortet-Fabregat, Perez, Lewis, 1993). As with all major administrative and organizational changes, some of the attributes so deeply entrenched within the correctional officer and their environment may need to be re-evaluated to achieve a successful professional evolution. This review explores the continuing professionalization of correctional officers and how that shapes their attitudes toward inmates, work environment, and rehabilitation.

After all of the relevant research areas in which correctional officers play a substantial role are presented, this review ends with a presentation of research questions that have emerged by identifying potential gaps in the research.

A Brief History of Correctional Rehabilitation

Throughout the history of modern corrections, rehabilitation has been identified as both successful and unsuccessful as it continues to forge its path for acceptance by corrections communities (Cullen, Cullen, & Wozniak, 1988; Cullen, Lutze, Link, & Wolfe, 1989; Cullen, Skovron, Scott, & Burton, 1990; Sundt, Cullen, Applegate, & Turner, 1998; Cullen, 2005; Lipsey & Cullen, 2007). Considering the history and uncertain future, rehabilitation continues to be a persistent component within corrections (Cullen, 2005; Sundt, Cullen, Applegate, & Turner, 1998; Cullen, Skovron, Scott, & Burton, 1990). Presently, rehabilitation mostly works parallel to and in conflict with other ideologies (e.g. retribution or incapacitation) and is often considered important in shaping inmate behavior both inside and outside of the prison (Fink, Martin, & Burke, 1972). Its ability to remain a consistent philosophy of punishment is impacted by this disjunction. Due to this inherent and potentially conflicting ideological relationship within correctional institutions, reviewing the development of rehabilitation throughout the history of corrections may provide insight into how to not only maintain its acceptance in present-day correctional institutions but also ensure its future acceptance.

Much of the current literature on rehabilitation often centers on the identification of success. More specifically, the literature has attempted to clarify the notion that rehabilitation does work, and researchers methodically began to identify specifically what works, what does not, and what may be promising (Cullen, 2005; Sherman, Farrington,

Welsh, & MacKenzie, 2002). Although this research movement is often focused on Martinson's (1974) study asserting that (with few exceptions) nothing works, it is still important to understand the genesis of rehabilitation in correctional institutions over time.

Since the first modern prisons were built in the early nineteenth century, they have been primarily used as a place to confine people who do not conform to the laws established by society (Allen & Simonsen, 1998). Prisons were generally considered harsh environments where inmates physically moved very little (Norris & Rothman, 1998). The first American prisons, located in Pennsylvania, New Jersey, and New York, all adopted their own styles of confinement (Allen & Simonsen, 1998). It was not until several decades later that Congress determined prison environments to be excessively cruel (Norris & Rothman, 1998). With the opening of a reformatory in Elmira, New York in 1876, the prison environment was considered to be more humane and more likely to facilitate the potential reform of its residents (Allen & Simonsen, 1998). At about this same time, such policies as indeterminate sentencing and the use of early probation tactics became known as rehabilitative attempts aimed at reducing the prison populations (Maguire & Radosh, 1996). As the mid-twentieth century thrust prisons into a modern era, the term "corrections" was used more often when referring to prisons. Additionally, more concern was expressed for prisoner rights and basic conditions of living (Allen & Simonsen, 1998).

Essentially, the rehabilitation ideology suggests criminal behavior is caused by something that should be identifiable and therefore treatable as any other illness or disease (Maguire & Radosh, 1996). The treatment ideology can be compatible with other ideologies such as deterrence or incapacitation; however, the main difference is that

treatment within even the strictest institutions is designed to prepare inmates for reintegration back into society (Allen & Simonsen, 1998). During the late 1960s and early 1970s, correctional institutions saw an abundance of treatment programs intending to rehabilitate and reintegrate offenders. It is programs such as these that Martinson (1974) included in his review.

Martinson took a systematic approach at reviewing major treatment programs within correctional institutions with the hope of finding a successful method of treatment that could be applied to all offenders in all types of institutions (Martinson, 1974). What he found was that very few evaluations seemed to pass muster in regards to appropriate methodological standards. With regards to reducing recidivism, Martinson (1974) believed that, with very few exceptions, treatment methods in correctional institutions could not be considered useful and successful. The response to this report was substantial. Institutions began eradicating their rehabilitation efforts, and policy-makers moved toward determinate sentencing laws that steadily increased the populations in prisons throughout the 1970s, 1980s, and 1990s (Cullen, 2005).

In an effort to save the rehabilitation ideology, many researchers began to explore these types of rehabilitation programs in more depth (Cullen, 2005). For example, Palmer (1975) revisited Martinson's study and came to some different conclusions about which treatment programs work. Although Martinson's methodology was sound, Palmer concluded the intent of the study was completely misperceived and misunderstood. The movement to disprove Martinson's conclusion has since revealed that different treatments can work for different offenders (Palmer, 1975). It is evident now that rehabilitation efforts within correctional institutions were never fully eradicated (Cullen, Cullen, &

Wozniak, 1988; Sundt, et al., 1998) and programs continue to be developed in what some call rehabilitation's comeback (Cullen, 2005). Robinson (2008) refers to rehabilitation in terms of marketability, or rather re-marketing as necessary to fit within previously accepted penal ideologies.

Currently, the research focuses heavily on determining what exactly works and does not work and for which types of offenders. Pioneering efforts by researchers such as Francis Cullen, Ted Palmer, Paul Gendreau, Joan Petersilia, and Doris MacKenzie continue to reaffirm rehabilitation's role within correctional institutions (Cullen, 2005). Rehabilitation is now considered to be probable, and major breakthroughs occur regularly in understanding how to improve treatment efforts (Cullen & Gilbert, 1982). Despite continued efforts by these and many other researchers to examine which treatment programs are effective, lobbyists, policy-makers, and law-makers prefer to design laws that inflate the prison populations (Irwin & Austin, 1997). Interestingly, prison populations have exploded so much due to these types of policies and laws that many governments have been forced to enact early-release policies to relieve prison capacities and budget constraints. Nevertheless, overpopulated institutions and stagnating prison staff training equates to poor implementation of potentially effective rehabilitation programs. Instead, many institutions may be more amenable to any rehabilitation program regardless of its potential effectiveness. One example of this is Behavior Management Programs (BMPs) that focus on changing behavior by use of deprivation and discomfort techniques (Toch, 2008). Toch (2008) explained that the wide acceptance of BMPs seems to directly reflect the institutional culture and staff perceptions that these are effective rehabilitation programs. Perhaps in some recognition of these ineffective but

welcomed rehabilitation programs, it is necessary to also explore a rehabilitative strategy that focused on improving the physical design of correctional institutions to help.

The Emergence of Direct Supervision and New Generation Institutions

In the 1970s, the Federal Bureau of Prisons implemented a widespread initiative referred to as a new generation of jails and prisons (Yocum, Anderson, DaVigo, & Lee, 2006). This process involved a modification of the architectural design of correctional institutions to allow for the implementation of a new managerial strategy: direct supervision. Historically, prisons and jails primarily employed remote supervision, sometimes referred to as intermittent or linear supervision, which allowed for physical barriers between correctional officers and inmates (Zupan & Menke, 1988). Direct supervision allows correctional officers to be in pod-like units with the inmates.

There are several important organizational differences between the traditional method of supervision and the new generation method of supervision. First, removing the physical barriers between officers and inmates facilitates more interaction between them (Yocum, et al., 2006). Second, the no-barriers access to the inmates is said to create a greater sense of autonomy and increased levels of decision-making among correctional officers; that is, they feel as though they have more control over their environment and feel authorized to respond as necessary (Gilbert, 1997; Wener, 2006). Third, this model reduces the likelihood of inmate-to-inmate and inmate-to-officer incidents due to the ability of officers to respond more quickly and to the improved relations between officers and inmates (Wener, 2006). These changes are likely responses to identifying such areas as decision-making, supervision, and integration as major factors in correctional officer job satisfaction and role stress (Lambert, et al., 2009).

Although the impact of direct supervision is yet to be confirmed in the empirical research, the evidence thus far is positive and encouraging (Wener, 2006). Zupan and Menke (1988) argued the direct supervision model was not as widely accepted as it should have been considering the substantial improvement in both officer and inmate morale and that this was largely due to the dearth in research. Their longitudinal study found moderate improvements in correctional officer job satisfaction, professionalism, and improved work environment but more importantly found correctional officers felt an increase in control, autonomy, and authority (1988). However, the amount of effort and money put into this endeavor does illustrate that correctional administrators feel this management style is largely effective (Yocum, et al., 2006). It should be noted that at this time the largest impact seen among job satisfaction among correctional officers is likely more noticeable in jails rather than prisons. Much of the literature focuses heavily on the effectiveness of direct supervision in jails, while prisons are often thought not to even employ this management strategy. This could be due to several reasons such as increased cost of physically changing a prison environment, types of offenders (e.g., security levels and special populations), and lack of acceptance that this approach would be feasible in a prison environment. However, if direct supervision is not employed in the entire prison, it is likely employed at least in designated units within the prison complex.

Most notable for the current study is the role of direct supervision in correctional officer orientation and perceived professionalism. The shift from traditional remote supervision to the new generation of direct supervision indicates an administrative and managerial acceptance of the correctional officer's role within the prison and perhaps can be considered an acceptance of the importance of rehabilitation (Wener, 2006; Gordon,

2006). If the correctional institution's goals align with that of a rehabilitative model, it is likely the correctional officer will follow suit. Gilbert (1997) argued that traditional supervision guides discretionary decision-making almost solely by the paramilitary management structure; whereas direct supervision allows for some of the most important decisions regarding inmates to be made by what he calls the lowest-ranking staff member of the prison: the correctional officer. Gilbert (1997) suggested that correctional officers have a significant influence over the inmates they supervise which alludes to the potential importance of correctional officers serving as treatment providers.

The Correctional Officer's Role in Rehabilitation

To consider rehabilitation as an effective ideology within corrections, those who have a direct relationship with the inmates should be considered of primary importance regarding treatment implementation issues (Duffee, 1974; Dvorskin & Spiers, 2004). The evolution of rehabilitation in correctional institutions undoubtedly also involves the development of the correctional officer. Historically considered strictly a prison guard (among many other titles), it was the primary responsibility of the guard to maintain security over inmates and within the prison. In the modern prisons of the early nineteenth century, these prison guards were generally uneducated, unprofessional, and untrained and were often hired out of necessity or political patronage (Allen & Simonsen, 1986).

As the general conditions in prisons during the mid-nineteenth century were improving, an effort was made to organize the guard force (Allen & Simonsen, 1986). To accomplish this, correctional institutions began to unionize front-line staff and model training efforts after a paramilitary approach emphasizing security and minimizing the importance of interacting with the inmates (1986). Paralleling the rehabilitation

movements in corrections overall, the role of the prison guards also changed. Guards became known as correctional officers, and their role began to change in a more rehabilitation-oriented direction (Poole & Regoli, 1980b). However, many correctional officers still came to be out of a lack of alternatives for other blue-collar work (Hemmons & Stohr, 2001). In the late twentieth century, correctional institutions began taking steps toward professionalizing correctional officers by requiring high school diplomas, raising average starting salaries, and encouraging more positive interaction with inmates. Despite these efforts to improve professional status, the present day correctional officer force still essentially maintains a paramilitary-style approach.

Correctional Officer as Treatment Provider

Much of the research on the effectiveness of rehabilitation asserts that implementation of such treatment may be a primary factor in its potential success (Allen, Mackenzie, & Hickman, 2001). Although many institutions employ specialized treatment personnel who may be involved in specific treatment efforts, it is important to examine the role of the primary front-line staff who are responsible for the safety and security of all inmates at all times, especially in terms of their impact on program implementation (Antonio, Young, and Wingard, 2009). One of the primary goals of correctional officers is to maintain security and to protect society (Zald, 1962; Dvorskin & Spiers, 2004), while at the same time the goal of treatment is to rehabilitate the offender and to ensure society's protection when they are released (Grusky, 1959; Farkas, 2000). Therefore, it seems that a natural role of the correctional officer should be to facilitate an environment that is conducive to the rehabilitation of inmates while maintaining control (Zald, 1962). As mentioned previously, the shift of job title to "correctional officer" implies the

importance of the role of the officer in the rehabilitation process (Poole & Regoli, 1980b).

In a professional capacity, correctional officers must interact with the inmates regularly; subsequently, they must react to changes within the correctional environment appropriately (Williamson, 1990). In the development of correctional officers as treatment providers and as rehabilitative ideals became more accepted by correctional institutions, correctional officers felt they could no longer control inmates the way they wanted to (Duffee, 1974; Sykes, 1958). The potential for burnout in this harsh work environment contributed to officers feeling ineffective and less committed, which became a barrier to accepting rehabilitation (Garland, 2002). In addition, correctional officers create their own subculture that often separates them from other professionals within the correctional institution (Clemmer, 1940). This naturally existing conflict in custody versus treatment orientation contributes to the wide range of issues involving effectiveness of rehabilitation efforts within correctional institutions.

Ideological Orientation

Organizational goals within prisons and jails are likely to affect correctional officer attitudes greatly. Whether a facility is custody- or treatment-oriented can influence attitudes of correctional officers toward inmates and the success of rehabilitation (Farkas, 2000). The correctional officer's front-line roles and continuous interactions with inmates have been researched extensively (see for example Farkas, 1999 and Melvin, Gramling, & Gardner, 1985). The average citizen may perceive guarding prisoners strictly in a custodial manner, and this perception may reflect back into the correctional environment. This societal reflection may directly impact the organizational goal that is adopted by the

correctional officer (Fink, Martin, & Burke, 1972). If society is in favor of rehabilitation, the correctional officer will likely be more treatment-oriented. Similarly, and more likely, if society is more punitive, the correctional officer is likely going to be more custody-oriented. The crux of the matter here is that there may be reason to believe would-be correctional officers tend to lean toward a more conservative, security-oriented philosophy (Farkas, 2000). These inherent personal philosophies may help in understanding the orientation of the correctional officer and their environment (Ortet-Fabregat, Perez, & Lewis, 1993). Additionally, they may help isolate the other factors that contribute to correctional officer attitudes.

Much of the literature to date has found that correctional officers are amenable to treatment for inmates (Cullen, et al., 1989; Toch & Klofas, 1982; Shamir & Drory, 1981; Philliber, 1987; Whitehead and Lindquist, 1989; and Antonio, Young, and Wingard, 2009). Although this is a sound argument for the rehabilitation ideology, it is important to point out that measuring attitudes by how they are oriented toward inmates, rehabilitation, or other aspects of the correctional environment contains abundant variation (Sims, 2001). Similarly, the attributes that are consistently identified as being possible predictors of correctional orientation are also operationalized inconsistently (Philliber, 1987). The attributes reviewed here encompass the correctional officers' attitudes toward inmates, rehabilitation, and/or work environment. Some of the literature overlaps with broader subject areas such as job satisfaction; however, only the research salient to the issue of attitudes as predictors of correctional orientation is reviewed.

Role Conflict between Treatment and Custodial Roles

Throughout the literature, role conflict appears in a variety of ways. It can be seen as moderating the impact of individual attributes (Jurik, 1985), organizational attributes (Hepburn & Albonetti, 1980), and sometimes as even varying in name (i.e., role stress) potentially creating an entirely different interpretation of its function. For the purpose of this review, role conflict is presented as its own attribute, separate from individual or organizational attributes. Role conflict is assumed to predict correctional officer attitudes toward inmates, treatment, and work environment. Due to the variations in interpretation of role conflict, the ideological orientation context in which role conflict may develop will first be described. Relevant literature is reviewed chronologically to demonstrate the development of the topic of correctional goal orientation.

Crouch and Alpert (1982) suggested correctional officers typically enter their occupation with a general acceptance of rehabilitation. Using both the Thurston's Attitudes toward Punishment of Criminals and Critical Incidents Scales to measure attitude and aggressiveness toward inmates, they surveyed three consecutive cohorts of correctional officer recruits at two points in time (during orientation and six months later). They found correctional officer attitudes to steadily change toward being more custody-oriented as length of employment progressed. In addition, they suggested that correctional officers did not start out with a punitive attitude toward inmates but perhaps were socialized into becoming more punitive as early as six months into employment. In other words, officer attitudes toward rehabilitation were relatively high at orientation, but as they became integrated into their work environment, socialization issues such as wanting to fit in with their coworkers lowered their attitudes very quickly. Although their

results were statistically significant, their final sample size (n=84) limited further analytical capabilities and might limit generalizability to other situational contexts and populations.

Cullen, Link, Wolfe, & Frank (1985) examined correctional orientation as a contributing variable rather than a dependent variable in assessing the impact on occupational stress. They surveyed a random sample (n=155) of correctional officers in a southern institution and found correctional orientation to be influential. Measuring the level of agreement toward custody ideals versus rehabilitative ideals, work-related variables such as role conflict, and individual characteristics, analyses revealed that being treatment-oriented had a positive impact on job satisfaction. Conversely, they suggested a custody-oriented correctional officer would likely be more dissatisfied with the job.

In a later assessment of the same data, Cullen, Link, and Wolfe (1989) also suggested that correctional officers are generally oriented more toward rehabilitation than previously thought. In their surveyed sample (n=155) of correctional officers, they measured orientation using Likert scales indicating support for both custody and rehabilitation. They also included a forced-response question measuring what the officers felt the purpose of incarceration was. The responses included representations of various ideological perspectives (i.e., to rehabilitate, to deter, to protect society, or to punish). The forced-response question that rehabilitation orientation was not supported (deterrence was the preferred response). They also found most officers consider their primary role to be custodial and their support for treatment efforts is secondary. Additionally, Cullen, et al. (1989) found the officers believed their job should include

more of a human service aspect, but it was not necessarily implied in their previously established role (custodial).

After Cullen, et al. (1988), there was a dearth of studies assessing goal orientation until recently when Tewksbury and Mustaine (2008) attempted to understand orientation in terms of correctional ideology. They focused on five correctional ideologies (rehabilitation, retribution, incapacitation, specific deterrence, and general deterrence) in an attempt to ascertain which orientation correctional officers innately lean toward. They surveyed a sample (n=554) of correctional staff at six prisons in Kentucky. The ideologies were assessed using scales indicating level of importance to the respondent. They also interpreted an open-ended question asking correctional officers to report their perception of the prison's main goal. After performing an initial bivariate analysis, they found rehabilitation was the most favored ideology. They found such high correlations between age and number of months employed to potentially bias the findings toward newer personnel supporting rehabilitation. Therefore, when they controlled for these variables and performed a multivariate analysis the preferred ideology became less clear. Overall, they concluded that retribution was considered to be the favored ideology at age-at-entry; however, longer careers increased the likelihood that the rehabilitative ideology was favored. This finding asserts that a custody-orientation may be more influential overall, but the treatment-orientation is pervasive nonetheless.

What is evident from the review of this literature is that much more research is needed to identify the impact of goal orientation as an institutional context that affects other attributes such as individual and organizational ideological orientation. One conclusion that can be drawn is that goal orientation is inherent to the level of acceptance

of a particular ideology by the administrators of an institution. A lackluster approach to establishing these goals within the institution may increase the level of conflict correctional staff feel during the course of their work.

Another conclusion that can be drawn from the goal orientation literature is that correctional officers come in with a certain level of conservatism, making it difficult to orient them differently while in the early part of their career. The degree of an officer's acceptance of treatment upon entering the corrections workforce might determine how they interact with inmates, enhance or thwart rehabilitation efforts, and otherwise contribute to the work environment over time. The less conservative an officer is may impact how amenable they may be to facilitating a treatment-oriented environment. Farkas (1999) suggested that the success of treatment programs in a correctional institution may be closely related to the role of correctional officers and their regular involvement with inmates; however, this contradicted Hepburn and Albonetti's (1980) suggestion that it is difficult to find a direct link between the role of correctional staff in providing treatment and the success of the treatment program.

Role Conflict as Impacting Officers' Attitudes toward Treatment Goals

Much of the research has focused more specifically on the role conflict of the correctional officer regarding their interactions with inmates (Teske & Williamson, 1979; Hepburn & Albonetti, 1980; Poole & Regoli, 1980b; Saylor & Wright, 1992; Farkas, 2001). Farkas (2001) defined role conflict as the inability to distinguish between a custodial approach and a treatment approach toward inmates. Since correctional officers have the most direct interaction with inmates and greatest potential for role conflict, this group is the primary focus. This section details role conflict as a potential contributor to

correctional officers' attitudes toward inmates, the implementation of rehabilitation programs, and/or the work environment. Relevant research is reviewed chronologically to illustrate development over time.

Treatment goals are often less accepted while custody goals are more prioritized, creating a difficult barrier to bringing the two goals closer to each other. Assessing how role conflict contributes to job satisfaction and attitudes toward inmates, Hepburn and Albonetti (1980) surveyed all treatment and custody staff at six correctional institutions in Missouri. They measured role conflict by level of agreement with statements regarding what role the respondents feel they have and whether they liked their jobs. From their sample (n=518), they found that treatment staff had higher levels of job satisfaction than their custodial counterparts, but the treatment staff felt higher levels of role conflict. This supports the idea that those who are more treatment-oriented may feel more conflicted with their role in the institution, regardless of their specific function. Although security level of the institution moderated these results, their overall conclusion was that role conflict can impact job satisfaction and persist with a more punitive attitude toward inmates.

In an assessment of social climate among correctional officers in federal prisons, Saylor and Wright (1992) surveyed correctional staff in 46 institutions within the Federal Bureau of Prisons (FBOP). This study is important because it employed systematic random sampling among all federal prisons in operation at that time. They measured perceived work environment and job satisfaction using the Prison Social Climate Survey, which is an annual survey instituted within the FBOP. From this national sample (n=3,325), ordinary least squares regression results indicated that those in a custodial role

held more negative attitudes toward their work environment than those in a non-custodial role.

In another systematic approach to summarizing the topic of role conflict, Maahs and Pratt (2001) performed a meta-analysis on 19 studies each measuring predictors of officers' attitudes toward treatment and their job¹. Relevant to the issue of role conflict and attitudes toward treatment, they concluded that correctional officers who experience role conflict did not favor rehabilitative goals and subsequently held more negative attitudes toward treatment as well as their job. Additionally, they found that officers who did not seem to fit the stereotype of a correctional officer were less satisfied with their job, and therefore, less accepting of a treatment goal.

Goal orientation and institutional acceptance of a certain ideology may indeed impact the existence of role conflict among correctional officers which may, in turn, impact attitudes toward inmates, rehabilitation, and/or work environment. To assess this even further, some researchers have attempted to evaluate what may specifically contribute to overall correctional officer ideology. Working from a broader context to a narrower context, overall institutional acceptance of goal orientation may only impact attitudes so much before other attributes appear as contributors. Individual and organizational attributes have been examined to determine what may make officers more custody- versus treatment-oriented (Farkas, 2001; Maahs & Pratt, 2001). Such attributes help to define attitudes toward inmates, treatment, and/or the work environment as a whole and historically seem to mimic either a custodial or rehabilitative inclination of the institution, the group (correctional officers), and the individual.

¹ The relevant studies from this meta-analysis also have been included in this current review. They are: Crouch & Alpert (1982); Cullen, et al. (1985); Hepburn & Albonetti (1980); Paboojian & Teske (1997); Poole & Regoli (1980a, 1980b); Shamir & Drory (1981).

Individual Predictors of Correctional Orientation

Working in a correctional institution is often perceived as a stressful occupation (Poole & Regoli, 1980b; Gardner, 1981; Cheek & Miller, 1983; Long, Skouksmith, Voges, & Roache, 1986; Finn, 1998; Armstrong & Griffin, 2004). Inherent to this concept is the hypothesis that those who work as correctional staff rarely do so by preference; that is, many correctional officers select this career more out of necessity or opportunity rather than by preference (Poole & Regoli, 1980b). Additionally, correctional officers are often considered to be similar to each other but different from employees in other occupations because of their perceived hostile work environment (Poole & Regoli, 1981). It is asserted that this type of hostile environment is created by those who make up the environment. In other words, certain types of people may be drawn to the type of work that correctional officers do (or are perceived to do), which makes for a high likelihood of a hostile environment. However, Jacobs & Kraft (1978) believed that the environment within a correctional institution is so hostile that it is more likely that any beliefs or ideals one has prior to working in such a place will be negated immediately, thus making an employee more hostile regardless of background. It is possible the environment within a correctional institution has changed over time to be less hostile; however, many aspects point to individual characteristics as impacting the overall environment. This individual disposition is explored here as a determinant of correctional officer attitudes.

In addition to the individual reacting to the hostile environment of a correctional institution, it has also been suggested that correctional officers are more likely to react more negatively toward inmates the longer they are exposed to them (Saylor & Wright,

1992; Paboojian & Teske, 1997). Furthermore, as these negative attitudes become more pervasive over time, it appears that an acceptance for rehabilitation or treatment programs becomes less of a priority (Tewksbury & Mustaine, 2008). Indeed, rehabilitation may continue to be an accepted goal by career-oriented officers but it is proffered here that prolonged exposure to a hostile work environment may push the rehabilitative goal into the background. Subsequently, correctional officers may be important individual units of analysis to determine if they have sole control over their attitudes toward inmates, rehabilitative goals, and work environment rather than being heavily influenced by other factors (e.g., organizational attributes). Therefore, individual attributes have been studied rather broadly to attempt to ascertain which personal characteristics may make someone more prone to harbor negative attitudes.

There are myriad individual attributes that could be considered important predictors of attitudes toward inmates, rehabilitation, or work environment. Many have been previously identified and researched extensively (Philliber, 1987). Although this review focuses on many of the same attributes that have already been established as potential predictors throughout the literature it is acknowledged that many of the conclusions drawn from past research are inconsistent and vague. Further discussion of these attributes is warranted. Notable studies are discussed in-depth; Table A1 presents a summary of the research on individual attributes.²

Age. Age is an important attribute to consider when understanding how individual characteristics contribute to correctional officer attitudes. Often, the extreme ends of the age spectrum reveal the most significant results. For example, some have suggested that younger correctional officers may have significantly different attitudes toward inmates,

² Tables referenced in this section can be found in Appendix A.

rehabilitation, and their work environment than older correctional officers (Philliber, 1987). With few exceptions, the research is consistent in measuring age continuously in terms of chronological years. One exception is Jacobs and Kraft (1978); in their study of the impact of race on correctional officers' attitudes toward rehabilitation, they also assessed age, but their dichotomous classification of the variable (under or over age 40 years) potentially biased their results (Jurik, 1985). In fact, they found neither race nor age to be a significant predictor of attitudes toward rehabilitation. They did find that younger officers appeared to have more positive attitudes initially, but those attitudes rapidly faded. Jacobs and Kraft suggested this result may be due to a socialization period that occurs in the early stages of employment as a correctional officer.

Another exception is a study by Teske and Williamson (1979) where they could only find age to be a significant predictor of attitudes toward treatment for inmates when it was part of a set of multiple independent variables. They posited that their data revealed attitude sets that yielded a greater acceptance toward treatment programs, rather than independent attitudes toward independent varieties of treatment (Teske and Williamson, 1979). To support the presence of attitude sets, the authors only entered variables that were found to be significantly correlated with the dependent variables at the bivariate level into a multivariate model. Using a multiple iterative correlation technique, an interaction between the independent variables was noted and each variable was then rank-ordered by saliency. With this technique, Teske and Williamson (1979) concluded that older officers held more positive attitudes toward treatment for inmates than their younger counterparts.

In an update to Teske and Williamson's (1979) findings, Paboojian and Teske (1997) surveyed pre-service and in-service correctional officers to determine if attitudes of correctional officers in the 1970s vary greatly from attitudes of correctional officers in the 1990s. Consistent with previous findings, age was one of the more significant individual attributes, suggesting that older officers have more positive sentiments toward rehabilitative goals. This result appears to remain the same over time, and the authors argued that a maturation process may occur, making the individual attribute of age potentially a significant predictor of rehabilitative orientation. However, overall, they found correctional officers in the 1990s were generally more negative toward rehabilitation than officers in the 1970s. Paboojian and Teske implied that this result supports the idea that society's attitude toward rehabilitation may impact correctional officer attitudes. Likewise, since they contribute to social sentiments, the attitudes of correctional officers might impact societal beliefs. Further, they suggested this may be why rehabilitation efforts throughout the 1980s have been considered to be ineffective. As correctional officers' attitudes have steadily declined over the years, their regular interaction with inmates may be negatively impacting the success of treatment efforts.

When chronological age is found to be a significant predictor of attitudes, most studies yielded results in a similar direction. Generally, older officers are more inclined to have positive attitudes, while younger officers are more likely to be less positive and more custody-oriented (Toch & Klofas, 1982; Jurik, 1985; Farkas, 1999; Farkas, 2000). Rather than view this relationship linearly, perhaps a curvilinear explanation may be warranted. With regards to chronological age, much of the literature has suggested that correctional officers generally enter the workforce with more positive attitudes; those

attitudes drastically decline within the first six months, and subsequently, as correctional officers age, their attitudes gradually improve again. More specifically, Toch and Klofas (1982) assessed the impact age had on professional orientation and job enrichment. They found younger correctional officers are significantly more custody-oriented than older correctional officers. In assessing the relationship between age and the impact of level of ambiguity on work environment, Jurik (1985) also found older officers are more positive toward their work environment. Similarly, Farkas (1999) found that older correctional officers have more positive attitudes toward rehabilitation and counseling roles.

Although the findings on age generally support older correctional officers having more positive attitudes overall, Armstrong and Griffin (2004) found that older officers, on average, experienced more health concerns that were directly related to job stress. This finding suggests that regardless of how much individual attributes may allow for the potential for positive attitudes toward rehabilitation, those attitudes may also be impacted by other variables such as role conflict and other organizational issues that evens out the overall acceptance of a rehabilitative goal. In other words, age appears to positively influence an acceptance for rehabilitation; however, other attributes may have a greater influence.

Age is often primarily considered in chronological terms; however, it should also be noted that age-at-entry into the particular employment may also be of importance. Three studies have assessed the age-at-entry attribute as a potential predictor of correctional officers' attitudes. Cullen, et al. (1989), Farkas (1999), and Tewksbury and Mustaine (2008) each assessed the impact of individual attributes on attitudes toward rehabilitation and inmates and/or rehabilitation, and attitudes toward ideology

(respectively). Farkas found age-at-entry not to be statistically significant, but Cullen, et al. found that the older someone enters into the correctional officer position, the more positive they are toward rehabilitation. Tewksbury and Mustaine (2008) also found age-at-entry to be a significant predictor of support for the rehabilitation ideology. These results actually support the importance of chronological age as a predictor variable, because it appears that as people get older, they may be naturally more positive toward inmates, rehabilitation, and work environment.

Race. Correctional officers were often stereotyped as white, rural, and uneducated, and it was these characteristics that in the past have facilitated increased tension within correctional institutions with the largely black, urban inmate populations (Jacobs & Kraft, 1978). To decrease these tensions, administrators began to recruit black correctional officers with the intent to ameliorate tensions between guards and prisoners (Philliber, 1987). However, in the research, racial diversity is often limited in the samples making statistically significant conclusions difficult to ascertain (Saylor & Wright, 1992; Cullen, et al., 1985; Jurik, 1985). Therefore, with the exception of a few studies, race is generally considered either to be inconsistently reported or it is not considered to be an influential factor in attitudes toward inmates, rehabilitation, or work environment (Philliber, 1987; Sims, 2001).

Jacobs and Kraft (1978) surveyed correctional officers in two maximum security prisons in Illinois. Their intent was to explore whether there were race differences with regard to attitude toward inmates and rehabilitation. They hypothesized that black officers would be more amenable to supporting rehabilitation than their white counterparts. Overall, they found race to be an insignificant factor in determining

propensity toward supporting rehabilitation even though on average the respondents were younger, more educated, and more urban. Jacobs and Kraft argued that one possible reason for this result is the answers on the survey were more socially desirable than if the respondents had been completely honest. Similar to their discussion on age, they also suggested another reason for the lack of difference attributed to individual attributes is the potential of a socialization period that occurs within the first months of employment.

In contrast, Jurik (1985) found race to be a significant predictor of attitudes toward inmates in her survey of officers at a medium-minimum facility in the western United States. Although this seems to be in direct contrast to Jacobs and Kraft's (1978) findings, Jurik suggested the results differ; first, due to geographical and security-level differences between the sampled institutions. Second, Jurik's sample incorporated other race types (e.g., non-black, non-white), while Jacobs and Kraft solely focused on black and white officers. Third, Jurik also suggested the statistical significance should be interpreted cautiously as it is only bivariate correlations that support the assertion that race predicts more favorable attitudes toward inmates. Similarly, Toch and Klofas (1982) also found race to show some form of differentiation in desire to have less interaction with inmates. In their assessment of alienation and desire for job enrichment, they found minority status to be significant with higher feelings of alienation among colleagues but preferred more distance between them and the inmates.

To assess the possibility that attitudes may change significantly within the first months of employment at a correctional institution, Crouch and Alpert (1982) performed a longitudinal study that measured cohorts during their training as well as six months later while on the job. Using race as a control variable, they found it did not have a

significant impact on punitive attitudes toward inmates. Similarly, Cullen, et al. (1985) also used race as a control variable and found black officers to be less satisfied with their job than their white counterparts but otherwise experienced no other significant differences in coping strategies. These results support Jacobs and Kraft (1978) but contradict Jurik (1985) and Toch and Klofas (1982). Again, these discrepancies are likely to be due to lack of racial diversity, race categorization, and analytical approaches.

In an attempt to understand how much impact race really has on officers' attitudes, Jackson and Ammen (1996) built off of a previous study (Teske & Williamson, 1979) that did not originally include race as a primary predictor variable. Jackson and Ammen assessed race (three groups: African Americans, Hispanics, and Caucasians) using categories previously considered by Toch and Klofas (1982). Jackson and Ammen (1996) found African American officers were more accepting of programs for inmates than both Hispanic and Caucasian officers. However, all three groups felt similarly regarding the degree of contact as well as the inclusion of psychological services for inmates. Overall, they concluded that race may impact attitudes at some level, perhaps more so than other demographic attributes.

Education. One individual attribute is often considered to be a primary predictor for how to improve the capabilities of a particular workforce (Jurik, 1985; Farkas, 2000). Improving the educational background of correctional officers is hypothesized to improve decision-making skills, discretion in interacting with inmates, increase the likelihood of job satisfaction, reduce the likelihood of role conflict, and increase the perception of professionalism (Jurik, 1985; Philliber, 1987; and Farkas, 2000). As a potential predictor of correctional orientation, education is often measured as a control variable in research

assessing predictors of correctional orientation. Additionally, Jurik (1985) also has suggested that although education may be a positive predictor of improved attitudes among correctional officers, it may also contribute to a higher turnover rate as job satisfaction may actually diminish. Indeed, higher education levels may allow for some officers to feel they can find more satisfying work elsewhere. However, when education is included, due to methodological differences and often being used primarily as a control variable, the results of education as a predictor of correctional orientation are often either mixed or negligible (Philliber, 1987).

Poole and Regoli (1980b) assessed education as a background variable by measuring it in the number of years of schooling beyond high school completed. In their assessment of education as impacting attitudes toward inmates, they found that more education lessened the likelihood of being more custody-oriented. Poole and Regoli (1980b) argued that this finding supports the idea that correctional officers play such a significant role in rehabilitating inmates that if they are more inclined toward the rehabilitation ideology, any attribute that predicts this inclination should be supported by the institutions. In other words, providing opportunities for officers to receive continued education or recruiting officers who have higher levels of education is warranted.

Tewkesbury and Mustaine (2008) assessed the level of education as a control variable in impact on a correctional officer's inclination toward any particular ideology (incapacitation, retribution, rehabilitation, and specific/general deterrence). They re-coded education to be a dichotomous variable measuring the attainment of a degree, and that they found that having a college degree significantly decreased support for

retribution, incapacitation, and deterrence ideologies over rehabilitation and increased support for these results were similar to those reported by Poole and Regoli (1980b).

In assessing correctional officer attitudes toward inmates, Jurik (1985) looked at education as an individual predictor of attitude. With a sample of 179, she measured education in terms of years of schooling and found a positive bivariate correlation between education and intent to work as a correctional officer for human service reasons and not custodial reasons. However, multivariate analysis revealed education to be an insignificant factor in predicting attitudes toward inmates suggesting that any relationship is actually due to other attributes.

Cullen, et al. (1985) examined the impact of education as a coping mechanism for reducing job stress (and subsequently improving job satisfaction and improving attitudes toward the work environment). Although their results showed education to be negligible in predicting attitudes of coping, similar to Jurik's (1985) hypothesis, they found that higher levels of education did yield less satisfaction toward their work environment. It should be noted that Cullen, et al. identified a limitation that their sample was not entirely representative of the correctional population, and therefore, generalizing the results should be done so with caution.

Although education is often touted as a potentially important variable in improving the correctional orientation of officers toward a more treatment-oriented viewpoint, the literature does not necessarily support this. When education is included in the study, it is often only as a control variable, and even still, it is generally categorical. Limited analysis on a variable measured at these levels has yielded insignificant or negligible results. With the exception of Poole and Regoli (1980b) and Tewkesbury and

Mustaine (2008), research reveals education to not be a significant predictor of correctional orientation. This result is discussed in more detail later in the review, as education plays an important role in shaping the professionalization of correctional officers.

Gender. Possibly due to a perception of the hostile nature of the correctional institution, historically, correctional officers have been mostly male. Even today, the representation of female correctional officers in correctional institutions (including women's correctional institutions) is sparse (Philliber, 1987). However, similar to race, some believe having female correctional officers working in an institution could either have a calming and therapeutic effect on the inmates, or subsequently reduce security threats (Crouch, 1985), or that females are more inclined toward supporting rehabilitative goals (Jurik, 1985). Also similar to the race attribute, research on gender differences among correctional officers has yielded mixed or insignificant results.

In their longitudinal study, Crouch and Alpert (1982) also assessed gender as one of their control variables. Again, they were looking at the possibility of some type of socialization occurring after few short months on the job. With regard to gender, they found significant results that gender does impact punitiveness and aggression. Specifically, they found women to become more tolerant of inmate behavior and less punitive toward inmates over the six month socialization period; meanwhile, their male counterparts become more aggressive and more punitive over the six month socialization period. Crouch and Alpert did find much of the female sample was considerably older than the male sample, but after controlling only for gender, they found age to be an insignificant variable.

Jurik (1985) found gender to have a significant impact on attitudes toward rehabilitation; that is, female correctional officers are more inclined to take a correctional officer job out of the human service expectation than their male counterparts. However, similar to her finding with race, bivariate correlation provided the only real statistical support for this conclusion. Additionally, Jurik also found female officers, as a whole, had less contact with inmates than male officers. Therefore, regardless of why they took the job, the actual interaction with inmates and/or rehabilitation by gender is limited.

Cullen, et al. (1985) found female correctional officers to appear to have more stress. However, Cullen, et al. (1989) used the same sample to assess the impact of gender on attitudes toward rehabilitation and found gender not to be statistically significant. Although the variables are operationalized differently, it does imply that gender may not be a stable predictor of correctional officers' attitudes.

The individual attributes presented above warrant further exploration to help clarify many of the inconsistencies found throughout. Many studies either contradicted each other or were inconclusive after running higher-level statistical analyses. Age, race, education, and gender are certainly not the only potentially important individual characteristics but they are the most prevalently and consistently studied. There is some evidence that with improved methodology (to include sample size, sample method, and statistical analyses) these individual attributes could be identified as potentially being strong predictors of attitudes.

Organizational Predictors of Correctional Orientation

Although individual attributes receive quite a bit of attention in the literature as important predictors of correctional officers' attitudes, it is recognized that some

organizational attributes also may impact attitudes (Jurik, 1985). Either directly or indirectly, organizational attributes may influence correctional officers' attitudes toward inmates, rehabilitation, and work environment (Hepburn & Albonetti, 1980). This suggests that in addition to individual differences and ideals (or even regardless of those individual differences and ideals), the organizational environment might create a uniform response from correctional officers in the type of attitudes they may hold; specifically, negative attitudes (Jurik, 1985). Some suggest that organizational variables may contribute more significantly to negative attitudes than any individual characteristics correctional officers may have (Maahs and Pratt, 2001). This review focuses on the following attributes as organizational variables, but it is recognized that many of these attributes could be representative of differences across individuals. For the purpose of this review, attributes that cannot be transported in (i.e., individual attributes) will be considered to be an organizational influence.

As reviewed in the previous section, individual-level conflict due to disparate treatment and custody goals exist. Although it is possible for the goals of individual officers to form a confluence maximizing control, safety, and treatment ideals, the organizational goals may be so drastically different from the individual goals that they may significantly shape the attitudes of the staff, particularly the correctional officer. Assessing organizational impact on correctional officer attitudes has proven to be difficult in past studies; due to the variety of dependent variables (e.g., job stress, job satisfaction, or role conflict), it is difficult to compare results and draw conclusions.

Shift assignment. Few studies have focused on such organizational factors as shift assignment or variations in frequency of contact with inmates. The studies that have

assessed these have found there to be some positive correlation (Farkas, 2001).

Additionally, the results potentially indicate that the impact of other attributes (e.g., age and seniority) appear to have been moderated by these organizational variables. Much of the frequency of contact with inmates is often dependent upon the type of shift the correctional officer may work. Some shifts (particularly morning and afternoon shifts) are seen as having the most frequent contact with inmates; related to this is the fact that most new officers are more likely to be assigned to these shifts (Farkas, 2001). Farkas has suggested that this potential correlation of newer officers on least popular shifts may explain some of the differences found between the attributes of age, seniority, and correctional experience. Cullen, et al. (1989) also assessed the impact of shift assignment on attitudes toward inmates by surveying a sample (n=155) of correctional officers employed at a southern correctional institution. Operationalizing shift in terms of “day shift,” “evening shift,” or “night shift,” they found correctional officers who were less supportive of rehabilitative goals were generally influenced more by organizational work conditions such as role assignment (night shift).

Few solid conclusions can be drawn about the impact of shift assignment and frequency of contact with inmates. Research has focused more so on attributes that may encompass shift assignment and inmate contact. The primary organizational attributes reviewed here are direct supervision, correctional experience, also referred to as seniority, and security level of the prison. Table A2 presents a summary of the organizational attributes to be reviewed here.

Direct supervision. One organizational factor that is thought to have a theoretically significant impact on correctional officer attitudes and overall orientation

may be the type of management strategy employed at the correctional institution. Often considered a factor in reducing disciplinary problems, occupational stress, and job satisfaction (Wener, 2006), management strategies may also be important in shaping officer attitudes toward their inmates, work environment, and rehabilitation. One strategy that may act as a potential predictor of officer attitudes is direct supervision. Direct supervision is a management strategy that emerged in the 1970s and allowed for new architectural designs that placed correctional officers in the same space as the inmates, removing major physical barriers that traditionally existed between them (Yocum, et al., 2006). Although inmates still have individual cells, they are allowed to intermix with each other as well as the correctional officers assigned to their pods at a given time. This new generation of management strategy has proven to be generally effective in reducing disciplinary problems between inmates as well as between officers and inmates (Zupan & Menke, 1988). Additionally, some believe correctional officers perceive themselves to have greater levels of autonomy, decision-making ability, professionalism, and rehabilitative impact (Wener, 2006). It is this latter point that is important to the current study.

There is a significant dearth of research on the impact direct supervision (or management style, in general) has on prison officers' attitudes toward inmates, work environment, and rehabilitation. Again, much of the research has focused primarily on jails. To remain within the organizational construct presented in this review, only the significant (statistically significant/not significant) findings relevant to the impact on correctional officers in prisons will be offered. Zupan and Menke (1988) performed a longitudinal study that assessed correctional officers' attitudes toward their job and

organization as they transitioned from a traditional remote supervision facility to a new generation direct supervision facility. Survey data were gathered at the facility six months before (n=37) and six months after (n=59) the transition. In addition to those transitioning, new officers were hired at the new facility, which likely accounted for the difference in sample size at the two data collection periods as well as possible contamination regarding the differences in length of employment. Results indicated overall the second data collection showed increased/positive response to the new facility as well as a potential for an increase in perceived job enrichment. However, as just mentioned, length of service seemed to play a role in attitudes between new hires and those with more experience. The authors cautioned that other factors might have moderated that particular result, such as not properly accounting for time of adjustment to the new facility. The statistical methods employed in this study were not specified; sample size limitations may indicate limited statistical analyses. Overall, the authors concluded the results were an indication that the new generation of direct supervision could positively impact correctional officers' attitudes toward work environment.

In an effort to produce more consistent data on the impact direct supervision may have on attitudes, Applegate and Paoline (2006) surveyed 385 line officers at a jail in southern California that employed traditional (n=202) and direct supervision (n=103) management styles in separate units within the same complex. The survey focused on attitudes toward work environment by primarily addressing work group cohesion, job satisfaction, autonomy, job involvement, dangerousness, routinization, and role ambiguity. Although it was hypothesized that the difference in management styles between the units would produce a difference in attitudes (direct supervision yielding a

more positive attitude) the OLS regression results found there to be no significant difference in attitudes with management style as a predictor variable.

Yocum, et al. (2006) employed three studies simultaneously that assessed the impact direct supervision had on officers' perceived control and attitudes toward inmates. Drawing samples from county jails in the Western United States, study 1 (n=82), study 2 (n=164), and study 3 (n=126) all compared officers who worked in remote supervision facilities with those who worked in direct supervision facilities (Study 3 contained both staff and inmates). It should be noted there was some overlap in sample selection among the three studies. The survey assessed aggression, stress, boredom, autonomy, and attitudes inmates and officers had toward each other. Consistent with the results found by Applegate and Paoline (2006), ANOVA and t-tests revealed no significant differences existed between any of the groups within each study.

The few studies that have specifically evaluated direct supervision as an organizational predictor of correctional officers' attitudes have all yielded results that did not support that management style as a powerful attribute. Theoretically management style should impact attitudes, but the evidence does not support this expectation. Some suggest differences in implementation, training, and education regarding direct supervision may be moderating the findings (Applegate & Paoline, 2006; Yocum, et al., 2006). Perhaps the lack of research has made it difficult to reach a solid conclusion about direct supervision as a predictor variable (Wener, 2006). Overall, similar to many of the individual attributes and other organizational attributes presented in this review, management styles warrant further exploration.

Correctional experience or seniority. How long a correctional officer has been employed at an institution or within the correctional industry is a frequently studied attribute that has yielded mixed results (Philliber, 1987). For one, it is often considered both an individual and organizational attribute depending upon how it is measured. For the purpose of this review, it will be considered as an organizational attribute for the reason that over the long run career officers are potentially significantly influenced by organizational practices which ultimately may minimize individual influences. Seniority is likely to be an organizational predictor as it may be perceived that officers who enjoy their work are likely to stay longer. Thus, the organizational environment may increase this likelihood. Also, as previously discussed, improvement of management strategies such as direct supervision may also help to explain why experience serves as a likely predictor of attitudes. Regardless of how it is specified, correctional experience does appear to generally have a substantial impact on correctional officer attitudes toward inmates, rehabilitation, and work environment.

As mentioned previously, the first few months of employment include a socialization process for all new officers (Jacobs & Kraft, 1978). This socialization process may negate any individual characteristics that correctional officers may have (Crouch & Alpert, 1982; Crouch & Marquart, 1980; Philliber, 1987). It is also possible that this socialization process continues over the course of a career as a correctional officer. To assess this, Philliber (1987) described the length of correctional experience attribute as one of the best ways (aside from an extensive longitudinal study) to get an idea of how attitudes may change over time.

While assessing the impact of race on attitudes toward rehabilitation, Jacobs and Kraft (1978) also differentiated their sample by length of time on the job (under four years vs. over four years). They hypothesized that less experienced officers would have a more favorable attitude toward rehabilitation, but they found no difference in attitudes by years of service. They further asserted that there is a socialization period that occurs at least within four years, but possibly even within the first six months of employment, and this is to likely influence the measured attitudes. The implication here is that positive attitudes held by newer officers may only last a few months or years. After this short honeymoon period, officers begin to develop negative viewpoints. Jacobs and Kraft (1978) measured experience as a dichotomous variable, and allowing experience to be measured with more variation could lead to different conclusions.

Teske and Williamson (1979) used several scales to address a variety of attributes including correctional experience as potentially impacting officers' attitudes. To measure attitudes toward certain treatment programs offered in the institution, Teske and Williamson developed a Master scale that was divided into six subscales: academic educational programs through high school, college programs, medical programs beyond basic health care, psychological counseling programs, religious programs, and vocational education programs. Although they concluded that individual correctional officers may be solely responsible for how their attitude can impact inmates, they also concluded that as officers gained more years of service in corrections they were increasingly more negative toward inmates, which may imply an organizational impact. Their finding supports the idea that experience, with the exception of the first few months of employment, may impact attitudes even more than age.

Expanding from both Jacobs and Kraft (1978) and Teske and Williamson (1979), Jurik (1985) also assessed the impact of experience on attitudes toward inmates. Improving on the measurement of Jacobs and Kraft (1978), she measured experience as a continuous variable (rather than dichotomous) and found, while controlling for other attributes, officers with more job experience have more negative attitudes toward inmates. Similar to Jacobs and Kraft (1978) and Teske and Williamson (1979), Jurik (1985) also suggested this may be due to a socialization that occurs over time.

Building off relevant findings, Cullen, et al. (1989) attempted to assess correctional officers' attitudes and support for rehabilitative or custodial goals by looking at whether correctional experience impacted attitudes toward rehabilitative goals. They found that increased correctional experience yielded more negative attitudes toward rehabilitative goals. Again, this supports the idea that some form of socialization may occur as a correctional officer gains more experience over time.

Saylor and Wright (1992) assessed what they called status characteristics that may impact the work attitudes of federal prison employees. They explored such status characteristics as type of custody position held (e.g., line officer or supervisor), job experience within the federal prison system, and job experience within the institution. With the belief that focusing only on correctional officers would limit the results, this study focused on all correctional staff (to include medical, counseling, and administrative). Aside from the general finding that federal prison personnel overall held positive attitudes (which could also be due to myriad factors such as better pay and benefits), they also found that the longer a staff member was in the Bureau of Prisons the more positive they felt toward their work. However, they did differentiate staff by

custodial vs. non-custodial position and found custodial staff (correctional officers) to generally be more negative. Additionally, the longer a staff member was at a single institution, the more negative they felt toward their work, yet they were still more positive toward their work than new staff reported at the outset of entering employment as correctional staff. The prison industry experience finding is consistent with past research. Implied here is that the employees who are identified as homesteaders are more likely to become stagnant, and their attitudes will plateau over time if they stay at the same institution. Therefore, Saylor and Wright (1992) suggest regular movement across institutions within the Bureau of Prisons may help employees maintain more positive attitudes.

Armstrong and Griffin (2004) found correctional experience to be a significant contributor to job stress. This finding is salient here because the authors suggest individuals may be unable to adapt well over time, which may contribute to a more negative outlook toward inmates, treatment, and their overall work environment. Therefore, correctional experience as a significant individual attribute continues to find support the idea that the more exposure to the correctional institution, the more likely an officer will hold negative attitudes.

One study stands out among the others by having contradictory results. Farkas (1999) assessed the impact of correctional experience on attitudes toward inmates and found the more seniority a correctional officer had the more likely they would prefer rehabilitative goals. This contradicts all other research reviewed above, which had established that more seniority generally yielded more negative attitudes toward inmates, rehabilitation, and work environment. It is difficult to ascertain why this result differs so

greatly. It is possible Farkas interpreted correctional experience in conjunction with the individual age variable, which suggests older officers are more positive toward inmates while controlling for experience. If chronological age and experience were both input into the same statistical model, they may have had conflicting results. Identifying that there is a difference in results may allow for broader interpretations of the correctional experience attribute. At the very least, it identifies that this attribute needs more consistent measurement to enable more accurate conclusions.

Tewksbury and Mustaine (2008) assessed correctional experience and how it impacted attitudes toward a particular punishment ideology. They found correctional officers generally supported the retribution ideology, but correctional officers were not opposed to the rehabilitation ideology. More specifically, they found correctional experience seemed to have a statistically significant impact to why retribution was the favored ideology. Additionally, correctional experience was also found to be statistically significantly related to support for incapacitation. The impact of correctional experience seemed to be negatively related to favorable opinions of punishment (retribution or incapacitation) but still not equally favorable of rehabilitation as they were of retribution.

Security level. The level of security at an institution or in a particular unit within an institution is typically distinguished as minimum, medium, or maximum and this can be an attribute that compares the organizational goal differences between treatment staff and correctional officers. Hepburn and Albonetti (1980) hypothesized that prisons with lower levels of security had more role conflict among individual correctional officers. They predicted that when treatment and custody goals converge, more role conflict will exist. Additionally, they hypothesized that with higher degrees of role conflict, there will

be a higher level of punitiveness. They found that minimum security prisons seem to contribute to greater amounts of role conflict than other security types. This suggests that when the organizational goals are blurred, both treatment staff and correctional officers may reflect similar indecisiveness. Correctional officers did not necessarily experience higher levels of role conflict, even at lower security levels. However, treatment staff were found to have greater levels of role conflict than correctional officers at the medium security level. The degrees of role conflict did impact punitiveness but not job satisfaction.

In their assessment of how organizational attributes may impact occupational stressors, Cullen, et al. (1985) found higher levels of stress and more job dissatisfaction in maximum security prisons. They suggested this was likely due to the higher levels of perceived dangerousness. Surveying correctional officers in a southern prison, they specifically looked at whether working in a maximum security prison impacted stressors, coping factors, and overall stress in the work environment. They found higher levels of stress occur for officers while they are physically inside the institution, but the stress levels dissipate outside of the institution. Additionally, Cullen, et al. assessed whether perceived dangerousness had an impact and found this variable to be pervasive with perceptions of job dissatisfaction. Cullen, et al. suggested this may be due to the correctional officers' beliefs that the perception of dangerousness may be related to higher levels of security and that the mere threat of violence, victimization, or danger is enough to impact job stress/satisfaction.

In contrast to the findings from Hepburn and Albonetti (1980), and Cullen, et al. (1985), Jurik (1985) found correctional officers who were assigned to a medium-

minimum security prison held positive attitudes toward inmates. Although, it should be noted that Jurik used attitudes toward inmates as her dependent variable rather than role conflict or job satisfaction. Additionally, this result was not significant in the bivariate analysis and only became significant in multivariate analysis when controlling for other potential determinants of officer attitudes, such as age and length of employment. Jurik also suggested the higher levels of positive attitudes may be due to selection bias, as more positive-oriented officers might have been selected for minimum security units to support more rehabilitative ideals.

The organizational attributes presented here illustrate the difficulty in determining whether individual or organizational attributes may contribute to officer attitudes the greatest. In this review, shift assignment and frequency of contact with inmates is only briefly mentioned because the data are inconsistent when trying to isolate their specific effects as organizational attributes. Direct supervision is listed here not only because of the influence management style may have on correctional officer orientation, but also because of the likelihood that it impacts correctional experience or willingness to remain employed as a correctional officer. Although research is limited and existing results are inconsistent, there is evidence that management style may be important in future research. Correctional experience is examined as an organizational attribute due to the nature of it being heavily dependent upon organizational satisfaction and longevity. However, it is noted that this attribute could also be viewed as an individual attribute as it relates to the individual's desire to continue working as a correctional officer. What is clear is that correctional experience has been inconsistently measured and its effect on officer attitudes has been inconsistently interpreted. Security level appears

straightforward at the outset, but the literature has revealed that its effect on officer attitudes, too, remains inconsistent in determination as a predictor of attitudes.

Both individual and organizational attributes (as they are reviewed here) may play significant roles in shaping correctional officers' attitudes toward inmates, rehabilitation, and/or work environment. However, these attributes overlap and contradict each other extensively, making it difficult to determine if there is any one attribute that has the most impact. Additionally, the levels of measurement, operationalization of variables and differences between dependent variables makes determining which attributes have the greatest impact very difficult to assess. Of the individual attributes, age seems to be significantly correlated with more positive attitudes; as correctional officers get older or if they begin their career as a correctional officer at an older age they have more positive attitudes. Race, gender, and education typically yielded mixed or negligible results. All of the organizational attributes may have some role in shaping attitudes, but it more likely directly impacts satisfaction within the work environment rather than specifically impacting attitudes toward inmates, rehabilitation, and work environment. Interestingly, correctional experience and age yielded opposite results, yet intuitively should be more parallel to each other. It seems appropriate to assume that as correctional officers get older, they also gain more experience and seniority and should overall have positive attitudes. The fact that correctional experience seems to yield more negative attitudes over time may show that organizational environment may outweigh the impact of individual characteristics. Overall, it is important to note that although these attributes have been studied extensively they have not necessarily been studied consistently. This

may cause some of the contradictory evidence among the variables and interpretations which makes it more difficult to draw any appropriate conclusions.

Correctional Officer Subculture: Pluralistic Ignorance

Prior to discussing some of the major attributes that may shape correctional officers attitudes, it is necessary to briefly explore the perceptions (and misperceptions) that correctional officers have of each other. Similar to what might exist among other military and paramilitary organizations, correctional officers may work within a distinct subculture (Stohr, Hemmons, Marsh, Barrier, & Palhegyi, 2000). This is important to recognize because the views that officers have of each other may have an impact on their individual attitudes toward inmates, treatment, and their work environment. Pluralistic ignorance refers to the phenomenon that occurs when a group misperceives the attitudes of fellow members of their group (Kauffman, 1981). Any discrepancy that appears between the perceived attitudes and the actual attitudes implies a socialization aspect that may unintentionally impact other attitudes.

Kauffman (1981) studied the existence of pluralistic ignorance by presenting correctional officers with dilemmas and scenarios in which they had to indicate approval or disapproval for both themselves as well as whether they believed their fellow officers would approve or disapprove. These dilemmas were used to determine the amount of appreciation an officer would have toward treatment and sympathy toward inmates in a given situation. The basis for the study was that officers are perceived by their fellow officers as not supporting treatment for inmates and therefore the results should indicate they will largely be unsympathetic. Kauffman (1981) found most of the officers to generally be more sympathetic to inmates and treatment than initially hypothesized;

however, they largely underestimated their co-workers' support and sympathy for treatment and inmates. In general, officers felt they were alone in their beliefs and felt as though they must maintain a more custodial stance in to fit in to the social group. Yet, the large majority of officers felt this way, indicating the presence of pluralistic ignorance.

Klofas and Toch (1982) also studied the presence of a subculture among correctional officers. This study differs from Kauffman (1981) in that Klofas and Toch (1982) controlled for other variables. They found age and tenure to be somewhat important in how likely an officer would be of accepting a more human service-oriented role. Specifically, younger and less experienced officers were less likely to accept this expansion of their role. They concluded that it is this group of officers (which included the young and inexperienced) that was more likely to fit into the subculture myth. That is, they were more custody-oriented than their older and more experienced counterparts. Furthermore, the authors suggested this result to be more of a symptom of organizational issues rather than pluralistic ignorance. Essentially, Klofas and Toch (1982) suggested there is more power among the group setting than the individual setting, which is what creates the subculture and makes it difficult to change opinions within the group.

Grekul (1999) took another approach to pluralistic ignorance by hypothesizing that inmates and correctional officers are more alike in their beliefs and attitudes than they are different. In a survey of Canadian prisoners and correctional officers, she found pluralistic ignorance to be present. Indeed, correctional officers view other correctional officers to hold much more negative attitudes toward inmates than they reported for themselves. Surprisingly, even inmates reported perceptions of correctional officer attitudes that were less negative than the actual attitudes reported by the correctional

officer. Similar to Kauffman's (1981) findings, it appears that correctional officers exhibit a fair amount of pluralistic ignorance, even more so than inmates perceive them to have.

Pluralistic ignorance indicates an organizational dynamic that seems to impact individual attitude toward inmates, treatment, and work environment. It may be difficult to overcome the powerful misperceptions within the correctional officer group. Therefore, it is important to keep this in mind when considering the various attributes that also may shape correctional officer attitudes.

Professionalism

Carr-Saunders (1966) described a profession as a model occupation and further described professionalization as a continuum, where on one end is a profession and on the other is a non-profession. It is important to recognize the difficulty in explicitly defining what encompasses a profession; however, the concept used for modern-day professionalization techniques is based upon the ideal model of a profession and where it is placed along the continuum (Goode, 1966). Generally, professionalization requires that there are commonly accepted assumptions, but a large focus is often placed on the accepted sequence needed to develop a profession (Turner & Hodge, 1970). Therefore, professionalism should be defined not only as a matter of existence but rather in terms of to what degree professionalization has been achieved.

Professionalization of an industry is important because it allows for mobility within a designated career (Hughes, 1966). Without an understanding of the organizational tactics that define this mobility, workers can become stagnant and unproductive. However, there are potential obstacles to obtaining mobility, which can

best be described as individual barriers and organizational barriers (Reiss, 1966). Reiss, identified individual barriers to include qualifications, skills, and training. He also identified organizational barriers to include certification processes, acceptance into training, and memberships into associations. Although many of these individual and organizational barriers may be considered outdated to the correctional industry, they do serve as a foundation for how to potentially link individual and organizational attributes to the successful development of professionalization and their impact on attitudes toward inmates and treatment.

Some of the more common threads in modern-day professionalization movements within any industry include the increased need for improved education, responsibility, and accountability of a certain group (Williamson, 1990). With a primary focus on how work is organized, a group that is considered professional is often deemed to adhere to a prescribed set of guidelines that apply to the occupation as a whole (Williamson, 1990).

Professionalizing certain industries, however, requires extra attention to be paid to the needs of the group to be professionalized. Regarding human service occupations, Frank (1966) suggested full professionalization requires three criteria be fulfilled: 1) consensus on the objectives of the profession; 2) knowledge of the profession that is more explanatory than descriptive; and 3) that there is a unifying theoretical principle behind the skills and techniques employed to perform duties. Williamson (1990) also described four primary elements of a profession: 1) theoretical knowledge acquired empirically; 2) interest in serving the community rather than the self as primary motivator; 3) self-regulation; and 4) reward system.

The criminal justice system as a whole has been attempting to professionalize since the 1960s (Jurik et al., 1987). However, in the criminal justice system professionalization is often referred to more as a reform strategy for addressing increasing organizational difficulties (Jurik & Musheno, 1986). Specifically, human service occupations have front-line workers who frequently interact with un-cooperative subjects, which can make workers feel more stress and hostility than other service occupations (Williamson, 1990). It is the inherent nature of the correctional environment to foster role ambiguity, conflict, and hostility in addition to encouraging an authoritarian approach. Although many correctional officers may believe in the ideals of rehabilitation, the effectiveness of their beliefs is minimized due to a lack of complete professionalization (Farmer, 1977). This inherent stressful work environment provides a substantial obstacle for complete professionalization of corrections, but as Williamson (1990) argues: corrections is an emerging profession. To better understand the context of the professionalization movement within corrections, it is helpful to consider the professionalization movement within law enforcement.

LEAA and the Police Professionalization Movement

When the Law Enforcement Assistance Administration (LEAA) was formed in 1968, it provided substantial funding for agencies and research organizations to identify problems within the criminal justice system and present solutions to those problems. Subsequently, there was a movement toward the professionalization of police officers (Thibault, Lynch, & McBride, 2001). Although the basic concept of professionalizing the front-line positions within the criminal justice system was not new (see for example National Commission on Law Observance and Enforcement, 1931), the LEAA provided

the impetus to make a concerted effort to improve the quality of front-line police officers patrolling the streets. As a result, flocks of well-educated and better-trained police officers began to fill the ranks (More, 1979). It became status quo to require a minimum of a high school diploma and uniform standards of training in all academies (Swanson, Territo, & Taylor, 1998). With an improved public image and the ability to challenge the policies established by their administrators, these new police officers began to represent a more professional approach to law enforcement.

The professionalization movement within law enforcement encouraged more autonomy for the front-line officers, reduced the likelihood of excessive use of force, and promoted more appropriate discretion with decision-making (Swanson, Territo, & Taylor, 1998). It was thought that formal improvement in education and training would improve morale, attitude, and overall emotional well-being (Bennett & Hess, 1996). The LEAA provided funding for prospective officers to receive the appropriate educational training. However, with the increased focus on education and improved training, more time was needed to prepare officers to begin their on-the-job training, which subsequently led to a decrease in efficiency and effectiveness. The LEAA cut its funding stream in 1982, which also signaled the end to one phase of the already fading professionalization movement in law enforcement (Thibault, Lynch, & McBride, 2001).

Today, police professionalization consists of community- and neighborhood-oriented policing to help improve relations between police and the communities they serve (Swanson, Territo, & Taylor, 1998). Although the professionalization movement in law enforcement did not reach completion, police officers can likely be placed on the continuum more near the professional side than the non-professional side. The

professionalization movement in law enforcement did provide a significant understanding of the process needed to improve the human service orientation of their occupation. For example, there is more to professionalizing a work force than simply improving educational standards. Although this is a fundamental aspect of professionalization, it does not allow for full development. Instead, the focus should be on meeting the essential criteria as previously established by Frank (1966) and Williamson (1990). Therefore, it is suggested here that professionalizing correctional officers may parallel that of law enforcement to address improvements or influence change in the human service aspect of the occupation.

Professionalizing Corrections

Similar to police officers, correctional officers are considered to have a direct relationship with the population they serve in that they seek autonomy in the decision-making process while serving on the front-line. As with the police movement, it was assumed that professionalizing correctional officers would alleviate some of the burden inherent in a correctional institution and improve relations with inmates (Jurik & Musheno, 1986). Moreover, professionalizing correctional officers may also facilitate a better work environment, thus improving officer attitudes overall (Farkas, 1990). Allowing a correctional officer to be more active in the decision-making process helps to expand their role from strictly custodian to correctional professional (Frank, 1966). Corrections certainly has the potential to be professionalized, but it is argued that it is perpetually an emerging profession rather than a completed profession (Wilensky, 1964). Farkas (1990) argued a reason for the potential barrier for full development may be due to the inherent realities within correctional work. Indeed, such issues as severe

overcrowding, consistent hostility, and feelings of powerlessness may make full professionalization difficult. However, Farkas (1990) also argued that professionalization is possible as long as the implementation strategy is explicitly defined and followed.

Proper implementation requires a multi-faceted approach, but some argue that increasing the professionalization of front-line correctional officers may exacerbate the already existing tensions between correctional officers and other correctional staff and administrators (Jurik & Musheno, 1986). Jurik and Musheno (1986) employed a mixed-methods approach to assessing the professionalization movement in a medium-minimum security prison in a Western Department of Corrections. Obtaining data primarily from in-depth interviews and self-administered surveys, they looked specifically at how the movement has improved training, attitude, and performance as well as minimized or eliminated organizational conflict. They found that professionalization efforts increased frustration between staff and did not minimize organizational conflict within that institution. They concluded that correctional officers require specified training on the importance of autonomous decision-making (Jurik & Musheno, 1986).

Weber (1957) also argued that delineating between the labels of professional and nonprofessional creates organizational conflict; therefore, all staff must be professionalized simultaneously to minimize this conflict. It is recognized that some professions already exist in a correctional institution (e.g., attorneys or psychologists); however, Poole and Regoli (1980a) suggested that full professionalization within a prison would encourage a more treatment-oriented staff, which can reduce inmate-staff tensions. They further argued that raising the standards for education and training could elevate the correctional officer to that of the treatment staff, thereby reducing role conflict,

ambiguity, and alienation. Poole and Regoli (1980a) surveyed 179 correctional officers in an all-male institution, and intended to find a link between professionalism and cynicism, role conflict, and work alienation. They found that an organization committed to the ideology of professionalization reduced cynicism, role conflict, and work alienation. Similar to Jurik and Musheno (1986), Poole and Regoli (1980a) also contend that autonomous decision-making is essential to creating a more professionalized correctional officer.

Jurik, et al. (1987) suggested that having professionalism mandated may be a primary reason for its ineffectiveness as an organizational management tool. They argued that the definition of professionalism is too narrowly defined as simply improving education of correctional officers. Subsequently, mandated education becomes a perceived faster means of achieving professionalization rather than adhering to intended goals of the professionalization movement. Jurik, et al. (1987) assessed the level of impact working environment can have on any adjustments made intending to professionalize correctional officers, such as improved attitudes, education, and status achievement. Drawing from data collected by Jurik and Musheno (1986), they framed their analysis from three different perspectives: reform, status, and inconsistency perspectives. Rejecting the reform perspective, they found education does not have a positive effect on job satisfaction. However, both the status and inconsistency perspectives were accepted suggesting that more education predicts higher expectations for job satisfaction (status perspective) and perceived work environment does influence job satisfaction more than individual attributes (inconsistency perspective). Overall, Jurik, et al. (1987) concluded that mandated professionalization in this prison may have

negatively impacted overall job satisfaction. Again, they cite lack of autonomy and persistent role conflict issues among correctional officers to be primary reasons for limiting the potential of professionalization.

The professionalization movement within corrections has primarily focused on increased training and education requirements for correctional officers (Williamson, 1990). Similar to law enforcement, having minimum degree requirements (e.g., associate's or bachelor's degrees) for new personnel is thought to increase the decision-making abilities and autonomy of these front-line staff. With increased decision-making abilities and autonomy, some believe this will improve overall attitude toward inmates, rehabilitation, and work environment (Poole & Regoli, 1980b; Williamson, 1990). It should be noted that a recognized problem to requiring increased training and education also seems to contribute to lower job satisfaction and subsequent increased job turnover as the personnel may seek better opportunities elsewhere (Fink, Martin, & Burke, 1972; Jurik, et al., 1987). Additionally, education as an individual attribute impacting attitudes toward inmates, rehabilitation, or work environment was found to be negligible or inconsistent (Farkas, 1999; Jurik, 1985; Philliber, 1987). Therefore, a correlation between professionalization and improved officer attitudes may be unaffected by educational improvement. This supports the concept that professionalization is a complex process and requires more than one aspect of the industry to be improved. As such, an increased focus on understanding which attributes (individual and/or organizational) have more impact may improve the likelihood of a successful professionalization movement.

Although there may be individual attributes as well as organizational attributes that can impact how correctional officers may view inmates, rehabilitation, or their

overall work environment, nearly all correctional officers receive some specific job training. Some institutions or agencies provide incentives to obtain higher education while employed as a correctional officer, but most institutions require correctional officers to receive specific training, whether it is off-site basic training prior to being assigned to a specific prison or on-the-job training during their first months of employment. It is important to note that correctional training is often measured in terms of age, length of service, or experience on the job (tenure). With the exception of late age-at-entry into corrections, these measurements may show that prolonged exposure to the correctional environment generally predicts more negative attitudes toward inmates, rehabilitation, and work environment; however, since this is only a proxy measure of specified correctional training, in terms of professionalization, only speculative conclusions can be drawn.

Professionalization: Improving Rehabilitation Program Implementation

It is clear that the rehabilitation movement is still making pioneering efforts in correctional institutions. This is in large part due to some inherent qualities found in either correctional officers or the institutions they work in. There are many factors, both individual and organizational, that can impact overall correctional officer attitudes toward inmates, rehabilitation, and work environment. Despite continued efforts to determine what predicts officer attitudes, many attributes have been found to be either inconsistent or negligible. However, some have emerged as important attributes in predicting attitudes. For example, age and correctional experience seem to have an impact, but only modest conclusions can be drawn due to the inconsistencies in measurement and methodology. Therefore, it seems possible that individual and organizational attributes

may establish guidelines on which to implement a professionalization development sequence. As Farkas (1990) argued, professionalization may cure what ails correctional officer mobility, but there are substantial obstacles. Short of suggesting a paradigm shift in the correctional officer industry, the correlation between individual correctional officer propensities toward professionalism as a parallel construct with that of correctional orientation is explored in more depth here. Past research indicates individual and organizational attributes may contribute equally to both orientation and professionalism; therefore, approaching them with similar analytical processes, a potential parallel may help confirm the theory that all that matters is what predicts attitudes. Any strong indications that both correctional orientation and professionalism are impacted by individual and/or organizational attributes may reveal the further necessity to focus more on correctional officers for proper rehabilitation program implementation.

Summary

Since previous research does indicate some individual and organizational attributes impact correctional officer attitudes in some direction (Philiber, 1987; Sims, 2001; Farkas, 1999), it is important to clarify the relationship. However, it is also important to evaluate these attributes while also understanding the likelihood that correctional officers may maintain or develop certain psychological attributes over time. Some correctional officers may be pre-disposed to certain types of authoritarian characteristics. Therefore, it is first necessary to evaluate certain psychological attributes to potentially reduce any statistical differences between the proposed independent variables (organizational and individual attributes) and personality attributes that have been stable throughout their lives.

Although previous research alludes to correctional officers having inherent personality characteristics that make them more likely to be custody- or treatment-oriented, it has not necessarily been assessed empirically. It seems reasonable to assume correctional officers may indeed have inherent traits that may not change over time. How conservative or liberal a correctional officer's personal philosophy is toward corrections, prisoners, and rehabilitation may never vary. Therefore, this begs the question of whether some correctional officers should even be hired if they exhibit certain personality traits. With this in mind, the current study intends to examine the following questions:

RQ1) Do correctional officers have certain inherent personality traits that impact their preference for treatment?

RQ2) Which individual and organizational attributes impact correctional officers' correctional orientation and preference for treatment?

RQ3) Does correctional orientation have a parallel relationship with professionalism in how correctional officers view rehabilitation programs?

The above research questions identify areas that may warrant further examination and have not been precisely identified by previous research. Correctional officers are often stereotyped into certain roles (i.e., turnkeys, screws, and hacks) but much of this stereotype may stem from an inherent personality trait. This study specifically examines the personality trait, conservatism, as a potentially important characteristic in impacting attitudes toward inmates, rehabilitation, or treatment. Previous research has attempted to clarify which attributes already may have a known or suspected impact on attitudes. The current study builds upon these known concepts by comparing the attributes with the psychological trait of conservatism. Often taken individually or in comparison to each other, individual and organizational attributes have yielded many inconsistent results. It is expected that these attributes can have just as much of an impact, if not more, when

paired with an inherent personality trait. A comparison of this way adds to the literature by viewing the attributes more as modifiers of traits that may already exist within the correctional officer.

Professionalism of correctional officers has been moderately examined and subsequently abandoned. This study proposes a revitalization of the professionalization movement among correctional officers by attempting to identify the importance of officers' correctional orientation and its impact on rehabilitation. Finding a statistical relationship between these two constructs may enlighten researchers about the possibility that professionalizing correctional officers may improve overall acceptance for rehabilitation within a prison. Along with acceptance may also come improved implementation of rehabilitation programs, officers as treatment providers, and encourage positive inmate-guard relationships.

CHAPTER III

METHODOLOGY

The previous chapter highlighted research that discussed, in depth, important aspects of the acceptance of rehabilitation within a correctional institution as well as explored the role of the correctional officer. Correctional orientation and professionalism were also discussed, at length, to help illustrate the importance of individual and organizational attributes and how they might impact correctional officers' attitudes toward inmates, rehabilitation, and work environment. Research questions were proposed to address the gaps identified in the literature. This chapter explores those questions further by specifying several hypotheses as well as identifying the methodological processes that were utilized in this study. First, to elaborate on the research questions, it is necessary to present the constructs from which they are derived so as to specify the hypotheses.

To answer the research questions, a survey was created to specifically measure important components of the larger constructs. The first construct is correctional orientation and preference for or against rehabilitation. An officer who is more treatment-oriented is likely to have a greater acceptance for rehabilitation. Four hypotheses were tested to address this construct:

H₁: Higher correctional entry age and chronological age will increase the preference for treatment orientation.

H₂: More correctional experience will decrease the preference for treatment orientation.

H₃: Education, race, gender, supervision style, and institutional security level will impact correctional orientation.

H₄: Correctional officers with higher levels of conservatism will have less of a preference for treatment.

The first two hypotheses indicate known expected directions based on research discussed in the previous chapter. It may appear that the first and second hypotheses counter each other; however, clarifying this incongruence may help to explain the inconsistent results that have persisted in the literature. Higher chronological age is likely to yield a preference for treatment, while more correctional experience is likely to yield a preference for custody; yet, as experience increases so does age. This may be explained by the possibility that the later one enters this field of employment, or age-at-entry, may mediate the incongruence between age and experience. Or perhaps, one overpowers the other in impact; age may be more powerful overall but certain organizational environments may contribute to experience as a more powerful variable. Further statistical analyses may help to clarify these attributes and subsequently clarify how they impact attitudes.

The third hypothesis is difficult to predict direction (as previously discussed), therefore, it is simply stated that given a diversity of data, education, race, gender, supervision style, and security level will each impact correctional orientation in some manner. This hypothesis was broken down further to relate the specific results of statistical analysis to each attribute in this hypothesis. Therefore, Hypothesis 3a is associated with education; Hypothesis 3b is associated with race; Hypothesis 3c is associated with gender, Hypothesis 3d is associated with supervision style, and Hypothesis 3e is associated with security level. There was some anticipation that data collected on race and gender would not be sufficiently diverse for further analysis, but were proposed in the hypotheses nonetheless. Since the broader concept of supervision

style could not be identified as a single known variable, it was measured through several items that focus on the face-to-face interactions between correctional officers and inmates. Focusing on interactions was intended to represent the nature of direct supervision versus indirect supervision. Officers who have more face-to-face interactions with inmates may be reflecting the supervision style they are obligated to work under.

The fourth hypothesis refers to the expected negative relationship between an inherent personality trait and correctional orientation. In this study, the personality trait that was used was the level of conservatism of correctional officers. This trait was selected because of the nature of the work environment within a prison. This was derived from the expectation alluded to in the literature that certain types of people become correctional officers, potentially more conservative people, and subsequently are less amenable to treatment.

The second construct is correctional officer professionalism. It was suggested in the literature that correctional officers are not considered to meet the criteria of being full-fledged professionals (Williamson, 1990); however, what may be more important is not the perception that others have about the professionalism of correctional officers, but rather to what degree officers perceive themselves as professionals. This construct was expected to help evaluate the potential relationship between correctional orientation and professionalism. The hypothesis proposed to address this construct is as follows:

H₅: All attributes will impact professionalism in the same way as with correctional orientation; high levels of a positive correctional orientation will be parallel to high levels of perceived professionalism.

This was an all-encompassing hypothesis that was broken down further to relate specific results of statistical analyses back to the original hypothesis. The overall

implication was that if officers are generally treatment-oriented, it was expected that they should perceive themselves as more professional.

Research Design

The current study employed a cross-sectional survey design to achieve the desired goals of the research. This type of design was useful because of the ability to closely analyze a particular phenomenon by looking at a cross-section as it occurs in time (Maxfield & Babbie, 2008). Additionally, this cross-sectional design was used for exploratory purposes to determine the depth and breadth of a particular phenomenon (Maxfield & Babbie, 2008). In addition to these reasons, this design was also chosen for more practical reasons. For instance, fewer resources were needed and costs were reduced to complete this study. Longitudinal and other exploratory designs, in addition to being time-consuming, often exhaust resources and incorporate significant costs (Menard, 2002). This study was not seeking to understand specific cause and effect relationships over time, but rather, this study sought to specify and clarify potentially expected and unexpected relationships. Additionally, the setting of the correctional environment is often not conducive to long-term research designs. Due to the nature of restricted access to the population, data collection was only allowed at one given time period. The use of a cross-sectional design helped to accomplish these goals by providing a detailed look at the proposed relationships while maintaining a practical approach to a potentially limited data collection access.

The survey method was appropriate for this study because of the necessity to get the most accurate data possible from a population that was difficult to access. Surveys are often preferred because they offer a varying flexibility to targeted populations (Maxfield

& Babbie, 2008). That is, a variety of questions can be placed on a single survey. Surveys are useful in social science research because of the subject matter that is often discussed. Self-report survey design encourages respondents to answer and behave honestly without fear of judgment by an interviewer or observer (Hagan, 2006). A survey is not only useful as a research tool because it is easy to distribute, relatively inexpensive, and results are obtained quickly, but it is also intended to obtain quantitative descriptions of a sample population by asking questions of respondents (Creswell, 1994). In this way, significant information can be gathered from the population during one sitting, yielding substantive inferential analysis (Miller & Salkind, 2002).

The correctional officer population is difficult to access for a variety of reasons. For example, it is difficult to gain access to prisons, because prison administrators are sometimes perceived as being fearful of negative results that might undermine their authority and control. Additionally, the targeted population (correctional officers) may also be reluctant to take extra time for a lengthy interview or to respond to a complex mail survey. Therefore, a simple survey that does not require a substantial amount of extra time from their work schedule or days off could have yielded substantial results. The surveys in this study were delivered to each of the selected institutions in bulk. Per prior agreement, prison administrators, and union representatives from each institution informed all correctional officers of the opportunity to participate and were given a one week period to complete the survey. Participating correctional officers completed the survey at their convenience. All surveys were collected one week later by the researcher. It was anticipated that the surveys would take approximately 15 minutes to complete.

Each survey used a self-report style so that respondents could easily and honestly answer all items.

Sample

Access to the institutions was obtained through the Research and Evaluation Division of the Pennsylvania Department of Corrections and subsequently through each institution's superintendent and union representative. Five institutions were selected as sites for survey administration based on their level of custodial management (i.e., minimum or close security) and number of officers employed. One of the originally selected institutions was not included for survey administration due to the union representative objecting to the survey. A similar institution was selected as a replacement site for survey administration. This new institution met the same criteria as the first five selected institutions and was an appropriate substitute based upon the security level and correctional officer population size.

According to the Research and Evaluation Division, the selected institutions used for survey administration should present a reasonable representation of all the custodial staff working at SCIs throughout Pennsylvania. Table F1 shows the comparison between the five selected institutions to all SCIs in Pennsylvania³. The population for the present research included all correctional officers employed at five state correctional institutions located in Western Pennsylvania. Two institutions were close-security (maximum) and three institutions were medium-security. The first close-security institution was originally designed to hold only young adult male offenders but currently holds both young adult and adult male offenders. The second close-security institution is one of the largest and oldest institutions in Pennsylvania and was modeled after the Elmira (NY) Reformatory.

³ All tables referenced in this chapter can be found in Appendix F.

One medium-security institution has a larger than average population of sex offenders. The other medium-security institution was architecturally designed specifically to institute a direct supervision management style by utilizing pods rather than corridors. The final medium-security institution is not known to hold any specific populations but does have a larger population of correctional officers.

There are institution-specific characteristics such as type of inmates housed, varying security levels within the institution, and rehabilitation programming available at each institution that allow for some additional interpretations of how the attitudes of these correctional officers may be influenced. To the greatest extent possible, characteristics such as special inmate populations, the ratio of correctional officers to inmates, and security levels were controlled in multivariate analyses. The sample was intended to be a representative and diverse group of respondents that reflected the entire population of correctional officers employed in Pennsylvania's State Correctional Institutions. Therefore, the organizational differences that may exist between institutions are minimized by sufficient representation in the sample.

The sample was purposive and non-random; therefore, a justification for this sample selection is warranted. Although given access to all state correctional institutions, the sample institutions were selected based on the following criteria: security level of institution, number of correctional officers employed, inmate characteristics, and geographical location. The security level was important, as it was an organizational attribute to be used as an independent variable. It was appropriate to compare at least two different security levels to help ascertain if they yield different results while controlling for other variables. Additionally, incidental inmate diversity (e.g., special populations

units) may have yielded a variety of internal security level designations based on cell block assignment or other administrative aspects of segregation.

The number of correctional officers employed was important because of the necessary sample size needed to achieve the desired levels of statistical analysis. At the time of data collection, the five institutions employed approximately 1,500 total correctional officers. Due to a cross-sectional design, it was necessary to maximize the amount of officers available to participate to achieve an appropriate sample size.

The diversity of the inmates within each institution was an important factor in sample selection because it may have revealed interesting aspects about the correctional officers who guard over them.

The location of these selected institutions was important for more practical reasons including cost and convenience for survey administration. To deliver the surveys in-person, the sample institutions needed to be within a reasonable proximity to the primary researcher.

To get a usable sample size from this population, this study required approximately 200 participants to easily satisfy Cohen's (1992) theory of statistical power. Based upon a desired medium effect size and the use of higher levels of statistical analysis (e.g., multiple regression), ten variables (independent and dependent) at $\alpha=.05$ level would require not fewer than 120 participants. Satisfactory response rates for surveys is usually around 30% (Dillman, 2007) which is consistent with response rates reported by Department of Corrections officials (M. Antonio, personal communication, January 20, 2009). Given the total population of 1,500 officers there was a potential for up to 400 respondents. However, a lower response rate was expected for this study

despite many precautions taken to achieve a satisfactory response rate. Achieving only half of the potential response rate satisfied the minimum requirements for appropriate sample size.

Operational Definitions

Dependent Variables

The current study assessed two dependent variables: correctional orientation and professionalism. Although a single dependent variable would likely be sufficient, the policy implications of testing the relationship with the second dependent variable are worthy of initial analysis. Since the two dependent variables were closely related to each other conceptually and it was ascertained that a relationship may exist, results from the multivariate analysis revealed that a more detailed assessment may be warranted.

Correctional Orientation

Correctional orientation was conceptually defined as the propensity for a correctional officer to be either pro-custody or pro-treatment. This is conceptually defined in the literature as similar to a continuum where custody-orientation is on one end and treatment-orientation is on the other and all correctional officers fall somewhere in between. Operationally, this dependent variable used selected items from the Klofas and Toch (1982) professional orientation inventory as defined and replicated by Whitehead, Lindquist, and Klofas (1987). In the original scale by Klofas and Toch (1982) and in the replication by Whitehead, Lindquist, and Klofas (1987) each reported a validated factor analysis of all utilized items as measurement of correctional officer orientation. The items selected for the current study were chosen because they were specifically defined as measuring correctional orientation and reflect a representation of items established as

general, punitive, or counseling. The inventory assessed officers' preferences for custody or counseling beyond their normal duty requirements.

The full scale was not used in the present study. The items selected for this study reflected two relevant components of the original scale: counseling roles and punitive orientation. Reliability coefficients reported by Whitehead, Lindquist, and Klofas (1987) in the replication for these components were .78 and .64 respectively. In the present study, individual items were coded numerically one to four (the category equated to "don't know" received zero points) and a summated scale was created from the values of the seventeen items used in the present survey. This summated scale reflected a possible range of 0 to 68 with higher values representing a more rehabilitative orientation. There were some items (survey items 10, 11, 12, 13, 14, 15, 16, 19, 21, 23, and 25) that required reverse coding. For these items, the categories for "strongly disagree" equated to four points and "strongly agree" equated to one point and so on.

Professionalism

Professionalism was conceptually defined here as the degree of perceived achievement of individual autonomy, decision-making, and comparative relevance to other officers as well as other professions. Although correctional officers have not been classified as professionals in the strictest sense of the term; this study does not intend to engage in such a debate. Instead, the perceptions of the officers regarding their level of professionalism were assessed strictly as they related to correctional orientation and overall preference for treatment. This dependent variable was operationally measured using Poole and Regoli's (1980a) corrections-oriented version of Hall's (1968) professionalism scale as revised by Snizek (1972).

For the purpose of the present study, the full scale used by Poole and Regoli (1980a) was pared down to nine conceptually relevant items. The full scale represented four different aspects of professionalism: belief in public service, sense of calling to the field, belief in autonomy, and belief in self-regulation. The nine items used in the present study reflected statements from each of these four aspects of professionalism. Poole and Regoli performed a principle component factor analysis that yielded all utilized questions to be statistically uncorrelated.

Similar to correctional orientation, each of the individual items used in the professionalism scale were coded numerically one to four and a summated scale was created from the values of each of the items. On this scale, higher values represented a more punitive orientation and scaled values ranged from 0 to 36 points. As with correctional orientation, there were some items (survey items 6, 7, 8, 9) that required reverse coding where “strongly disagree” equated to four points and “strongly agree” equated to one point and so on.

Independent Variables

Much of the previous research identified variables that potentially impact correctional officers’ attitudes toward inmates, rehabilitation, and work environment; however, the research has also been inconsistent and ultimately inconclusive regarding which variables specifically impact attitudes (Philliber, 1987). This study attempted to clarify some of these inconsistencies by assessing previously tested attributes empirically along with other variables proposed here. Their measurement and analysis here was expected to offer a more precise understanding. As independent variables, they are separated into two groups: individual and organizational attributes.

Individual Attributes

Individual attributes were used in this study to describe representations of demographic characteristics of individuals. The primary individual attributes used in this analysis were correctional entry age, chronological age, education, gender, race, and level of conservatism. The hypotheses were derived from previous research as well as a conceptual understanding of prediction of attitudes. Therefore, the hypothesis regarding age anticipated a positive impact on correctional orientations (preference for treatment). Although previous research indicates age (both entry and chronological) to be a strong predictor of officers' attitudes, it is difficult to assess which age component might be the strongest. Similarly, education, gender, and race also may interchange strength of prediction value in a multiple regression model. The current study attempted to clarify these inconclusive findings from previous research. The hypothesis regarding level of conservatism assumed a certain type of person is more likely to become a correctional officer. Based on previous assumptions throughout the literature, it was expected that officers were likely to have higher levels of conservatism.

Age. Age has been used as an independent variable throughout the research to assess its prediction value of officers' attitudes toward a variety of dependent variables. The current study explored both chronological age and correctional entry age as potential predictors of correctional officers' correctional orientation. Chronological age was conceptually defined as the respondents' number of years since birth at the time of the survey administration. Simply put, this assessed how old someone is. The respondents were asked to write their date of birth, which yielded a continuous independent variable when converted to years. Correctional entry age was conceptually defined as the

chronological age the respondents were when they became correctional officers. The respondents were asked to write the date they entered into employment as a correctional officer. This also yielded a continuous independent variable, when converted to years.

Education. Education has historically been considered an important potential predictor of officers' attitudes toward correctional orientation. However, it has also historically yielded vague and inconsistent results in regards to identifying a positive or negative relationship. The important factor revealed in previous literature is that any formal schooling beyond high school may make the difference in attitudes compared to those who have only completed high school. For this study, education was conceptually defined as the respondents' level of formal schooling that has been completed at the time of the survey, but the categorical responses on the survey have been coded to reflect respondents who have had education beyond high school and those who have not.

Gender. The current study anticipated a potential lack of sufficient variance in gender to allow for a full analysis of this variable as a predictor of correctional orientation. Previous research has also struggled with insufficient variance, yielding inconsistent results. This variable was included in the analysis and was conceptually defined as the biological difference associated with males and females. Respondents were asked what their gender is and selected either "male" or "female."

Race/ethnicity. Similar to education and gender, previous research has yielded inconsistent results with race as a variable. Also similar to gender, often with purposive sampling, it is difficult to achieve a diverse sample to fully analyze race as a predictor variable. As with gender, race/ethnicity was included in the proposed analysis and was conceptually defined as the respondent's perceived ethnic origin. Respondents self-

selected from a list the category that best describes their perceived ethnic origin. Previous research indicates a consistent method of measurement for race/ethnicity is to use the following categories: White Non-Hispanic, White Hispanic, African-American, American Indian or Alaska Native, Asian, and an Other category where they were provided with space to list their race/ethnicity.

Level of conservatism. Much of the literature alludes to correctional officers having certain personality traits that make them more likely to fit the stereotypes of being conservative and authoritarian (see for example Toch, 1978 and Klofas, 1986). It seems reasonable to assume that people who become correctional officers may have inherent personality traits that make them more prone to be custody-oriented. If this is the case, their attitudes are going to always appear to be more negative regardless of the individual and organizational attributes that also may be impacting their attitudes.

The broad umbrella of personality traits can include a variety of psychological, emotional, and cognitive dimensions. The intent here was not to psychoanalyze correctional officers but rather to ascertain levels of judgment they may have toward certain issues. For the purpose of this study, the conceptual focus of personality was on levels of conservatism. Conservatism refers to the degree of conservative or liberal viewpoints someone holds toward social issues (Wilson & Patterson, 1968). What was assessed here was how certain personality traits, such as conservative ideology, impacted overall correctional orientation and preference for treatment. How an officer feels about capital punishment, abortion, and other controversial issues may indeed be associated with negative attitudes toward inmates, rehabilitation, and work environment in a correctional institution.

Level of conservatism was assessed using a reduced 12-item scale of the Wilson-Patterson Attitude Inventory (WPAI) or the conservatism scale. The full-scale WPAI (1968) was developed to improve upon other self-reported personality measures, such as the MMPI; this inventory sought to remove ambiguity, agreement response bias, and predictive value. Wilson and Patterson rigorously tested this inventory and found it to be sufficiently reliable and valid in assessing authoritarianism, dogmatism, fascism, and anti-scientific attitudes (Wilson & Patterson, 1968). This inventory originally contained 50 items, but although still widely accepted, many of the items are considered dated or irrelevant for modern use. Based upon suggestions by other researchers, the original 50-item scale was pared down to 27 items and used it in the same way as Wilson and Patterson (1968). This 27-item scale was then reduced again to 12 items and was purported to be as effective as the original 50-item scale (Henningham, 1996). Henningham (1996) reported a reliability coefficient of 0.74 for the 12-item scale.

The 12-item scale by Henningham (1996) was used in the current study. The original scale required respondents to select “yes”, “no”, or “maybe” based on their first reaction to the term(s) for whether they believe in a particular issue. The issues included such phrases as “abstinence” and “death penalty.” The current study eliminated the possibility of respondents choosing “maybe” with the intent to force either a conservative or liberal response. The coding for this scale was modified to account for the absence of the “maybe” response. All responses that were in agreement with a conservative phrase received one point while all responses that were in agreement with a liberal phrase received zero points. There were several items that required reverse coding (e.g., Gay Rights) so that responses that disagreed with a liberal phrase also received one point and

responses that disagreed with a conservative phrase received zero points. The possible range of scores varied from 0 to 12 where a higher score related to higher levels of conservatism.

To validate the 12-point WPAI scale, a second survey item was added that allowed respondents to self-select on a linear scale how conservative they perceived themselves to be. This item instructed respondents to mark on a line their degree of conservatism. The line associated with this item had a 0 on the left end associated with the word “liberal” and a 10 on the right end associated with the word “conservative”. In the middle of the line was a 5 indicating a degree of neutrality. Respondents were to place a mark on the line where they felt they fall on the conservatism continuum. The responses provided required some computation for coding purposes to ensure consistency across respondents. Some respondents directly indicated a whole number by circling the 0, 5, or 10 associated with the visual representation of conservatism. With these respondents, their direct response was accepted. Other respondents provided a whole number between 0 and 5 or between 5 and 10, and again, these whole numbers were accepted for coding purposes. For respondents who marked the line with an X or similar indicator, the distance of the mark from the left hand point (i.e., 0) was divided by the total distance available (i.e., the distance of the visual line between 0 and 10) and then multiplied by 10 so that their mark could be associated with the more direct whole number responses. This allowed all responses to be coded on an actual scale of 0 to 10. These scores were analyzed as a continuous measurement and a higher score was indicative of the respondent being more conservative.

Organizational Attributes

Organizational attributes are characteristics of the work environment or structure of the institution that may influence the individual behaviors of those who work within it. Although there are many organizational attributes that have been previously researched, many of those attributes are difficult to assess without a sufficiently diverse sample. For the purpose of the current study, the organizational attributes used in this analysis were supervision style, correctional experience (tenure), and security level of the institution. Based on previous research, correctional experience was hypothesized to have a negative impact on correctional orientation. The impact of supervision style and security level has not specifically been identified as having a consistently positive or negative impact; therefore, these were included in the broader hypotheses with education, gender, and race. It should also be noted that correctional experience was also potentially associated with correctional entry age. Again, this is assessed further in the analysis section.

Supervision style. Direct supervision has emerged as a promising new generation of facilities promoting human service-oriented environments. It is believed that this focus on physical design helps to facilitate a work environment where officers are more naturally inclined toward human service, and therefore, may have more positive attitudes toward prisoners, rehabilitation, and their work environment. The difficulty here lies within the inability to specifically identify an institution as direct supervision or indirect supervision. Although these labels are understood as potentially existing at an institution, they are not so clearly defined by the institution. Supervision style is generally identified and measured through a variety of characteristics that are indicative of direct or indirect supervision rather than relying solely on an implied administrative label.

Supervision style was conceptually defined in this study as the institutionally-accepted practice of supervision over inmates by way of routine face-to-face interactions with inmates. Operationally, supervision style was initially defined on the survey tool using several measures to include correctional officers' perception of supervision effectiveness, notice of organizational change, frequency of interactions, whether or not the frequency of interactions was more, less, or the same, types of interactions, and whether or not the organizational change was positive or negative. Although at the Univariate level these items provided some useful information, they were not used in further analyses due to the inability to remove the neutrality of the responses. Response categories for these items allowed for too many respondents to remain neutral. For example, survey item 51 asks: "With regards to supervision over inmates at your institution, how effective do you consider it to be?" The response categories included the following: Very effective, Moderately effective, Neither effective nor ineffective, Moderately ineffective, and Very ineffective.

The majority of respondents selected the two categories representing positive effectiveness (64%), but the neutral response category of neither effective nor ineffective received a substantial response (15%) which made determining how to collapse the categories for multivariate analysis difficult. Survey items 54 and 55 were not necessarily neutral; however, these items did not yield any relevant data for how supervision style is defined in this study and were removed from further analysis. When asking how respondents feel about the frequency of face-to-face interactions with inmates, item 54 offered the response category of "About the right amount" which received the largest response rate (67%). Similarly, when asked if the frequency of face-to-face interactions

has changed, item 55 offered the response category of “It has stayed about the same” which also received the largest response rate (47%).

As these data were coded, it was determined the best items representing the supervision construct in further analyses were the following: 1) frequency of face-to-face interactions with inmates; and 2) perceived frequency of interactions involving treatment issues, grievances, family, and administrative issues. The former survey items allowed for too much neutrality from the respondent which was potentially due to either inappropriate response categories or enabling the existence of pluralistic ignorance. The usable supervision survey items were similar to the second conservatism measure where respondents self-selected on a linear representation of frequency of contact. The left end of the line had a 0 and was associated with very little to no frequency and the right end of the line had a 10 and was associated with a very high frequency. As with the conservatism item, these supervision survey items also required computation for coding purposes to maintain consistency across respondents. Respondents who identified their answer by circling the 0, 5, or 10 or if they wrote a specific number down, then they were left as is. If respondents made a mark on the line, that mark was measured from the left end of the 5.8cm line and a value was associated with it. This value was then calculated as a percentage from the distance to the end of the line and multiplied by 10 to convert it back to the 10-point scale.

Correctional experience. Previous research indicates how long someone has worked in corrections may significantly impact their attitudes toward prisoners, rehabilitation, and work environment. Mixed results regarding this variable have shown that the longer someone works as a correctional officer, the more negative attitudes they

hold toward inmates, rehabilitation, or work environment. The exception to this is if the officer entered the correctional work force at a later age. For the purpose of this study, correctional experience was conceptually defined as the length of time employed as a correctional officer. Respondents were asked to write down the date they entered into employment as a correctional officer. Respondents were also asked to write down the date they entered into employment as a correctional officer at that specific facility. The survey was also assessing their correctional entry age; therefore, time in service as a correctional officer can be cross-referenced with that date/age for accuracy. This clarification assisted with identifying respondents who may have worked at other correctional institutions, thus lengthening their experience. However; it should be noted that unknown extended absences from work were not included in this measurement (i.e., maternity leave, leaves of absence, and intra-institution job changes).

Security level. The security level of an institution may be an organizational attribute that impacts the behavior and attitudes of the correctional officers who work within. Past research has shown mixed results with security levels. This variable is often defined in a variety of ways. For example, individual cell blocks within an institution may have different security levels than the primary label given to the whole institution. This study anticipated intra-institutional diversity, such as the youthful/adult offender mixed institution, where security designations may vary sufficiently for analysis. However, to the greatest extent possible, this was controlled for so that only institutional security level was the variable of analysis. Therefore, the current study conceptually defined security level as the pre-determined security level established by the Department of Corrections to that institution. If there were separate security designations within the

institution, the respondents were asked to write in whether they work in an area that contains any other security level designations separate from that of the designation of the institution as a whole. Respondents were also asked if they oversee any special populations of inmates, and if so, how those populations are designated.

The above-mentioned independent variables were anticipated to fall within the expected parameters as outlined in previous research. However, to date, conservatism has not been empirically tested among correctional officers, which makes its influence on the others unanticipated. A summary of the coding of the independent variables can be found in Appendix B.

Human Subject Protection

In any social science research, it is important to offer protections for human subjects. In corrections research, the environment is often seen as authoritarian, and voluntary participation may be questionable. Correctional officers are not a protected population in official terms, but because of the paramilitary nature of their work environment, there can be a perception of social desirability for participation. To be more specific, officers may feel obligated to participate in research if administrators strongly encourage that participation. In this situation, it may not be perceived as completely voluntary. Since voluntary participation was a concern for the current study, some ethical dilemmas were addressed.

Access to the selected state correctional institutions was granted by the Pennsylvania Department of Corrections Research and Evaluation Division (see Appendix D). This division regularly conducts research in its institutions, all involving voluntary participation. Correctional officers in these institutions are familiar with

surveys that ask about their attitudes about a variety of issues to include inmates, rehabilitation, and work environment. Although participation was highly encouraged, the Research and Evaluation Division did emphasize the importance of voluntary participation. Therefore, the current study followed suit with the protocol established by the Research and Evaluation Division. Final approval was granted by each institution's superintendent and union representative. Contact was established with the Public Information Officer from each of the selected institutions to discuss survey distribution protocol. Per recommendation by the Research and Evaluation Division, flyers were distributed in advance to each of the selected institutions to make potential respondents aware of the forthcoming survey. The surveys were delivered to each institution in-person and left for the correctional officers to complete at their convenience. An informed consent form accompanied the surveys to describe, in detail, what the volunteers must do. The surveys also each contained a return envelope in which officers could place their surveys in when they returned the surveys to the designated location. This extra step allowed for greater confidentiality.

Considering the nature of the surveys the officers are familiar with, the current survey did not require officers to answer anything that would be considered emotionally or psychologically stressful. Therefore, minimal harm was all but guaranteed. The surveys were completely anonymous. Since the surveys were being delivered at one time and collected a week later, the researcher did not know who completed the survey. Although the surveys were coded by institution, specific individual identification was impossible and this further ensured anonymity.

Informed consent forms were provided to those who volunteered to complete the survey⁴. The consent form explained the basic scope of the research while not revealing all aspects of the survey. The form also specified the nature of their voluntary participation and that they may choose to cease the survey at any time without repercussion. If respondents voluntarily chose to participate in the survey, they were allowed to retain their copy of the informed consent form, which indicated their voluntary involvement as well as provided them with contact information for the research team should they have had any questions. The consent forms are now being maintained in a secured location for a minimum of three years as required by the institutional review board.

Summary

This chapter outlined and reviewed the basic methodological process involved in this research project. This process included such steps as identifying and discussing the research questions and hypotheses, sample description and selection, research design and survey construction, and human subject protection issues. Throughout the chapter, each of these steps was explained in detail both in theory and how they were applied in the current study. The next chapter discusses the analysis and results.

⁴ A copy of the Informed Consent Form is found in Appendix E.

CHAPTER IV

RESULTS

To assess correctional officer attitudes toward inmates, work environment, and rehabilitation, surveys were administered to correctional officers at five State Correctional Institutions (SCI) in western Pennsylvania. The data collected through these surveys measured the respondents' attitudes toward the custodial or rehabilitative treatment of incarcerated offenders and perceptions of professionalism. In addition, demographic variables were also included in the analysis to control for relationships that might mask the impact of the variables of interest. In this chapter, the results are presented. Univariate statistics and assessments of construct validity and reliability are presented followed by a discussion of bivariate relationships. Building from these findings, the results of multivariate regression analyses are presented.

At the time of survey administration, PA DOC reported that there were 1,757 correctional officers employed at the five selected institutions which represented 18.6% of the total amount of correctional officers employed by the state of Pennsylvania (9,452). Of this population, 95.8% were male, 4.2% were female, 94.8% were White, and 5.2% were non-White. Of the total population of correctional officers at all SCIs, 89.9% were male, 10.1% were female, 87.3% were White, and 12.7% were non-White. The average age (41 years) and tenure (9 years) were nearly identical representations of the total Pennsylvania population of correctional officers (M. Antonio, personal communication, December 9, 2009). Comparing the population of the five SCIs to the population at all SCIs, the actual sample appears to be a reasonable representation of available correctional officers. Although the total number of correctional officers is

acceptable, when broken down into gender and race, the female and non-white correctional officers are underrepresented in the population of the five SCIs.

Surveys were made available to all correctional officers at each of the five selected institutions. The data collection period ran for three weeks during May and June 2009. Each institution's public relations officer coordinated the distribution and collection of the surveys and provided notice to all custodial personnel several days in advance of the survey administration. Direct delivery of the surveys to individual correctional officers was not permitted. Instead, surveys were left in a conspicuous place (e.g., staff break room) and the custodial personnel were given instructions to take blank surveys, complete the survey at their convenience, and return the survey anonymously in a sealed envelope to another box in the same location. Due to the relatively short time-frame between distribution and collection of the surveys the possibility that significant incidents, newsworthy events, and other historical effects that might bias the results were minimized. Each institution's public relations officer confirmed that no extraordinary events (e.g., riots, escapes, or other institutional research) occurred within the period of time the surveys were administered. The administration of surveys at two institutions (i.e., SCI Pine Grove and SCI Houtzdale) occurred over the Memorial Day holiday weekend (May 23-25). Although the public relations officers at these two institutions ensured that data collection would not be impacted operationally, there is some potential for bias toward negative attitudes due to working on a holiday; however, this potential for bias is expected to be minimal. It is likely that most public service agents are accustomed to working odd shifts, weekends, and holidays, and the timing of the survey administration is not likely to alter opinions in general.

At the end of the data collection period, 202 surveys were returned completed for a total response rate of 11.5%. 200 surveys were collected at the institutions and two surveys were returned to the primary researcher via United States Postal Service and could not be equated to a particular institution. Throughout the data collection period, some public relations officers were more enthusiastic informing the custodial personnel of this survey opportunity. This may have contributed to the higher response rate at specific institutions. Additionally, enthusiasm from the prison superintendents and union representatives also may have similarly affected the response rate at their respective institutions. Although all five institutions assisted in the survey administration, the response rates of each institution seem to relate to the effort of the public relations officers for advertising the surveys to the custodial personnel.

Table F1 reports the comparison between the sample, the population within the five sampled SCIs, and the state population. Although the overall response rate was low, the sample was a reasonable representation of the sample population. The sample is comparatively the same to the population of the sampled SCIs as the sampled SCIs is to the total population. Throughout all SCIs in Pennsylvania, males represented 89.9% of the correctional officer population. Within the five selected SCIs, males represented 95.8%. In the sample, males represented 93%. These percentages illustrate that the sample was sufficiently representative of the five SCIs as well as all SCIs throughout Pennsylvania. The same can be seen with race as well. In the larger state population, Whites represented 87.3%; for the five SCIs, Whites represented 94.8%; and for the sample, Whites represented 93.4%. Comparing these two categories, what is certain is that females and non-whites are slightly underrepresented in comparison to their

employment across the state. With regards to age, 41 years is the average age across each aggregation. The average level of experience within the sample is nine years compared to ten years within the sample. These comparisons from total population to sampled SCIs to sample illustrated the sampling strategy utilized in this study captured a fair representation of all custodial staff in Pennsylvania based on the categorization criteria of race, gender, age, and tenure.

Frequencies and Descriptive Statistics

This section presents the frequencies and descriptive statistics results for all variables included in this study. The dependent variables are presented first, and these are followed by a presentation of the independent variables categorized into individual and organizational.

Dependent Variables

This study measured two dependent variables: correctional orientation and perceived professionalism. Both of these variables were measured utilizing scales approximating a continuous measurement. Correctional orientation assessed respondents' perceptions and attitudes toward custody or treatment with regards to inmates, work environment, and rehabilitation. Utilizing items drawn from orientation scales created by Klofas and Toch (1982) and replicated by Whitehead, Lindquist, and Klofas (1987), this scale assessed counseling and punitive inclinations. The combined scale of 17 items included possible values that ranged from 0 to 68 with higher values indicating more of a treatment orientation.

Perceived professionalism was measured using Poole and Regoli's (1980a) scale of professionalism among correctional officers. This scale focused on certain trademark

qualities of professionalism such as belief in public service, sense of calling to the field, belief in autonomy, and belief in self-regulation. The combined scale of nine items included possible values that ranged from 0 to 36 where higher values indicated a greater level of perceived professionalism. Table F2 reports the descriptive statistics for all of the variables.

The responses for correctional orientation were normally distributed with a median value of 34 and a mean value of 34.34. Though measured differently, these preliminary results appear to compliment the results found by Klofas and Toch (1982) and in the replication by Whitehead, Linquist, and Klofas (1987) that at the outset, correctional officers may not have a strong leaning toward rehabilitation or custody until moderated by other characteristics (e.g., age, gender, and race). The scores for perceived professionalism also appear to be normally distributed with a median value of 23 and a mean value of 23.02. Poole and Regoli (1980a) did not report their results regarding distribution of the professionalism variable; however, it is possible this is due to not finding a direction for or against higher levels of perceived professionalism by correctional officers until, as with orientation, moderated by other characteristics.

Independent Variables

This study measured nine independent variables categorized into individual and organizational attributes. The individual attributes represent the demographic characteristics of correctional officers; that is, inherent traits that presumably cannot be altered. Organizational attributes represent the various characteristics considered to be built-in to the institution as perceived by the individual respondents, yet these

characteristics could be altered by the administration and are likely to impact all correctional officers equally.

Individual attributes. The individual attributes measured in this study were age, education, and level of conservatism. Gender and race/ethnicity were excluded from any bivariate or multivariate analysis due to lack of sufficient representation and variability within the sample.

The primary item used to measure education originally was included on the survey as an ordinal representation of education categories that began with some high school followed by high school diploma/GED, some college or vocational-technical school, graduated college/vocational-technical, some graduate school, and finally completed graduate school. Although this ordinal arrangement of responses could approximate a continuous measurement of education, the construct provided throughout the literature indicates the major difference in attitudes toward inmates seems to stem primarily from any amount of formal education in comparison to no additional formal education beyond high school. Therefore, for further analysis, this variable was collapsed into two categories: graduated high school/GED or less and any formal education beyond high school. The majority of respondents fell into the category of at least some formal education beyond high school with 148 respondents (73.6%), while 53 (26.4%) respondents only had completed high school at the time of the survey. This indicates that most respondents have at least some formal education beyond high school.

An additional survey item was added to assess education as a continuous variable as years of formal education completed beyond high school; however, this survey item did not yield a consistent response. Respondents may have considered high school to be

formal education and therefore the number (in months/years) that they wrote in may be high school plus college or only college. As this could not be determined consistently, this item was not included in further analysis.

Age (in years) appeared to be normally distributed with a median age of 41 years and a mean of 41.57 years. The youngest age reported was 23 years, and the oldest age reported was 63 years. The age-at-entry values also were a reasonable representation of normality with a median value of 29 years and a mean value of 31.13 years. The youngest age reported at the time of becoming a correctional officer was 21 years while the oldest age reported at the time of becoming a correction officer was 53 years.

The two items that measured conservatism both yielded results that are initially indicative of respondents leaning toward being more conservative. The WPAI appeared to be normally distributed with a median value of 7 and a mean value of 7.18. On a scale of 0 to 12 which if a 6.00 indicates neutrality, respondents may lean slightly toward being more conservative. On the self-select linear item, on a 10-point scale where a higher score equated to higher perceived levels of conservatism, the median value was 6.67, and the mean value was 6.20. These results are approximately normally distributed and are comparatively similar to the WPAI results.

Organizational attributes. In addition to individual attributes, this study also measured a category of variables that although are indicated by the individual respondents are more appropriately considered to be organizational attributes that can vary across individual respondents. These variables included types of interactions with inmates, security level, and correctional experience or tenure. The surveys were coded by institution, but due to a limited variance for each institution this coding was utilized for

organizational purposes only and not utilized in further analysis. Supervision style was measured using four survey items that examined the interactions correctional officers have with inmates (including frequency of interactions), and the nature of those interactions (including treatment, grievance, or administrative issues). Security level was measured strictly as PA DOC's identification of the institution either being medium- or close-security levels. Employment tenure was measured as length of time, in months, employed as a correctional officer. Tenure was included as an organizational attribute because the length of time employed in corrections could be largely due to satisfaction with that employment, which can be tied to overall supervision style and effectiveness.

The larger construct of supervision style was measured similarly to the self-select conservatism measure and focused on the interactions that correctional officers reported having with inmates. As already mentioned, these items were coded and equated to a 10-point scale to account for consistency across respondents. The first item measured the frequency of inmate interactions, or how often an officer felt face-to-face interactions with inmates occurred. The median value was 10, and the mean value was 8.36 indicating most respondents report a high frequency of face-to-face interactions with inmates. The remaining items measured how frequently those interactions involved issues concerning treatment, grievance, family, and administrative matters. With regards to treatment, the median value was 5 with a mean value of 3.91, indicating these respondents have less frequent interactions involving treatment concerns. Interactions involving inmate grievances scored similarly to the treatment interactions with a median value of 5 and a mean value of 5.12, indicating about half of the interactions with inmates may involve grievance issues. Family-related interactions had a median value of 3 and a mean value of

3.32, which indicated that these types of interactions are not as frequent. Administrative issues were perceived to occur slightly less with a median value of 5 and a mean value of 4.65.

The institutions selected for this study only represented two security level categories: medium and close (maximum). These are the primary categories utilized by PADO and represent a large majority of the SCIs in the state. In this study, the facilities containing the close designation (76.5%) were represented more frequently than facilities containing the medium designation (23.5%). A survey item asked whether officers worked in an area of the institution that was designated differently from that of the whole institution. Similar to that of the multiple education survey items, respondents reported such a wide variety of responses (to include potentially untrue designations) that this item was not reported here.

Correctional experience or tenure was measured in months by calculating time-in-service based on the date when the respondent first entered employment as a correctional officer and the date the officer completed the survey. The responses for this variable appear to be normally distributed with a median value of 126.5 months and a mean value of 125.05 months or just over 10 years. The least amount of time a respondent reported being employed as a correctional officer was six months, and the longest amount of time was 299 months or about 25 years.

Reliability

An assessment of reliability in this study focuses primarily on the nature of the respondents; that is, this measure of reliability assumes all respondents are essentially the same with respect to their occupation (Field, 2009). The current survey was developed

based on past successful administrations of scale items in corrections research; however, these scales had not yet been used in combination. Each of these scales included in this study was previously assessed for reliability and validity by the primary authors. For the current survey, the two scales to measure correctional orientation and perceived professionalism were modified to decrease the required time to complete the survey. Although the 12-item WPAI scale measuring level of conservatism was used in full, it was modified slightly by removing the option for respondents to select “maybe”. Henningham (1996) reported an alpha reliability coefficient of $\alpha=.74$ for the 12-item scale. It is possible this re-coding impacted the reliability of the scale.

A reliability assessment of the 12-item scale was completed based upon its use in the current study and yielded a fairly low alpha coefficient of $\alpha=.55$. It is generally accepted in social science research that an alpha coefficient of $\alpha=.7$ or higher is considered strong reliability (Carmines-Zeller, 1979; Field, 2009). Yet, Cortina (1993) suggests that the number of items on a scale may substantially impact a reliability coefficient and should be interpreted accordingly. Therefore, low-item scales (e.g., 20 items or fewer) with a reliability coefficient of $\alpha=.5$ or above may be just as strong as high-item scales (e.g., more than 20 items) with a reliability coefficient of $\alpha=.7$ or above. Additionally, this scale had not been assessed in a prison environment, which may have notable differences in response consistency on some occupational-related items such as “the death penalty” and “stiffer jail terms.” To confirm this, further statistical analysis of scale reliability revealed that if these two specific items were deleted the alpha score would be slightly higher ($\alpha=.573$ and $.579$, respectively). Table F3 shows the item-total correlations and the alpha score for the WPAI scale. Since this is not a vast improvement,

these two items were retained to be consistent with the original authors' research and may be explained as occupational-related anomalies for this conservatism assessment.

A second survey item was added to measure conservatism with intent to confirm the WPAI as a valid measure of conservatism. This item asked respondents to self-select on a linear scale how conservative or liberal they perceived themselves to be. At the Univariate level, it appeared these two measures were reasonably similar in that both reflected moderately high levels of conservatism across respondents. As the lower alpha coefficient may suggest, the WPAI may not be measuring the conservatism construct as directly as originally intended. The self-select item may measure conservatism more directly. These two items are compared more directly to each other in both the bivariate and multivariate discussions.

The scale assessing professionalism was modified slightly but also remained consistent with the intent of Poole & Regoli's (1980a) 25-item professionalism scale. This 25-item scale was derived from more generalized professionalism scales originating from Hall (1967) and Snizek (1972). Snizek reported a reliability coefficient of $\alpha=.78$. The modifications made by Poole and Regoli reflect a change in the language of the survey items to be more appropriate for surveys administered in a corrections environment. After performing a factor analysis, Poole and Regoli's scale excluded certain items related to professional organization and yielded four basic subscales of professionalism that could specifically be identified with corrections. Poole and Regoli did not report an alpha coefficient for their modified version of Snizek's scale.

The current survey utilized nine items representing the four professionalism subscales of Poole and Regoli's scale: belief in public service, belief in autonomy, belief

in self-regulation, and sense of calling to the field. The reliability coefficient for the current sample was $\alpha=.570$. Similar to the WPAI scale, for the purpose of reducing the amount of time the respondents spent on the survey, the modifications made in the current study were simply meant to reduce the number of total items while still representing the intent of Poole and Regoli's 25-item scale. Further analysis of the reliability of these items revealed that only two of the nine items would have improved the alpha score. If survey items 1 ("I think my profession, more than any other, is essential for society") and 7 ("Some other occupations are actually more important to society than mine is") were deleted, the alpha score would have improved slightly ($\alpha=.577$ and $.570$, respectively) (see Table F4). It is unclear why these two survey items may impact the reliability coefficient. It is possible these items reflect potential respondent confusion over trying to understand another profession rather than focusing only on their own profession. As with the WPAI scale, since this is not a substantial improvement these items were retained.

The final scale utilized in the current study was derived from Klofas and Toch's (1982) correctional orientation scale. Klofas and Toch reported original reliability coefficients for four subscales: counseling roles ($\alpha = .78$), concern with corruption of authority ($\alpha = .65$), social distance ($\alpha = .59$), and punitive orientation ($\alpha = .64$). The current survey combined two of the subscales from the Klofas and Toch scale: counseling roles and punitive orientation. These two were selected with the intent to specifically identify the respondents' differences between treatment and punitive orientations. An assessment of reliability for all 17 items used as a single assessment in the current survey resulted in a coefficient of $\alpha = .78$, which is consistent with one of the reliability coefficients of the

original Klofas-Toch scale. To maintain consistency in pursuing improved reliability of this scale, further analysis revealed that removing any of these items would not improve the alpha coefficient (see Table F5).

Bivariate Analysis

Bivariate relationships do not control for other variables but rather give an indication of the relationship between two variables as well as provide a foundation for understanding how the variables may interact in a multivariate analysis (Field, 2009). Gender and race/ethnicity have been removed from these results due to a lack of sufficient variability in the sample. All bivariate relationships presented in this section intended to provide the foundation for how to proceed with multivariate analysis.

An important assumption of multivariate analysis is that the independent variables to be used in the analysis are independent of each other; that is, each of the independent variables that may be correlated with the dependent variables is virtually uncorrelated with each other (Bachman & Paternoster, 2004). Bivariate correlations illustrate the relationships that may violate this assumption. Field (2009) described some other important assumptions regarding the interpretation of correlation statistics. One assumption is that the variables are measured at the interval-ratio level, and another is that the sampling distribution is normally distributed, and finally, if one of the variables is categorical, it should be collapsed to only represent two categories (Field, 2009). The data analyzed here meet these assumptions.

The independent variables utilized in multivariate analysis were first analyzed as bivariate correlations (see Table F6). The bivariate correlation matrix highlights the independent variables that are most correlated with the dependent variables. Although

none of the correlations represent any strong relationships there are several that were statistically significant. Both age ($r=.264$; $p<.001$) and age-at-entry ($r=.172$; $p<.05$) are positively correlated with correctional orientation and statistically significant. Of the variables representing supervision style, interactions with inmates involving treatment as well as family issues are each positively correlated with the correctional orientation variable ($r=.177$; $p<.05$ and $r=.202$; $p<.001$, respectively). None of these variables were significantly correlated with professionalism. The only variable significantly correlated with professionalism was security level which was weak and positive ($r=.152$; $p<.05$).

These bivariate correlations revealed some instances of potential problems of multicollinearity that need mentioning. It was anticipated for this study that age and age-at-entry would likely be highly correlated. Indeed, the bivariate correlation revealed that age and age-at-entry are correlated ($r=.753$, $p<.01$); therefore, these two independent variables were not used in the same multivariate models. Similarly, the bivariate correlation revealed that age and tenure are moderately correlated ($r=.498$, $p<.01$). Although these two variables were not necessarily measuring the same construct, tenure was calculated using age and age-at-entry measurements, and therefore, tenure also was not used in the same multivariate model as the variables that determined its measurement.

Another pair of variables required a closer look for multicollinearity was the two conservatism measures, the WPAI and the self-select conservatism scale. Initially, the self-select conservatism measure intended to validate the WPAI scale, but the bivariate correlation analysis confirmed that it the WPAI measure may not be a valid and direct measure of conservatism. Both measures were significantly correlated ($r=.347$, $p<.01$) but the correlation was not strong enough for the self-select item to validate the WPAI. These

results indicate both measures may be equal in multivariate analysis; therefore, both measures were independently utilized in separate multivariate analyses so as to compare the final results. Finally, and as expected, all of the variables representing the supervision style construct were significantly correlated with each other; however, this correlation was intentional to represent the construct of supervision style.

Bivariate analyses were further conducted on the correlated variables mentioned above that could pose a problem with multicollinearity (see Table F7). When regressed with correctional orientation, age was the most statistically significant ($\beta=.264$, $t=3.696$, $p<.001$). Although age-at-entry was also statistically significant ($\beta=.172$, $t=2.344$, $p<.001$) it was not as strongly associated as age. Tenure was not statistically significant when regressed with correctional orientation ($\beta=.123$, $t=1.699$). Neither the WPAI nor the self-select measure of conservatism was statistically significant with correctional orientation ($\beta=.018$, $t=.255$ and $\beta=-.097$, $t=-1.367$, respectively).

Regressing the same above-mentioned variables with professionalism (see Table F7), none of the variables were statistically significant. Tenure was found to be negatively associated, but still not statistically significant. Although age was not the strongest variable among these three with professionalism, it is still the best variable to be utilized in multivariate analysis due to its strong relationship with correctional orientation. For WPAI and the self-select measure of conservatism, WPAI was not statistically significant ($\beta=.024$, $t=.335$), but neither was the self-select measure ($\beta=.025$, $t=.357$). As with the results of the correlation analysis, both WPAI and the self-select measures will each be utilized in multivariate analysis but they will be used in separate

models so that the strength of each model can be solely linked to the use of the WPAI or self-select measure.

The bivariate correlations only illustrate that a relationship may exist between variables; however, a causal relationship cannot be established between these variables, because a correlation between an independent variable and a dependent variable does not ensure causation. To establish any potential causation between variables, other criteria must first be met. In addition to an empirically derived association (Bachman and Paternoster, 2004), the independent variable must be confirmed as temporally ordered before the dependent variable so that cause and effect can be statistically supported. Also, spuriousness must be ruled out (Field, 2009).

An analysis of the correlations between the variables helps to further understand the relationships these variables have with each other as well as with the dependent variables. Since the correlations presented here do not suggest causation between the dependent and independent variables, the models used in the multivariate analysis only utilized the correlations to account for and remove the potential for multicollinearity.

Multivariate Regression Analysis

Multivariate regression analysis works under the assumption that the relationship between variables is linear, which is considered to be the most parsimonious approach to analyzing a relationship (Lewis-Beck, 1980). Therefore, multivariate regression analysis is used in this study to examine the relationships more closely by identifying what kind of relationship may exist between the independent and dependent variables and to clarify the explanatory power the independent variables collectively have on the dependent variables. Multivariate regression analysis is useful in this study because the impact of

any particular independent variable may be more certain as the influences of other independent variables are controlled (Lewis-Beck, 1980).

This analysis employed the use of ordinary least squares (OLS) multiple linear regression. Two separate constructs are represented in the multivariate analysis as dependent variables: Correctional Orientation and Professionalism. Prior to selecting the variables to be analyzed in each of the regression models, careful consideration was taken based upon the bivariate relationships to minimize the potential risk for multicollinearity.

Correctional Orientation

The construct of correctional orientation was measured here as the impact of individual and organizational attributes on correctional officers' inclination to be either custody- or treatment-oriented. Because of the exploratory nature of this research (e.g., measurement of constructs and the lack of confirmed relationships in the existing literature), a more liberal regression strategy was used. A backward deletion stepwise process was used to allow for the least statistically significant independent variables to be removed resulting in the best model representing each construct. To achieve this, a full model with all nine independent variables previously identified in the univariate and bivariate analyses was estimated. The backward deletion process continued until the R^2 and F statistics no longer changed substantially from model to model. If more than one variable was considered to be statistically weakest, then separate models with each removed were estimated to further specify the most parsimonious model that best fit the data. As stated previously, both measures of conservatism were used in separate models for each dependent variable to assess the strength of each on the model. The first full model for correctional orientation included the following independent variables: age,

conservatism (WPAI), frequency of inmate interactions, inmate interactions involving treatment issues, inmate interactions involving administrative issues, inmate interactions involving grievance issues, inmate interactions involving family issues, education, and security level of the institute.

Table F8 shows the results of each iteration throughout the stepwise process. With all variables placed into the first model, these results indicate that these nine independent variables explain 12.5% of the variance in correctional orientation and is statistically significant ($F=2.454$, $p<.05$). Additionally, age was statistically significant ($\beta=.281$, $t=3.583$, $p<.001$). Using the backward deletion process, the statistically weakest variable, when removed, might yield a stronger model. Assessing the t-statistics, there are three variables that would all be considered statistically weakest in this model: the WPAI conservatism measure ($t=-.236$, $p=.813$), inmate interactions involving administrative issues ($t=.259$, $p=.796$), and institutional security level ($t=.291$, $p=.771$). These variables were each removed one at a time to produce a slightly improved R^2 value ($R^2=.129$) as well as an improvement in the overall significance of the model ($F=3.954$, $p<.001$). Also at this point in the backward deletion process, the inmate interactions involving family issues variable became significant ($t=2.081$, $p<.05$). To continue with the process, the next variable that was statistically weakest was frequency of interactions with inmates ($t=.634$, $p=.527$). With the removal of this variable, the R^2 dropped again slightly ($R^2=.125$) and although the overall significance did improve ($F=4.733$, $p<.001$), the interactions involving family issues variable was no longer significant. Therefore, the frequency of inmate interactions variable was retained and the final reduced model for

correctional orientation included the following five variables: age, education, inmate interactions involving treatment, family issues, and grievances.

Table F9 shows the results for both the full and reduced models for correctional orientation. The variable of age stayed significant throughout the backward deletion process and ultimately was the most statistically significant variable impacting correctional orientation ($\beta=.275$; $t=3.745$, $p<.001$), while controlling for the other variables. For every increase in one year in age of a correctional officer, there is a .228 unit increase in being more oriented toward rehabilitation. Another variable that was just short of being statistically significant as weaker variables were removed was inmate interactions involving family issues ($t=1.964$, $p=.051$). As officers have more frequent interactions with inmates that involve family issues, there is a .477 unit increase in being more oriented toward rehabilitation. Although the other three variables were retained in the reduced model none were statistically significant, while controlling for the other variables.

When age-at-entry was substituted for age in the reduced model, the R^2 value ($R^2=.084$) was substantially reduced, but the model remained overall statistically significant ($F=2.429$, $p<.05$). Additionally, when added into the reduced model, age-at-entry was also statistically significant ($\beta=.173$; $t=2.266$, $p<.05$) while controlling for the other variables. For every year older of age-at-entry into employment as a correctional officer, there is a .172 unit increase in being more rehabilitation-oriented. When tenure was substituted for age in the reduced model, once again the R^2 was substantially lower ($R^2=.076$) but the model remained significant overall ($F=2.277$, $p<.05$). However, when tenure was added to the model, it was not statistically significant ($t=1.786$, $p=.076$) while

controlling for the other variables. This suggests that actual chronological age in years is the most informative variable.

To properly assess the impact of each conservatism measure on the construct of correctional orientation while controlling for the other variables, multivariate analysis was run using both the WPAI scale measure of conservatism as well as the self-select measure of conservatism. The above-mentioned analysis utilized the WPAI measure. The following analysis will insert the self-select measure of conservatism in place of the WPAI to determine if the backward deletion process will yield different results. Therefore, the same nine variables were used in the full model with the exception of the self-select measure of conservatism in place of the WPAI measure (see Table F6).

Table F10 shows all iterations throughout this stepwise process. Utilizing all nine variables in this full model with the second conservatism measure yielded a slightly higher initial R^2 value ($R^2=.132$) and the model was also statistically significant overall ($F=2.624$, $p<.01$). As with the other model, age was significant at the start ($t=3.638$, $p<.001$). Using the same backward deletion process, in this model the statistically weakest variable is also inmate interactions involving administrative issues ($t=.253$, $p=.800$); however, no other variables were at the same level of statistical weakness as was found in the previous analysis with the WPAI measure. Upon removing that administrative interactions variable, the R^2 stayed the same ($R^2=.132$) and the overall significance of the model improved slightly ($F=2.962$, $p<.01$). At this point, security level of the institution was the least statistically impacting ($t=.411$, $p=.682$), so it was removed next. Again, the R^2 value remained the same ($R^2=.132$) and the overall significance again improved slightly ($F=3.442$, $p<.01$). The next variable indicating a weak impact was

frequency of inmate interactions ($t=.645$, $p=.520$). Removing this variable dropped the R^2 value ($R^2=.126$) and the overall significance remained about the same ($F=3.864$, $p<.01$). The best reduced model utilizing the self-select measure of conservatism retained six variables: age, conservatism, education, inmate interactions involving treatment, grievances, and family issues.

The full and reduced models can be seen in Table F11 showing the impact of the self-select conservatism measure. What is most notable between the two models utilizing the two different conservatism measures is that with the self-select measure, only age remained significant throughout the backward deletion process. Although inmate interactions involving family issues was approaching significance, the R^2 value would have had to be substantially reduced to achieve significance. Therefore, utilizing the self-select measure of conservatism improves the overall impact of the full model (13.2% explained variance) but only age was statistically significant in the model. The WPAI measure of conservatism had a slightly reduced explained variance (12.6%) but only had the single statistically significant variable.

When age-at-entry and tenure were placed into the final reduced model utilizing the self-select measure of conservatism, they yielded approximately the same results as with the model utilizing the WPAI measure of conservatism. Both yielded substantially reduced R^2 values but retained overall statistical significance of the model. Additionally, age-at-entry remained significant while tenure did not. Once again, age appears to be the most statistically significant variable of the age-type variables. These results mirrored that of the other model discussed previously.

Comparing the WPAI and self-select measures of conservatism after running the multivariate analysis with each, neither appears to be significantly stronger than the other at impacting correctional orientation. Both measures were ultimately retained in the final reduced models, but neither was ever statistically significant. The R^2 values were only slightly different and the independent statistical significance of the other variables varied minimally.

Professionalism

The construct of professionalism was measured here as the impact of individual and organizational factors on correctional officers' self-perception of their level of professionalism. This construct was hypothesized as similar to but separate from that of the correctional orientation construct. That is, to remain consistent in assessing the hypothesis of obtaining parallel results for these constructs, each of the independent variables used in the full model for correctional orientation were also used in the full model for professionalism. The backward deletion process also was utilized for professionalism in the same way that it was utilized for correctional orientation. As with correctional orientation, two separate models were run using nine variables with the only difference being the insertion of two conservatism measures (WPAI scale and self-select measure). This was done to compare the strength of each conservatism measure while controlling for the other eight variables. The following nine variables were entered into the full regression model for professionalism: age, conservatism (WPAI), frequency of inmate interactions, inmate interactions involving treatment, inmate interactions involving administrative issues, inmate interactions involving grievances, inmate interactions involving family issues, education, and security level of the institution.

Table F12 shows all iterations of the stepwise process. The full model for professionalism yielded an R^2 value of .077, which indicated these nine variables explained about 7.7% of the variance of professionalism. However, the overall model was not statistically significant ($F=1.433$, $p=.179$). Security level of the institution was statistically significant ($t=2.192$, $p<.05$) at the outset of this multivariate analysis. To begin the backward deletion process, three variables had a similar level of statistical weakness: age ($t=.328$, $p=.743$), inmate interactions involving administrative issues ($t=-.315$, $p=.753$), and inmate interactions involving grievances ($t=-.399$, $p=.691$). First, interactions involving administrative issues was removed which only slightly reduced the R^2 value ($R^2=.076$); however, when age was removed, the R^2 value dropped substantially ($R^2=.068$). When age was placed back into the model, education ($t=.491$, $p=.624$) and interactions involving grievances ($t=-.447$, $p=.656$) were equally weak. Interactions involving grievances was removed first and this brought the R^2 value back up ($R^2=.075$). Although education was still one of the weakest variables, when it was removed, the R^2 value dropped again ($R^2=.070$); however, after placing education back into the model the next weakest variable was interactions involving treatment issues ($t=.657$, $p=.512$). Upon removing this variable, the R^2 value improved again ($R^2=.072$). At this point, education was once again the weakest variable ($t=.365$, $p=.716$), and removing it did reduce the R^2 value slightly ($R^2=.069$) but also made the overall model significant ($F=2.381$, $p<.05$). Removing any additional variables substantially reduced the R^2 value and impacted the overall statistical significance of the model. Therefore, the final reduced model retained five variables: age, conservatism (WPAI), security level of the institution, frequency of inmate interactions, and inmate interactions involving family issues

Table F13 presents the results for both the full and reduced models for professionalism. This reduced model indicated the five independent variables retained explain about 6.9% of the variance in professionalism and was considered a statistically significant best fit for the professionalism construct. The only variable that was statistically significant in the full model was security level of the institution ($\beta=.174$; $t=2.257$ $p<.05$). While controlling for the other variables, institutions designated as a close (maximum) security facility are associated with higher levels of perceptions of professionalism of correctional officers.

When age-at-entry was substituted for age in the reduced model, the R^2 value decreased slightly ($R^2=.066$) and the overall model was no longer statistically significant ($F=2.226$, $p=.054$). Additionally, age-at-entry was not statistically significant ($t=.404$, $p=.687$) within the reduced model while controlling for the other variables. Substituting tenure for age in the reduced model yielded a similar result of a reduced R^2 value ($R^2=.061$), a model that was not statistically significant ($F=2.113$, $p=.066$), and tenure was not statistically significant ($t=.019$, $p=.985$) in impacting professionalism while controlling for the other variables. It is interesting to note that in the professionalism construct, although age maintained a weak significance throughout the backward deletion process, removing it over other weak variables substantially reduced the R^2 value. Therefore, it is further supported that of all of the variables that are based on age or length of time spent in corrections, chronological age in years is the most instructive.

To continue the comparison in strength between the two conservatism measures, multivariate analysis with the professionalism construct was also conducted using the self-select measure of conservatism. As with the correctional orientation comparison, the

same nine variables were inserted at the start with the only difference being the substitution of the self-select measure of conservatism for the WPAI measure of conservatism.

Table F14 shows all iterations for this stepwise deletion process. The full model for professionalism with the self-select measure of conservatism yielded an R^2 value of .072 indicating approximately 7.2% of the variance in Professionalism is explained by these nine variables. This is slightly reduced from the model that contained the WPAI measure of conservatism. Additionally, this model is not statistically significant overall ($F=1.335$, $p=.223$); however, similar to the other model, security level of the institution is statistically significant ($t=2.083$, $p<.05$). For the backward deletion process, inmate interactions involving administrative issues was the weakest ($t=-.157$, $p=.875$) in this full model so it was removed first. Removal of this variable did slightly decrease the R^2 value ($R^2=.071$); however, the overall significance increased slightly ($F=1.508$, $p=.158$). At this point, both interactions involving grievances ($t=-.421$, $p=.674$) and education ($t=.497$, $p=.620$) were the weakest in the model and were each removed next. Removing the interactions involving grievances variable only slightly reduced the R^2 value ($R^2=.070$) and increased the overall significance ($F=1.707$, $p=.111$). Removing education reduced the R^2 value too much ($R^2=.067$) and was retained. From here, both age ($t=.505$, $p=.614$) and interactions involving treatment ($t=.600$, $p=.550$) were weak variables. As in the other model, removing age reduced the R^2 value too substantially ($R^2=.059$), but removing interactions involving treatment only slightly reduced the R^2 value ($R^2=.068$) and the overall significance of the model was improved ($F=1.940$, $p=.078$) and began approaching statistical significance. Once again, education ($t=.301$, $p=.704$) was the

weakest variable in the model, and removing it produced an R^2 value of .065 and increased overall significance ($F=2.238$, $p=.053$).

At this point in the backward deletion process, age is the least impacting variable ($t=.576$, $p=.565$) with the self-select measure of conservatism also appearing weak in the model ($t=.722$, $p=.471$). It was found that removing both of these variables reduced the R^2 value too substantially; however, removing only one only reduced the R^2 value slightly but made the overall model statistically significant. Between these two variables, when the conservatism measure was removed and age was retained, the model was statistically stronger ($F=2.828$, $p<.05$). Table F15 shows the full and reduced models for professionalism with the self-select conservatism measure. The final reduced model ultimately retained four variables: age, security level of the institution, frequency of inmate interactions, and inmate interactions involving family issues. This model had an R^2 value of .065 and was statistically significant overall ($F=2.828$, $p<.05$). Security level of the institution remained statistically significant throughout the backward deletion process to include staying significant in the final reduced model ($\beta=.178$, $t=2.324$, $p<.05$). This implies that respondents employed at institutions designated as close security perceive themselves as slightly more professional than medium security institutions.

Inserting age-at-entry and tenure in for age in the final reduced model produced similar results as with the first professionalism model. The R^2 values decreased and although the overall model retained statistical significance, neither age-at-entry nor tenure was statistically significant.

Regarding the comparison between the conservatism measures, it appears that within the professionalism construct the WPAI measure may be a little stronger than the

self-select measure. The WPAI measure was retained in the final reduced model whereas the self-select measure was not retained. Although neither were statistically significant at any point throughout the backward deletion process, the WPAI may be the better measure overall. The primary results of each multivariate analysis performed with each of these measures did not vary greatly which implies each of these conservatism measures should be used with caution.

Discussion of Hypotheses

After the initial univariate and bivariate results, it was clear that multivariate analysis would be appropriate for hypothesis testing of the two constructs: ideological orientation and professionalism. The first construct is ideological orientation, or identifying which end of the continuum that officers fall regarding being more custody- or treatment-oriented. The hypotheses developed to address this construct detailed the type of impact the individual and organizational attributes would have on officer orientation. Hypothesis 1 stated higher chronological age and age-at-entry increases the preference for treatment orientation. Due to multicollinearity issues both age and age-at-entry could not be entered into the same statistical model. Previous analysis identified age as being a stronger predictor than age-at-entry, so it was used in the full statistical model. Regarding chronological age, there is strong support for Hypothesis 1. As officers get older they are more treatment-oriented. This confirms previous research that older officers are more likely to accept rehabilitation. When age-at-entry was substituted for age in the final statistical model, Hypothesis 1 could not be fully supported as age-at-entry was not statistically significant.

Continuing with the correctional orientation construct, Hypothesis 2 stated more correctional experience, or tenure, would decrease the preference for treatment orientation. This direction may seem counterintuitive to Hypothesis 1; however, previous research indicates officers who began their careers very early and have spent 30 or more years in corrections may be less likely to accept a rehabilitation role, despite their age. Similar to age and age-at-entry, tenure could not be placed into the same statistical model due to multicollinearity issues. When tenure was substituted for age in the statistical model, the model remained significant, but tenure did not have a statistically significant impact and therefore does not have a relationship to orientation. For this study, Hypothesis 2 was not supported. It is also important to note that other factors may be at work in this case. For instance, officers who began their careers at earlier ages may be less educated than those who began employment at older ages. Additionally, much of the research implies that over the long career in corrections an officer can run the gamut regarding positive or negative attitudes toward rehabilitation. In a cross-sectional study, it is difficult to know how consistent these results would be if taken repeatedly with the same population.

Hypothesis 3 broadly states that education, gender, race, supervision style, and institutional security level will impact correctional orientation. This hypothesis was further broken down into subparts representing each variable separately. Gender and race could not be included in the statistical analyses due to lack of variation within the sample. Therefore, Hypothesis 3a stated education would impact orientation; Hypothesis 3b stated supervision style would impact orientation; and hypothesis 3c stated institutional security level would impact orientation.

Although education was included in the final model for orientation, it was not found to be statistically significant. Therefore, there was no support for Hypothesis 3a. Education does not appear to be a factor in influencing officers' preference for being custody- or treatment-oriented. There was partial support for Hypothesis 3b. Supervision style was composed of several variables that if all were statistically significant then Hypothesis 3b would be fully supported. Three of the five components were retained in the final model but none were found to be statistically significant. The inmate interactions involving family issues variable was nearly statistically significant and it is possible with a different combination of variables it could be a stronger predictor. This result suggests there may be something here worth further study if these variables were retained but not significant. It is possible these variables could be utilized in other formats or combined with other variables (both independent and dependent) and could yield more significant results. Hypothesis 3c was not supported due to institutional security level not being retained in the final model; thus, security level does not impact correctional officer orientation within this sample.

Hypothesis 4 stated that officers who had higher levels of conservatism would have less preference for treatment. Conservatism was measured two different ways and both measures were used in the multivariate analyses. The WPAI scale measure of conservatism was not retained in the final model for correctional orientation; therefore, Hypothesis 4 was not supported. The self-select measure of conservatism was retained in the final model for correctional orientation but was not statistically significant. Given these results, the level of conservatism (regardless of how it was measured here) does not seem to impact orientation in any direction that cannot be solely associated with chance.

This result was surprising, but similar to tenure, it is possible that either the other attributes not measured here might be greater predictors or conservatism could be measured in a more valid manner.

Overall, the results indicated that although the individual attribute of age was the most significant predictor of orientation, the organizational attributes were more prolific in the full, reduced model. The other attributes (both individual and organizational) did not play a significant role in predicting orientation in this study and therefore it could only be speculative that there is a possibility that the results could vary with different combinations of these and other variables. Inherent personality traits vary among themselves, which allows for the possibility that conservatism was just one trait and further exploration into this category of variables is necessary. Ultimately, this study found there is extensive complexity in predicting attitudes toward orientation and more research is needed to cover all of the possible combinations to explain this complexity further.

The second construct examined in this study was professionalism, or how officers perceive their own level of professionalism in the field of corrections. It was proposed that professionalism should parallel that of ideological orientation. Correctional officers who have a greater preference for treatment should perceive themselves as more professional. This stems from the principles of professionalism, to include autonomy in decision-making and more authority, allow an officer to be more accepting of a rehabilitation role. Therefore, Hypothesis 5 stated that the hypotheses proposed to measure orientation would measure professionalism in the same way. Indeed, all

hypotheses for professionalism should be confirmed or rejected in the same way as orientation to confirm that professionalism is parallel to ideological orientation.

Hypothesis 5a stated age and age-at-entry would be associated with greater levels of perceived professionalism. As in the models explaining orientation, age, age-at-entry, and tenure all had the potential of multicollinearity. Age had a strong relationship with the dependent variables in the bivariate assessment, so it was the primary variable used in the statistical models. For professionalism, age was retained in the final model but was not significant. As stated previously, age was considered a weak variable and would have logically been removed during the backward deletion process early on. However, it was found that retaining age helped to maintain a stronger R^2 while not impacting the overall significance of the model. This suggests that even when age is a weak variable in multivariate analysis; it does seem to influence the construct of professionalism in some way. Age-at-entry, when substituted for age, was also not a significant factor in predicting higher levels of professionalism. Therefore, Hypothesis 5a was not supported. Hypothesis 5b stated that more experience would yield less of a perceived level of professionalism. When tenure was substituted for age, it did not yield a significant impact. How long an officer has been in the field of corrections was not associated with greater levels of professionalism; therefore, Hypothesis 5b was also not supported. The three age-related variables had a unique impact on the two constructs; however, they appeared stronger for orientation than for professionalism. Ultimately, it appears these combinations of variables do not impact professionalism in the same way as orientation.

Hypothesis 5c stated education, race, gender, supervision style, and institutional security level would impact perceived levels of professionalism in some way as they did

on correctional orientation. Race and gender were not included in the analysis and only institutional security level and two components of supervision style were retained in the final model. Further, the only significant variable was security level. This suggests the greater the level of security, the more likely officers will perceive themselves with higher levels of professionalism. This result is interesting since security level was not retained in the orientation model. Therefore, professionalism may be more related to organizational attributes rather than individual attributes. Although two components of supervision style were retained in the final model (frequency of inmate interactions and interactions with inmates involving family issues), neither were significant, indicating these aspects of supervision style do not seem to predict levels of professionalism. Also, in contrast to the orientation construct, these supervision components were not as strong as a group. Overall, Hypothesis 5c was not supported and further confirmed that professionalism may not parallel orientation, as originally proposed.

Hypothesis 5d stated higher levels of conservatism would decrease the perceived levels of professionalism. As with the orientation construct, conservatism was measured in two ways and run separately in the multivariate analysis. In contrast to the orientation construct, the professionalism analysis revealed that neither of the measures of conservatism was statistically significant. Further, the results of the professionalism analysis revealed exactly opposite results regarding the two conservatism measures from what was revealed in the orientation construct. Nonetheless, given the results, conservatism was still not statistically significant with regards to professionalism which indicates that greater levels of conservatism do not predict levels of professionalism; therefore, there was no support for Hypothesis 5d. Aside from the potential validity

issues with the measurement of conservatism, it is also possible that conservatism is only one inherent personality trait out of a multitude of potential predicting personality traits. What is more telling of these results is that nearly all of the results for the professionalism construct were opposite of what was proposed. Additionally, the one statistically significant predictor, security level, is an organizational attribute; unlike the individual attributes that were significant predictors for orientation. Although these variables did not yield good prediction quality of attitudes toward perceived levels of professionalism, the importance of the lack of support for Hypothesis 5 is worth noting. It begs the question: can correctional officers simultaneously be accepting of the rehabilitation role and consider themselves professionals? As discussed previously, the complexity of predicting attitudes allows for substantial further exploration.

Summary

The purpose of this chapter was to report the results from univariate, bivariate, and multivariate statistical analyses to explain the potential impact of individual and organizational characteristics on both the correctional orientation of correctional officers and perceived levels of professionalism. The data analyzed here were collected from surveys administered to correctional officers employed at Pennsylvania State Correctional Institutions in May and June 2009. The statistical approaches presented in this chapter intended to confirm what is known from previous research and to define relationships that have not been explored.

The univariate results provided a sufficient description of the data. Although the final usable sample ($n=202$) was fairly representative of the overall state population of correctional officers, the gender and race variables were removed from further analysis

due to lack of variability. After removing gender and race, the independent variables that were retained for further analysis were education, age, age-at-entry, conservatism, security level, tenure, frequency of inmate interactions, inmate interactions involving treatment, administrative, family, and grievance issues. The univariate statistics assessed the distribution of each variable. Most of the variables appeared to be normally distributed. Age-at-entry was slightly positively skewed, while the frequency of inmate interactions variables was slightly negatively skewed. These variables presented in the univariate analysis were later presented in the bivariate and multivariate analyses.

The bivariate correlations presented in this chapter established which variables indicated the important relationships between the dependent variables and the independent variables and well as between the independent variables. This important step laid the foundation for the multivariate analysis performed later. As expected, age, age-at-entry, and tenure showed signs of collinearity and were accounted for by using bivariate regression to measure the strength each of those variables had with regard to the independent variables.

This chapter presented the results from the ordinary least squares regression analysis using the stepwise, backward deletion process to achieve an objective approach at identifying the most parsimonious models. The independent variables utilized in multivariate analysis were selected from previous research and bivariate correlations, with each appropriately meeting the assumptions of multivariate analysis. The full set of nine variables utilized in the backward deletion process included conservatism, age, education, security level, frequency of inmate interactions, and type of interactions

(treatment, administrative, family, and grievances). The categorical education variable was collapsed to be more suitable for multivariate analysis.

Four separate regression models were necessary; two regressions represented the correctional orientation construct while the other two regressions represented the professionalism construct. Since bivariate analysis did not confirm that the WPAI scale measure was adequate, additional and separate models were run utilizing both measures of conservatism to ascertain if either would have a significant impact on the dependent variables.

The first full models of each construct included all nine independent variables where one set contained the WPAI scale measure of conservatism and the other contained the self-select measure of conservatism. This approach reduced the possibility that any other changes were not due to any other factors other than the differences between conservatism measures. The reduced models were pared down using a manual backward deletion process that removed the weakest variables as identified by their statistical strength while controlling for the other variables. Additionally, the R^2 values and overall F scores were monitored to keep the model as strong and statistically significant as possible.

The final reduced correctional orientation model utilizing the self-select measure of conservatism was the strongest with 12.6% of the variance explained by six variables. In this model, age was statistically significant while controlling for the other variables and inmate interactions involving family issues could be considered statistically significant as well. The final reduced model utilizing the WPAI scale measure of

conservatism was as strong as the full model ($R^2 = .125$); however, the conservatism measure was removed from the final model.

The final reduced model for professionalism that utilized the WPAI scale measure of conservatism explained about 6.8% of the variance. Of the five retained variables, security level of the institution was the only statistically significant variable in this model. In this construct, although the conservatism measures yielded opposite results from the correctional orientation construct neither were statistically significant so no conclusions can be drawn other than the 12-item WPAI scale may not be a valid or reliable method of measuring conservatism.

The hypotheses were discussed at length to report any confirmations that resulted from the statistical analyses. Most of the hypotheses were not confirmed indicating much of the research that served to guide these hypotheses remains unreliable and inconsistent. Most notable is the final hypothesis that the two constructs (correctional orientation and professionalism) did not parallel each other as predicted indicating the potential relationship between these two constructs needs to be clarified further.

The final chapter presents a detailed discussion and interpretation of the results of this study. The present results are compared and contrasted with the results of relevant past research. Limitations for this study are identified and discussed in-depth. Policy implications are examined with the conclusions of the current study as well as proposed research for further study is presented.

CHAPTER V

DISCUSSION AND CONCLUSION

Predicting correctional officer attitudes is a complex process that requires understanding the variety of potential combinations between individual and organizational characteristics. Past research has identified several attributes that consistently prove to be worth studying yet are just as consistently difficult to define and measure (Philliber, 1987). Common individual attributes such as age, gender, race, and level of education and organizational attributes such as security level and supervision style have been researched extensively against a variety of dependent variables to include job stress, burnout, correctional orientation, and professionalism (Sims, 1990). Yet, with all of the research and potentially promising results it is still unclear which of these attributes influence attitudes over others.

Correctional officer attitudes may be influenced by a variety of potential predictors, but much of the relevant research has revealed that a major obstacle exists in defining and measuring those potential predictors (Philliber, 1987). Much of the research conducted on correctional officers is subject to strict human subject protocols, environmental and managerial conflicts, and the high likelihood of pluralistic ignorance among the research subjects. Thus, corrections research has been limited to specific and limited populations, convenience sampling, and hastily defined variables to fit a survey methodology for ease of data collection. Although many studies have yielded promising results, it is still difficult to consistently identify valid conclusions.

The purpose of this study was to focus on individual and organizational attributes that may predict correctional officer attitudes toward the broader constructs of ideological

orientation and professionalism. Not without the similar limitations listed above, this study attempted to explore and clarify the previously held vague understanding of which individual and organizational attributes are the most powerful predictors of officer attitudes. Despite the limitations, some valid conclusions emerged that can contribute to current research as well as provide some new courses of action for future research. This chapter discusses the major findings in greater detail by relating the conceptual framework to the statistical analyses presented in univariate, bivariate, and multivariate forms. Policy implications are discussed as well as the limitations of the current study so as to improve upon future research design. Additionally, this chapter presents suggestions for future research and final conclusions.

Discussion of Results

The research questions proposed in this study provided direction for the statistical analyses that were performed and presented in the previous chapter. These research questions were derived from an extensive review of the literature on the constructs of officer attitudes regarding ideological orientation and professionalism. A review of the research also revealed the primary attributes that were worth exploring further are age, tenure, security level, and supervision style within the facility. Additionally, gaps were identified for areas that needed more in-depth exploration, such as psychological characteristics (e.g., levels of conservatism). Indeed, the extant literature provided the guidelines for administering the most effective methodology of gathering data from correctional officers given limited access. Ultimately, research questions emerged from a review of the literature for this study intended to explore and clarify previously vague research and to identify and test the impact of a previously untested individual attribute

on officer attitudes. From the research questions, hypotheses to measure the constructs were proposed in this study.

The data used in this study were obtained from surveys collected from 202 correctional officers employed at five Pennsylvania State Correctional Institutions. Statistical analyses were divided into three sections: univariate, bivariate, and multivariate analyses. A discussion of those results is presented here.

Univariate Analysis Results

The univariate results were categorized by dependent and independent variables, and the independent variables were further categorized into individual and organizational attributes. Gender and race were discarded due to a lack of variability within the sample. Although this was expected, not including gender and race into the analyses limited the clarification sorely needed for these variables; however, this could be indicative of a common problem in corrections research. It is highly likely the sample obtained from this particular population is saturated by Caucasian males making for an inherent difficulty in clarifying the role of race and gender. It is suggested that for future research oversampling for gender and race may be necessary to obtain appropriate samples for data analysis.

One interesting frequency result is that the average age a respondent entered into the field of corrections was around 30 years old. Historically, correctional officers were thought of as entering into the corrections workforce much younger due to the lack of educational requirements, job displacement, or unemployment (Hemmons & Stohr, 2001). Perhaps those who are interested in corrections work may not feel they are being

forced into the field as they once did, indicating a potential for greater perceived levels of professionalism.

A final notable result in the univariate analysis is the prevalence of educational experience. Most officers in the sample had some form of formal education beyond high school (73%). Again, a common perception is that most officers are uneducated, and although efforts have been made to raise the educational requirements of correctional officers at time of employment and for promotion purposes (Farkas, 2000), research, including the present study, may be illustrating the minimal impact of education and the need to explore other attributes (e.g., job displacement, unemployment, and geographical location). Some researchers still consider education to be a substantial factor in increasing the acceptance for rehabilitation and perceived levels of professionalism but it is becoming increasingly apparent that this may change in future research (Jurik, 1985 and Farkas, 2000).

Bivariate Analysis Results

Bivariate correlations utilized in this study intended to lay the groundwork for multivariate analysis. The approach taken in this study was that of unbiased analysis methods to disallow the potential for previously identified methodological errors. It was necessary to first establish potential relationships and collinearity within the independent variables as well as between the independent variables and the dependent variables so as to better prepare for multivariate analysis.

Despite past research indicating such importance of these common individual and organizational attributes, the bivariate correlations yielded fairly weak relationships between the independent variables and the dependent variables. This indicated that the

variables to be utilized in the multivariate analyses were likely to be minimal in their individual statistical significance. The bivariate correlations did reveal the potential for multicollinearity that was proposed to exist between age and age-at-entry. Additionally, tenure was also considered to potentially correlate with age and age-at-entry. These three variables were inserted into the multivariate models separately to ensure that independent statistical conclusions could be drawn about each. Age-at-entry and tenure were individually substituted for age in the final statistical models for an assessment of their impact on the dependent variables. The ultimate goal of the bivariate analysis was to identify the variables to be used in the multivariate analyses. The variables that emerged from the correlations analysis included age, conservatism, education, security level, and the five supervision style variable components (interactions-treatment, grievances, family, and administrative issues).

Bivariate analysis also confirmed the minimal validity of the primary conservatism measure. The WPAI scale measure was intended to serve as a reliable and valid measure of conservatism. To confirm this measure's validity for measuring conservatism, a second measure was assessed on the survey asking respondents to self-select where they fall on a linear continuum of more liberal to more conservative. This item was coded accordingly to account for the variance across respondents. The WPAI scale was found to have a low reliability coefficient and subsequent bivariate correlations revealed that the validity confirmation item of conservatism (self-select) was not strongly correlated with the WPAI scale measurement of conservatism. This result raised doubts as to the reliability and validity of the WPAI measurement. To accommodate for and

further explain this potential weakness, multivariate analyses were run utilizing both measures of conservatism in separate models.

Multivariate Analysis Results

Multivariate analysis revealed age to be the only statistically significant variable in the correctional orientation model. Older officers are more accepting of a rehabilitation model. The other variables that were retained were not statistically significant and explain only 13% of the variance of correctional orientation. This result indicates that this combination of variables is weak overall. There are many other factors that are unaccounted for in the research as well as the present study. Additionally, neither conservatism measure appeared to have any valid impact on the whole models.

Regarding professionalism, only security level of the institution was shown to be statistically significant. Officers who work at a close (maximum) level of security perceive themselves to be more professional. As with correctional orientation, the other retained variables were not statistically significant. Also similar to the orientation model, very little of the variance (7%) is explained by these variables, indicating there are many other factors impacting professionalism that were not accounted for in the present study.

Neither the correctional orientation model nor the professionalism model retained the same set of variables and those that were statistically significant in one were not in the other. These results imply that the relationship between correctional orientation and professionalism may not be as strong as originally predicted. Another explanation is that these constructs are not meant to run in conjunction with each other but rather one may impact the other in more of a linear capacity. What these results indicate is that the relationship between these two constructs needs to be defined more explicitly.

Policy Implications

Previous research shows that correctional officer attitudes are impacted by a variety of factors. This study clarified that myriad attributes are related to officer attitudes toward rehabilitation and professionalism. Even further, this study clarified that the combinations of variables may make more of a difference than any one specific variable. Correctional orientation seemed to be more heavily influenced by individual attributes while on the other hand professionalism was possibly more influenced by organizational attributes. With this in mind, acknowledging the strongest attributes in each model may provide the outline for training of incoming correctional officers. However, ultimately the weak combinations of these variables indicate that there is much more that is unaccounted for or considered in explaining what impacts correctional orientation and professionalism.

The greatest policy implications here point toward improved identification of certain characteristics and attributes of correctional officers at the point of hire. Additionally, correctional institutions should acknowledge their goals and ensure those goals are understood and enforced by the correctional officers. PADO policy indicates that rehabilitation is an important goal while an inmate is completing his/her sentence. If this policy initiative is pervasive throughout the statewide organization, then it is reasonable to suggest that correctional officers are encouraged to adopt this policy as well. Therefore, if organizational goals are rehabilitation-oriented but correctional officers remain punitive; this is indicative of individual attributes having a more powerful impact. Likewise, if correctional officers are rehabilitation-oriented at the point of hire,

but over time become more punitive, this may be indicative of organizational attributes having a more powerful impact. Either way, correctional institutions can naturally assess these attributes over the long-term.

As for improving perceptions of professionalism; much of the literature points toward improving training and educational skills as important keys for success at becoming more professional. However, this study as well as some of the research suggests that officers make the personal choice to perceive themselves as professionals depending on how much control and autonomy they feel in their daily activities. Rather than trying to make the whole organization more professional, officers may just need more discretion and autonomy in their decision-making ability. Finally, many other organizations employ rigorous human resource tactics at the point of hire to find the best fit for the job. This often includes a variety of personality tests. Although hiring of officers should not be based solely on these test results, there may be some indication of which way a new-hire might lean. Personality traits may make the difference for why a 30-year veteran officer is more custody-oriented than a 50-year old officer who became employed in corrections at a later age.

The findings of this study suggest understanding the complexity of personalities, individual demographic characteristics, and organizational characteristics can all impact officer attitudes. This study found that professionalism does not appear to be directly related to correctional orientation when the same variables are involved. Therefore, to allow these two constructs to coexist, it is necessary to more clearly define the relationship between these two constructs. It is proffered here that one construct may impact the other linearly rather than in parallel. For example, officers who perceive

themselves as more professional may be more rehabilitation-oriented. Gilbert (1997) suggests that correctional officers who have these characteristics of being open to all roles and a high degree of professionalism can integrate their goals of coercion and correctional services appropriately to confined inmates. Gilbert (1997) further describes Muir's typology regarding professionalism that allows for an officer to make discretionary decisions to gain compliance while allowing for the use of coercion if necessary. Administrators and human resource departments that acknowledge the inherent nature of role conflict will be more successful at identifying the characteristics of both officer and environment that will allow for a better combination of correctional orientation and professionalism.

Limitations and Future Research

Many studies have focused on explaining the complexities of correctional officer attitudes but few have succeeded in clarifying which attributes predict attitudes the greatest. Indeed, as extensively as the topic of correctional orientation has been covered in a variety of ways, there is still much to be explored. This study attempted to clarify and explain that complexity so as to contribute to a different approach of measuring officer attitudes and to help provide for new direction for further exploration. This section identifies the limitations of the current research as well as provides possibilities for further research.

Research Limitations

Correctional officers are a very difficult population to study. This is in large part due to limited access as well as their general unwillingness to participate in any research. This study addressed this limitation by developing a survey that was intended to engage

the respondents, as well as a method of administration that allowed for the greatest potential response rate. However, much of the participation on the surveys weighed heavily on the enthusiasm of the administrators and union representatives at each institution. Out of the six institutions contacted for this study, only a few went to extra lengths to assist with obtaining a good response rate. This resulted in a large portion of the officers at each institution potentially not aware there was a survey available to them or not encouraged to participate. With a potential sample size of over 1700 respondents, it was disappointing to only receive only 202 usable surveys. It is possible for a larger sample to be obtained from these institutions but more rigorous and enthusiastic survey administration methods would be necessary to elicit a better response. For example, to achieve more variation at each institution, it might be necessary to oversample at particular institutions, such as the close security institutions. Similarly, oversampling may allow for a greater variation in the race and gender variables. As is, the specific institution could not be used as a control variable and race and gender were later discarded due to the lack of variation for surveys collected.

In addition to the lackluster response rate, many surveys were returned with handwritten comments that alluded to the potential that less than sincere responses were present. Many officers commented that the survey questions were not getting to the real problem, which they self-reported as the concept that inmates can never be treated positively. Due to the nature of these comments and observable response patterns on some survey items, some potential variables became unusable (e.g., continuous education survey item). The survey also contained items that attempted to ascertain respondents' thoughts on supervisory effectiveness as well as perceived effectiveness of the

supervision style. However, many of these items may have encouraged too much neutrality among the respondents. For example, item 51 on the survey asked respondents how effective they considered the supervision over the inmates, and the response category most selected was “neither effective nor ineffective.” This, as well as several other items attempting to ascertain respondents’ attitudes toward supervision style, resulted in the most neutral answer category being the most frequently selected response.

There were additional survey items (e.g., items 54 and 55) that did not necessarily elicit a neutral response but the information provided by respondents was unusable at this time. A current limitation of using a supervision style construct as an independent variable is defining it conceptually and operationally to yield useful information from a survey. At this time, these items were not included but could be used in some way in future research if supervision style is defined accordingly. This study defined supervision style in terms of face-to-face interactions officers have with inmates. Therefore, until this construct is further defined, the other survey items cannot be used appropriately.

Since these survey items suffered from neutral and oversimplified response categories, this may have encouraged respondents to remain ambiguous, which could be a potential symptom of pluralistic ignorance. Indeed, some survey items were possibly too aggressive for officers to provide comments, even anonymously. Careful wording of items and response categories that forced a direction of acceptance or rejection would likely minimize the potential for only neutral responses.

Additionally, it was later discovered that the survey item 39, as well as items 52, and 53 (to include 53a, 53b, 53c, and 53d) could have been worded differently to elicit more valid responses. These three survey items were measured in the same way in that

the respondent was to place a mark on the provided line that indicated their answer. As survey administration was complete and the surveys could no longer be modified, these items were re-coded to improve the validity of the responses and further account for the variation across responses. Initially considered to be a 10-point linear scale, approximating a continuous level measurement, many respondents' marks were considered ambiguous between the 0 and the 5 and the 5 and the 10. For these responses, a careful measurement strategy and visual inspection was required to maintain consistency of measurement across respondents.

To improve the validity of these items, the line was first measured in centimeters and it was found that all items contained the exact same measurement: 5.8cm. Next, the 0, 5, and 10 reference points merely served as guidance for the respondents. However, in the coding, these points now represented points on the 5.8cm line and were equated accordingly (e.g., 0=0, 5=2.9, and 10=5.8). Additionally, respondents who specifically identified their mark on the line with a number designation (e.g., "7") were accepted and equated to values on the 5.8cm line (e.g., 7=4.1cm). This recoding helped to make the responses more accurate and valid to the measurement they were intending to capture. For further analysis and discussion of these results, these survey items were coded again to reflect a more intuitive 10-point scale again. To achieve this, the measurements were assessed in relation to the total area of the line and multiplied by 10 to achieve the 10-point scale while retaining the individual variance among respondents. This re-coding process may have produced more valid measures which may have improved the overall validity of the statistical analysis.

A possible limitation of this survey methodology and coding process was later identified. Although rigorous methods were employed to improve the validity of the responses, it is possible that respondents who originally selected a 0, 5, or 10 may have anchored the coding scale unintentionally. Re-assessing the surveys revealed that about half of the respondents circled one of the three provided number guides, while the other half of respondents either identified their own number or placed an ambiguous mark on the line. This limitation is important in future survey methodology as the univariate results may be misleading. Three of the five supervision style items scored mean values that might have been anchored by the guide numbers 0, 5, or 10. It is worth noting the possibility that this is due to respondents being guided to select those numbers rather than selecting their response on their own.

The self-select conservatism item also required the same re-coding, though this item does not appear to be anchored by the guide numbers as heavily as the supervision style items. Re-coding the self-select conservatism item ultimately contributed to the discovery that this item did not confirm the validity of the WPAI measure as it originally was intended. Although these survey items could have been framed more appropriately at the start of survey administration, the effort put into re-coding and re-analyzing minimized any error strictly due to measurement of these items. Future research utilizing survey methodology should consider alternative response methods to minimize later validity issues with measurement.

Considering the difficult population, limited access, and potentially aggressive subject matter, the survey items did not necessarily address the topic appropriately. The professionalism and orientation scales should be used in full to obtain more variety in

scores for interpretation. Although this would substantially increase the length of the survey, it would allow for more in-depth results. There is little in the way of comparison to see how other research has managed the use of these survey scales; however, this study identifies potential validity issues related either to the survey items specifically or to the response categories and measurement. This is also related to the potential that the layout of the survey could help to maximize truthful responses by allowing a better flow for respondents to follow with ease.

Finally, the use of conservatism as an inherent personality trait proved statistically insignificant in this study, but it is believed that this trait as well as other personality traits could be significant if not combined with too many other attributes. Although this study identified conservatism as the primary characteristics studied presently, there are other potential characteristics worthy of exploration. These can include, but are not limited to, religious beliefs, personal experiences, victimization history, and other personality traits such as being extroverted versus introverted. Additionally, it is concluded here that the reduced 12-item scale version of the WPAI may not be as valid in the field of corrections as it is in other settings. The WPAI is founded in conservative and liberal ideology that may apply differently to different populations. As with the limitations of the other scales used in the current research, the WPAI should be used in full, to include the original response category of “don’t know” to retain the validity of the measure. Further research in corrections should use this scale with caution.

Suggestions for Future Research

As mentioned above, there are areas that could be improved to yield more varied results allowing for more interpretation of the data. This study provided the framework

for where future research can focus to further explain and clarify the complexities of predicting officer attitudes toward rehabilitation and self-perceived levels of professionalism.

This study only minimally addressed the potential of the importance of inherent personality traits. Although conservatism was the focus in the present study, there are myriad personality traits that could be addressed with regard to their impact on orientation, professionalism, and the other common dependent variables throughout the research (i.e., job satisfaction, burnout, and role conflict). Exploring this gap further could allow for a greater understanding of the complexities of why correctional officers develop the attitudes they do. There is a plethora of research on the psychological impact of work in a correctional institution, but there is very little that specifically discusses the personality characteristics that officers have prior to entering the field of corrections. As can be seen in previous research as well as the current study, the common predictors such as age, experience, security level, and so on may only scratch the surface of what impacts attitudes. Research in this area would benefit greatly by a study that would focus solely on the role of inherent personality traits.

Another area that should have a greater focus in the research is that of the role of professionalism. This study attempted to clarify a relationship between professionalism and orientation but found that professionalism does not seem to interact with the attributes in the same way they did with orientation. Additionally, there is a clear dearth of research on this topic with regards to correctional institutions. Much of the research up to the 1990s indicated that professionalism may not work in corrections and seems to have stopped researching this topic. However, as this study shows, officers do have a

perception of their own level of professionalism and future research should identify how important that perception is and what impacts that perception. Exploring whether it is the officer or the environment that makes more of a difference may determine if professionalism is possible in corrections.

Related to further exploration of professionalism, the differences between organizational and individual attributes would benefit from further research. If it is true that professionalism is impacted more by organizational attributes, while orientation is impacted more by individual attributes, then it stands to reason that these areas should be addressed further in the research to clarify why that may be.

Research in these areas could benefit from a focused qualitative study. As mentioned above, many of the respondents provided handwritten comments on the surveys that could not necessarily be utilized empirically in this study. It may be that because this is a difficult population to research, correctional officers may be amenable to having a way to express their thoughts that are outside of a more rigid survey instrument. Future research in this area should consider adding more open-ended questions to their survey instruments and perhaps should consider addressing these same variables using an interview method to obtain qualitative data.

Further research using similar measures for the independent and dependent variables in this study would possibly benefit from a rigorous factor analysis on improved survey items to include repeat factor analysis on proven scales, such as the correctional orientation and professionalism scales. The current study utilized relevant parts of previously validated and established scales and it was presumed the validity of the individual items would carry over; however, the use of modified scales in future research

should utilize factor analysis to identify relevant survey items more appropriately. Another area for future research is identifying the relationship between correctional orientation and professionalism. This study considered it a parallel relationship, but it is possible there is a hierarchical relationship indicating two levels of measurement. Further research may want to employ hierarchical methods to examine this type of relationship. As mentioned previously, it is possible one of these constructs impacts the other in a linear manner. Future research should explore if professionalism impacts orientation or vice versa.

Each of these areas addressed in this section can all have substantial policy implications if the research provides significant clarification. It was proposed in this study that if there is a trait, such as conservatism, that impacts officers prior to even entering into the field of corrections, there are implications at both the time of hire as well as the point of training. If future officers enter the workforce with pre-planned pathways of how their attitudes will develop and evolve, and if research can identify those pathways, the implications for the hiring and training of correctional officers could prove more positive for the organization as a whole.

Conclusions

The past research on officer attitudes was extensive but it was also limited in its ability to truly explain what factors play the greatest role. The research has focused heavily on a handful of attributes and consistently finds that none of these well-researched attributes contributes greatly over the others. Many of the individual and organizational attributes have been inconsistently measured and therefore the results have been inconsistent. Philliber (1987) and Sims (2001) identified the correctional

environment as being dynamic, so as correctional officers and correctional institutions continue to evolve, the research needs to evolve with it. This study attempted to explore and clarify the most commonly used individual and organizational attributes as well as to explore other potential attributes to address the complexity of predicting attitudes.

It was clarified that age and age-at-entry do play a role in predicting attitudes, in that older officers and officers who enter the workforce at a later age are more accepting of treatment. However, age and age-at-entry did not impact attitudes toward perceived professionalism. It was also clarified that age seems to be more of a factor in predicting attitudes toward rehabilitation than experience; however, this was potentially moderated by other factors unaccounted for in the study. Professionalism was not found to be tied to orientation but the exploration into this relationship revealed professionalism may be impacted more by organizational attributes while orientation may be impacted more by individual attributes. An exploration into inherent personality traits as individual attributes revealed conservatism to not be a major factor in predicting attitudes; however, the survey methodology or combinations of other variables may have minimized the potential for impact and this is an area that needs continued research.

From the knowledge acquired through this study, it is clear that predicting attitudes is complex at best and will take consistent, extensive, and methodical research to continue to clarify what impacts attitudes the most. At the outset, the results of this study suggest that correctional administrators would benefit from opening their institutions up to more in-depth research. Union representatives would benefit from allowing and even encouraging their correctional officers to participate in research.

Correctional officers would benefit from participating in research to help to improve their work environment.

Finally, it may have initially appeared that the research was exhaustive in this area but the results of this study show that there is ample room for further research. Exploring personality traits and their impact on officer attitudes or improving the methodology by better engaging the correctional administrators, union representatives, and correctional officers as to the importance of the research. Consistency in results is ultimately the goal of clarifying how officer attitudes are impacted and whether or not that improves their outlook toward inmates, rehabilitation, and work environment.

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Appendix A: Individual and Organizational Attributes

Table A1

Overview of Individual Attributes as Predictors of Correctional Officer Attitudes

Study	Attribute(s)	Measurement of variables	Analytical processes	Summary findings
Jacobs & Kraft (1978)	Age, Race	Age: dichotomous (under 40/40+); Race: dichotomous (blk/wht); Attitudes toward rehab: level of agreement survey scale	Survey (n=231): Frequency distributions and Chi Square Analysis	None of the variables were found to have a significant impact on attitudes toward rehabilitation.
Teske & Williamson (1979)	Age	Age: continuous in years; DV: attitudes toward treatment: master scale (dichotomous) and 6 subscales (educational, medical, psychological, religious, vocational)	Survey (n=235): descriptives, correlations, multiple regression	Age was considered significant when grouped with a set of IVs to contribute CO attitudes toward treatment. Individual results were not determined.
Poole & Regoli (1980)	Education	Education: continuous in years beyond high school (completed); DV: role stress: scale measuring perception of ambiguity; Orientation: attitudes toward commitment to control of inmates	Survey (n=144): Path Model of causal relationships	Increased education yields less custodial orientation.
Crouch & Alpert (1982)	Age, Education, Race, Gender	Age, Education, and race: measurement is unspecified; Gender: dichotomous (male/female); DV: punitiveness/aggression: attitudinal scales measuring level of agreement.		

Table A1 Continued

Overview of Individual Attributes as Predictors of Correctional Officer Attitudes

Study	Attribute(s)	Measurement of variables	Analytical processes	Summary findings
Toch & Klofas (1982)	Age	Age: measurement is unspecified; DV: job enrichment/professional orientation: scale Measuring level of agreement	Survey (n=832): frequency Distributions	Younger COs are more custody-oriented.
Cullen, et al. (1985)	Race, Education, Gender	Race: not specified (presumably dichotomous); Education: continuous in years; Gender: dichotomous (male/female); DV: role problems: scale assessing level of role conflict and ambiguity as it impacts stress/coping skills toward the work environment	Survey (n=155): regression analysis	Black COs are more dissatisfied toward their work environment; more educated COs are more dissatisfied toward their work environment; female COs appear to have more stress.
Jurik (1985)	Age, Race, Education, Gender	Age: continuous in years; Race: multi-category (Hispanic, Black, Native American, White); Education: continuous in years; Gender: dichotomous (male/female); DV: Attitudes toward inmates: survey scale by level of agreement	Survey (n=179): Bivariate and multiple regression	Older officers have more positive attitudes; Race Was a significant predictor of attitudes; Education Was not statistically significant; Females are found to be more inclined toward a human service aspect of being a CO.
Cullen, et al. (1989)	Age-at- entry, Race, Education, Gender	Age: continuous in years; Race: dichotomous (black/white); Education: continuous in years; Gender: dichotomous (male/female); DV: Attitudes toward rehab: 2 scales assessing level of agreement	Survey (n=155): Regression analysis	Older COs that enter the workforce are more positive toward rehab; Black COs are more likely to support treatment, but not statistically significant; Education and Gender were not statistically significant.

Table A1 Continued

Overview of Individual Attributes as Predictors of Correctional Officer Attitudes

Study	Attribute(s)	Measurement of variables	Analytical processes	Summary findings
Jackson & Ammen (1996)	Race	Race: multi-category (Caucasian, African American, Hispanic, Asian, Native American); DV: attitudes toward selected treatment programs for inmates – measured by scale assessing dichotomous answer categories.	Survey (n=851); multiple regression – race was recoded into 3 groups of dichotomous variables; ANOVA and ANCOVA were used to assess differences between groups of races.	Race was not found to be statistically significant as a predictor of attitudes toward treatment in multiple regression; ANOVA and ANCOVA revealed the following: African American COs supported more extended services for inmates than Caucasians. Caucasian COs were more punitive than African American COs. All race groups supported psychological services for inmates equally.
Paboojian & Teske (1997)	Gender	Gender: dichotomous (male/female); DV: thoughts about quitting measured by Likert-scale response items about the amount of time thought about quitting.	Survey (n=424): purposive sample at 7 institutions; Use of a structural model and hierarchical regression; listwise deletion excluded race, age, and education.	Gender was found to be an insignificant predictor to thoughts about quitting.

Table A1 Continued
Overview of Individual Attributes as Predictors of Correctional Officer Attitudes

Study	Attribute(s)	Measurement of variables	Analytical processes	Summary findings
Farkas (1999)	Chronological	Age: continuous in years; Gender: dichotomous	Survey (n=125): Frequency	Overall, COs do not have punitive attitudes. Older
	Age,	(male/female); Race: categorical (Caucasian, African	distributions; Regression	COs prefer counseling roles and rehabilitation;
	Correctional	American, Hispanic); Education: Multi-category (high		Females prefer both counseling roles and punitiveness;
	Entry Age,	school, some college, Associates, Baccalaureate, Some		correctional entry age, race, and education were found
	Gender, Race,	graduate); DVs: attitudes toward inmates/rehab.		to not be statistically significant.
Armstrong & Griffin (2004)	Education			
	Age, Race,	Age: continuous in years; Race: dichotomous	Survey (n=3,794): Bivariate	Race significantly impacted job stress among COs;
	Gender	(white/non-white); Gender: dichotomous	comparisons; multiple	Gender significantly impacted health status for COs;
		(male/female); DV: perceived job stress and health as it	regression; difference of	males who are older experienced more health
		impacts attitudes toward the workplace – measured	means tests	concerns.
Tewksbury & Mustaine (2008)		using previously established scales assessing indicators		
		of work stress and health status.		
	Age-at-Entry,	Gender: dichotomous; Education: multi-category (less	Survey (n=554); Bivariate	COs reported retribution as the most important, rehab
	Gender,	than high school or GED/high school or GED/attended	and multiple regression	was ranked fourth; Females support rehab, males
	Education	college/2-year college/4-year college, graduate degree);	(listwise deletion); some	support incapacitation; higher level of education
		DV: attitudes toward ideology (retribution,	multi-categories were	predicted greater levels of support for rehab; age-at-
		rehabilitation, incapacitation, deterrence) – measured	recoded into di/trichotomous	entry and gender were statistically significant for
		by assessing level of importance to respondent.	categories; Difference of	rehab; education was statistically significant for
			Means tests	retribution and deterrence (specific).

Note. DV = Dependent Variable; IV = Independent Variable; CO = Correctional Officer; Rehab = Rehabilitation

Table A2

Overview of Organizational Attributes as Predictors of Correctional Officer Attitudes

Study	Attribute(s)	Measurement of variables	Analytical processes	Summary findings
Jacobs & Kraft (1978)	Correctional Experience	Correctional experience: dichotomous (under 4/4+ years); DV: attitudes toward rehab; scale assessing level of agreement	Survey (n=231): frequency distributions and Chi Square Analysis	Correctional experience was not found to have a significant impact on attitudes toward rehab.
Teske & Williamson (1979)	Correctional Experience	Correctional experience: continuous in years; DV: attitudes toward treatment – master scale (dichotomous items) and 6 subscales (educational, medical, psychological, religious, vocational)	Survey (n=235): descriptives, correlations, multiple regression	Correctional experience was considered significant when grouped as a set. Individual results were not determined.
Hepburn & Albonetti (1980)	Security Level	Security level: 6 sampled prisons (3 min, 2 med, 1 max); DV: role conflict – scale level of agreement	Survey (n=518); one-tailed tests of significance (difference of means), regression	Minimum security level predicts higher levels of role conflict (only when controlled by staff position – treatment vs. CO)
Poole & Regoli (1980)	Correctional Experience	Correctional experience: continuous in months; DV: Role stress – scale level of perception of ambiguity; orientation: attitudes toward commitment to control of inmates	Survey (n=144): Path Model of causal relationships	Increased experience yields increased custodial orientation.

Table A2 Continued

Overview of Organizational Attributes as Predictors of Correctional Officer Attitudes

Study	Attribute(s)	Measurement of variables	Analytical processes	Summary findings
Toch & Klofas (1982)	Correctional Experience	Correctional experience: measurement is unspecified; DV: Job enrichment/professional orientation: scale measuring level of agreement.	Survey (n=832): Frequency distributions	Less experienced COs were less accepting of rehabilitation programs.
Cullen, et al. (1985)	Correctional Experience, security level	Correctional experience: continuous in years; SL: maximum security is the level of sample prison; DV: role problems – scale assessing level of role conflict/ambiguity as it impacts stress/coping toward work environment.	Survey (n=155): regression analysis	Length of experience appears to contribute to feelings of pressure on the job but does not impact levels of satisfaction toward work environment. Working in a max security level prison increases stress for officers while at work, but does not increase stress overall in their lives.
Jurik (1985)	Correctional Experience, Security Level	Correctional experience: continuous in years; SL: multi-category (min, med, max); DV: attitudes toward inmates – scale assessing level of agreement	Survey (n=179): Bivariate and multivariate correlations	Higher levels of experience yielded more negative attitudes; minimum security levels yielded more positive attitudes (only significant when other variables were held constant).
Zupan & Menke (1988)	Direct Supervision	Direct Supervision: dichotomous (direct vs. remote); IV: attitudes toward older traditional facility (remote) vs. newer generation (direct) facility before/after transition	Survey (n=96): Longitudinal measurements 6 mos prior and 6 mos after transition; analysis not specified	Attitude scores after the transition were higher than scores prior to the transition, indicating a general level of satisfaction with direct supervision style facility; results were weakened by sample contamination and limitations.

Table A2 Continued

Overview of Organizational Attributes as Predictors of Correctional Officer Attitudes

Study	Attribute(s)	Measurement of variables	Analytical processes	Summary findings
Cullen, et al. (1989)	Correctional experience	Correctional experience: continuous in years; SL: level of sample prison is maximum; DV: attitudes toward rehab – 2 scales assessing level of agreement	Survey (n=155): regression analysis	More years of experience indicates more likelihood of negative attitudes toward rehabilitation, but not statistically significant. Results regarding security level were not specified.
Saylor & Wright (1992)	Correctional experience, security level	Correctional experience: continuous in months at BOP and specific institution; SL: multi-category by lowest level (LVL 1) to highest level (LVL 6); DV: social climate – attitudes toward work environment – scale assesses level of agreement on 7 aspects of environment.	Survey (n=3,325): OLS regression (all non-continuous variables were used in effects vectors)	The more experience, the less satisfied within the institution, but overall satisfied within BOP. More experienced staff are more satisfied at their institution than less experienced staff. Those working in lower security levels were more satisfied than those in higher security levels.
Paboojian & Teske (1997)	Correctional experience, security level	Correctional experience: continuous in years; SL: multi-category (min, med, max); DV: thoughts about quitting – Likert-type response about amount of time thought about quitting.	Survey (n=424): purposive sample at 7 institutions; use of a structural model and hierarchical regression.	Correctional experience was found to be an insignificant predictor to thoughts about quitting. Respondents who felt security was too loose had more negative attitudes and more thoughts about quitting.
Farkas (1999)	Correctional Experience	Correctional experience: continuous in years; DV: attitudes toward inmates/rehab using 4 scales (orientation, counseling roles, social distance, punitive orientation)	Survey (n=125): Frequency distribution; regression	Overall, COs do not have punitive attitudes. The longer a CO worked, the more preference they had for counseling roles and rehab.

Table A2 Continued

Overview of Organizational Attributes as Predictors of Correctional Officer Attitudes

Study	Attribute(s)	Measurement of variables	Analytical processes	Summary findings
Armstrong & Griffin (2004)	Correctional experience, security level	Correctional experience: dichotomous (5+ years/4 or less years); SL: multi-category ranging from lowest (LVL 1) to highest (LVL 5); DV: perceived job stress and health as it impacts attitudes toward the work environment – measured using previously established scales assessing indicators of work stress and health status.	Survey (n=3,794): Bivariate correlations, multiple regression, difference of means tests	Correctional experience significantly impacted job stress among COs; Males who are older and have worked in corrections the longest experienced more health concerns. Security level had minimal impact and was not discussed in detail.
Applegate & Paoline III (2006)	Direct Supervision	Direct Supervision: dichotomous (direct vs. traditional in same facility); IV: attitudes toward work environment	Survey (n=305); OLS regression	No significant difference was found between the two types of facilities; all aspects of attitude assessments were found to be negligible.
Yocum, et al. (2006)	Direct Supervision	Direct Supervision: dichotomous (remote vs. direct at multiple facilities); IV: attitudes toward and perceived control of inmates	Survey (n=372); 3 separate studies; ANOVA, t-tests	No significant differences were found with management style as a predictor of attitudes.
Tewksbury & Mustaine (2008)	Correctional Experience	Correctional experience: continuous in months; DV: attitudes toward ideology (retribution, rehab, incapacitation, and deterrence) – measured by a scale assessing level of importance to the respondent.	Survey (n=554): bivariate analysis (multi-category variables were re-coded) and difference of means test, multiple regression (listwise deletion)	COs reported retribution as the most important; rehab was ranked fourth; experience was only significant in the impact on the choice for retribution. More experience made for less commitment to punishment. Experience was significant in support for retribution and incapacitation.

Note. DV = Dependent Variable; IV = Independent Variable; CO = Correctional Officer; Rehab = Rehabilitation; SL = Security Level

Appendix B: Coding for Variables

Variable	Level	Code(s)
Correctional Orientation	Continuous	0 to 68
Professionalism	Continuous	0 to 36
Age	Continuous	18 years old to maximum
Education	Categorical/Collapsed	0= completed high school 1= formal schooling beyond high school
Gender	Categorical	0= male 1= female
Race	Categorical/ Collapsed	0= White 1= Non-White
Supervision	Continuous	0 to 10
Frequency of Interactions		0 to 10
Interactions-Treatment		0 to 10
Interactions-Administrative		0 to 10
Interactions-Grievances		0 to 10
Correctional Experience	Continuous	1 to maximum months
Security Level	Categorical	0= medium 1= close
Conservatism (WPAI)	Continuous	0 to 12

APPENDIX C

SURVEY

There are 3 parts to this survey, please note there are survey items on the backs of these pages as well. Please answer all items as honestly as possible. This survey should only take 10-15 minutes of your time. Thank you so much for your voluntary participation!

PART I

Instructions: For questions 1-26, circle the answer that best reflects how much you agree or disagree with each of the following statements. If you are absolutely unsure, circle "Don't know (DK)".

SA = Strongly agree
A = Agree
DK = Don't know
D = Disagree
SD = Strongly disagree

1. I think my profession, more than any other, is essential for society.	SA	A	DK	D	SD
2. The dedication of correctional officers in this profession is gratifying.	SA	A	DK	D	SD
3. I am my own boss in almost every work-related situation.	SA	A	DK	D	SD
4. My fellow correctional officers have a pretty good idea about each other's competence.	SA	A	DK	D	SD
5. People in this profession have a real "calling" for their work.	SA	A	DK	D	SD
6. There is really no way to judge a fellow correctional officer's competence.	SA	A	DK	D	SD
7. Some other occupations are actually more important to society than mine is.	SA	A	DK	D	SD
8. I don't have an opportunity to exercise my own judgment.	SA	A	DK	D	SD
9. There is not much opportunity to judge how another correctional officer does his/her work.	SA	A	DK	D	SD

10. The best way to deal with inmates is to be firm and distant.	SA	A	DK	D	SD
11. The way you get respect from inmates is to take an interest in them.	SA	A	DK	D	SD
12. With some inmates, an officer becomes a substitute parental figure.	SA	A	DK	D	SD
13. Improving prisons for inmates makes prisons worse for officers.	SA	A	DK	D	SD
14. Rehabilitation programs are a waste of time and money.	SA	A	DK	D	SD
15. Rehabilitative programs should be left to mental health professionals.	SA	A	DK	D	SD
16. There would be less crime if prisons were more uncomfortable.	SA	A	DK	D	SD
17. Prisoners are different from most people.	SA	A	DK	D	SD
18. Only a few prisoners are really dangerous.	SA	A	DK	D	SD
19. Prisoners never change.	SA	A	DK	D	SD
20. Most prisoners are victims of circumstance and deserve to be helped.	SA	A	DK	D	SD
21. It is not wise to trust a prisoner too much.	SA	A	DK	D	SD
22. Bad prison conditions make prisoners more bitter.	SA	A	DK	D	SD
23. Give a prisoner an inch and he'll take a mile.	SA	A	DK	D	SD
24. Prisoners need praise just like anybody else.	SA	A	DK	D	SD
25. You should not expect too much from a prisoner.	SA	A	DK	D	SD
26. Prisoners are no better or worse than other people.	SA	A	DK	D	SD

PART II

Instructions: For items 27-38, answer based on your first reaction by circling “Yes” or “No”.

WHICH OF THE FOLLOWING DO YOU FAVOR, OR BELIEVE IN?

27. Death Penalty	Yes	No
28. Multiculturalism	Yes	No
29. Stiffer jail terms	Yes	No
30. Voluntary euthanasia	Yes	No
31. Bible truth	Yes	No
32. Gay rights	Yes	No
33. Pre-marital virginity	Yes	No
34. Asian immigration	Yes	No
35. Church authority	Yes	No
36. Legalized abortion	Yes	No
37. Condom vending machine	Yes	No
38. Legalized prostitution	Yes	No

39. If liberal and conservative thoughts could be represented on a scale of 0 to 10 with 0 meaning you are liberal and 10 meaning you are conservative, mark on this scale would you be:

0-----5-----10
Liberal Moderate Conservative

PART III

Instructions: For questions 40-55, please fill in the blank or check the response that best describes you.

40. Date of Birth (month and year): _____

41. Date you entered into employment as a corrections officer (month and year):

42. Date you entered into employment at this facility (month and year): _____

43. What is your gender? Male _____ Female _____

44. Formal education is defined here as any program/coursework that would result in a degree or certificate.

How many years beyond high school of formal education have you completed?

45. What is your highest level of formal education?

____ Some high school

____ High school diploma/GED

- ____ Some college/technical-vocational school
- ____ Graduated from college/technical-vocational school
(Associates, Bachelors, Certificate)
- ____ Some graduate school
- ____ Completed graduate school

46. Race / Ethnicity:

- ____ White Non-Hispanic
- ____ White Hispanic
- ____ African-American
- ____ American Indian/Alaska Native
- ____ Asian
- ____ Other (please list) _____

47. Which shifts do you generally work? _____

47a. On average, how many shifts per week do you work? _____

48. Do you work in an area of the institution with a security level different from the rest of the facility? Yes _____ No _____

48a. If YES, what is that security level designated? _____

49. Special populations may include juveniles, sex offenders, mental health inmates, and disciplinary segregation. Do you work in an area designated for a special population?

Yes _____ No _____

49a. If YES, what is the special population? _____

50. Organizational changes may include anything from supervision style over inmates to administrative paperwork required for interactions with inmates. Are you aware of any organizational changes that may impact any interactions you have with inmates?

Yes _____ No _____

50a. If YES, how do you think these changes impact your interactions with inmates?

- ____ Positively
- ____ Negatively
- ____ Don't know or difficult to judge

50b. If NO, do you feel there is a need for an organizational change within your institution?

Yes _____ No _____

51. With regards to supervision over inmates at your institution, how effective do you consider it to be?

- ☐ Very effective
- ☐ Moderately effective
- ☐ Neither effective nor ineffective
- ☐ Moderately ineffective
- ☐ Very ineffective

52. On a scale of 0 to 10 with 0 being no interactions and 10 being very frequent interactions, where on this scale would you rate the frequency of your interactions per shift with inmates?

0-----5-----10
None Some Frequent

53. On a scale of 0 to 10 with 0 being no interactions and 10 being very frequent interactions, where on the following scales would you rate each of the types of interactions per shift?

53a. Treatment 0-----5-----10

53b. Administrative 0-----5-----10

53c. Family/Social Concerns 0-----5-----10

53d. Custodial Demands/Grievances 0-----5-----10

54. How do you feel about the frequency of your face-to-face interactions with inmates?

- ☐ Should be more
- ☐ Should be less
- ☐ About the right amount

55. Has the frequency of your face-to-face interactions with inmates changed since you have been a correctional officer?

- ☐ Yes, it has increased
- ☐ Yes, it has decreased
- ☐ No it has stayed about the same

APPENDIX D

Pennsylvania Department of Corrections

Research and Evaluation Division

Access as guaranteed by Dr. Michael Antonio, Director

To: Jennifer Lasswell

From: Michael Antonio

Date: January 27, 2009

Re: Proposal

Per our conversation, upon approval of your research proposal by the Research Review Committee (RRC), a contact person at the targeted institution(s) will be identified for you. You may contact this person to coordinate when the surveys will be dropped off and when you will pick them up from the institution. If you or your committee has further questions, please let me know.

Michael E. Antonio, Ph.D.

Research & Evaluation Manager

Chair, Research Review Committee

Pennsylvania Department of Corrections

Bureau of Planning, Research, Statistics & Grants (PRSG)

phone: (717) 214-8972

fax: (717) 731-7830

APPENDIX E
Informed Consent Form

You are invited to participate in this research study. The following information is provided in order to help you make an informed decision whether or not to participate. If you have any questions, please do not hesitate to ask. This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects
(Phone: 724-357-7730).

You are eligible to participate because you are a corrections officer working within the Pennsylvania Department of Corrections. The purpose of this study is to examine a variety of influences that may impact your overall attitudes toward your work environment. You will be asked to complete a survey asking you questions that will help determine which factors may be more influential than others. Participation in this study will require approximately 10-15 minutes of your time. Participation is completely voluntary and non-participation will in no way negatively impact you.

The information gained from this study will help the researcher gain a better understanding of the various influences within a correctional environment on corrections officers. All answers will be kept completely confidential. No specific identifying information will be requested on the survey.

Your participation in this study is completely voluntary. You may choose to either participate or not participate in this study without fear of reprimand. You may also withdraw at any time without adversely affecting your relationship with your administrators or with the researchers. Your decision will not result in any loss of benefits to which you are otherwise entitled. If you do choose to withdraw, simply do not return your survey. Your responses are only considered in combination with those of the other participants. The information obtained in the study may be published in scientific journals or presented at scientific meetings, but your identity will be kept strictly confidential.

If you are willing to participate in this study, please tear off and keep this Informed Consent Form for your records and return the attached survey by placing it in the designated envelopes in the provided box. If you have any questions regarding the survey, please feel free to contact the researchers below:

Jennifer Lasswell, Graduate Student
Indiana University of Pennsylvania
Department of Criminology
200 Wilson Hall
Indiana, PA 15705
Phone: 724-357-5976
Email: j.lasswell@iup.edu

Daniel R. Lee, Ph.D.
Indiana University of Pennsylvania
Department of Criminology
200 Wilson Hall
Indiana, PA 15705
724-357-2720
Email: danlee@iup.edu

Appendix F: Tables

Table F1

Comparison of Sample Characteristics to Population

Category	All PA SCIs		5 SCIs		Sample	
	n	%	n	%	n	%
Number of COs	9,452	--	1,757	--	202*	--
Gender – Males	8,500	89.9	1,684	95.8	188	93
Females	952	10.1	73	4.2	9	7
Total	9,452	--	1,757	--	202	--
Race – White	8,247	87.3	1,665	94.8	184	93.4
Non-White	1,205	12.7	92	5.2	13	6.6
Total	9,451	--	1,757	--	197	--
Average Age (in years)	41**		41**		41.57	
Average Tenure (in years)	9**		9**		10	

*Note: *2 surveys were received in the mail and their institutional affiliation is unknown.*

***Reported values for age and tenure from PADOC are whole numbers as shown.*

Table F2

Descriptive Statistics

Variable	Valid	Valid	Median	Mean	SD	Minimum	Maximum
Correctional Orientation (n=200)	--	--	34.00	34.34	7.41	12	55
Professionalism (n=201)	--	--	23.00	23.02	4.14	9	32
Age (n=187)	--	--	41.00	41.57	9.39	23	63
Age-at-Entry (n=185)	--	--	29.00	31.13	1.63	21	53
WPAI (n=199)	--	--	7.00	7.18	2.22	1	12
Self-Select Conservatism (n=199)	--	--	6.76	6.20	2.27	0	10
Tenure (n=192)	--	--	126.5	125.05	73.00	6	299
Frequency of Inmate Interaction (n=196)	--	--	10.00	8.36	2.68	0	10
Inmate Interactions-Treatment (n=190)	--	--	5.00	3.91	3.29	0	10
Inmate Interactions-Administrative (n=192)	--	--	5.00	4.65	3.24	0	10
Inmate Interactions-Family (n=189)	--	--	3.00	3.32	2.78	0	10
Inmate Interactions-Grievances (n=189)	--	--	5.00	5.12	3.22	0	10
Education (n=201)							
Completed High School/No College	53	26.4	--	--	--	--	--
Some College/Graduated College	148	73.6	--	--	--	--	--
Security Level (n=200)							
Medium	47	23.5	--	--	--	--	--
Close	153	76.5	--	--	--	--	--

Table F3

Item-Total Correlations for the WPAI Scale

Survey Item	Item-Total Correlation
Death Penalty	-.141
Multiculturalism	.173
Stiffer jail terms	-.049
Voluntary euthanasia	.210
Bible truth	.288
Gay rights	.295
Pre-marital virginity	.208
Asian Immigration	.098
Church Authority	.383
Legalized abortion	.370
Condom Vending Machine	.369
Legalized prostitution	.293
Cronbach's Alpha: .550	
n=12	

Table F4

Item-Correlations for the Professionalism Scale

Survey Item	Item-Total Correlation
I think my profession, more than any other, is essential for society.	.137
The dedication of corrections officers in this profession is gratifying.	.273
I am my own boss in almost every work-related situation.	.352
My fellow corrections officers have a pretty good idea about each other's competence.	.279
People in this profession have a real "calling" for their work.	.213
There is really no way to judge a fellow correctional officer's competence.	.215
Some other occupations are actually more important to society than mine is.	.159
I don't have an opportunity to exercise my own judgment.	.440
There is not much opportunity to judge how another corrections officer does his/her work.	.354
Cronbach's Alpha: .570	
n=9	

Table F5

Item-Total Correlation for the Correctional Orientation Scale

Survey Item	Item-Total Correlation
The best way to deal with inmates is to be firm and distant.	.286
The way you get respect from inmates is to take an interest in them.	.296
With some inmates, an officer becomes a substitute parental figure.	.258
Improving prisons for inmates makes prisons worse for officers.	.453
Rehabilitation programs are a waste of time and money.	.476
Rehabilitative programs should be left to mental health professionals.	.479
There would be less crime if prisons were more uncomfortable	.439
Prisoners are different from most people.	.302
Only a few prisoners are really dangerous.	.273
Prisoners never change.	.441
Most prisoners are victims of circumstance and deserve to be helped.	.288
It is not wise to trust a prisoner too much.	.275
Bad prison conditions make prisoners more bitter.	.263
Give a prisoner an inch and he'll take a mile.	.441
Prisoners need praise just like anybody else.	.470
You should not expect too much from a prisoner.	.443
Prisoners are no better or worse than other people.	.366
Cronbach's Alpha: .781	
n=17	

Table F6

Correlations Matrix

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
(1) Orientation	1.00													
(2) Professionalism	.282** (200)	1.00												
(3) WPAI	.018 (197)	.024 (198)	1.00											
(4) Self-Select Conservatism	-.097 (197)	.032 (198)	.347** (197)	1.00										
(5) Age	.264** (185)	.007 (186)	.224** (184)	-.039 (184)	1.00									
(6) Age at Entry	.172* (183)	.030 (184)	.137 (182)	-.087 (182)	.753** (185)	1.00								
(7) Education	.080 (199)	-.009 (200)	-.064 (198)	-.004 (198)	-.090 (186)	-.004 (184)	1.00							
(8) Tenure	.123 (190)	-.037 (191)	.145* (189)	.107 (189)	.498** (185)	-.124 (185)	-.145* (191)	1.00						
(9) Security Level	.020 (198)	.152* (199)	.091 (197)	.112 (197)	-.116 (186)	-.060 (184)	.046 (199)	-.097 (190)	1.00					
(10) Interactions-Frequency	.038 (194)	.111 (195)	.063 (194)	-.004 (195)	-.078 (181)	.063 (179)	.059 (195)	-.203** (186)	.108 (194)	1.00				
(11) Interactions-Treatment	.177* (188)	.096 (189)	.002 (187)	-.011 (187)	.031 (175)	-.030 (173)	-.035 (189)	.089 (180)	.070 (188)	.223** (186)	1.00			
(12) Interactions-Administrative	.092 (190)	.037 (190)	.102 (189)	.052 (189)	.065 (177)	.009 (175)	.060 (191)	.096 (182)	.021 (190)	.153* (188)	.365** (190)	1.00		
(14) Interactions-Family	.202** (187)	.108 (187)	.041 (186)	.014 (186)	.039 (174)	.006 (172)	.088 (188)	.049 (179)	.027 (187)	.109 (185)	.519** (189)	.405** (189)	1.00	
(13) Interactions-Grievances	-.002 (188)	.015 (187)	.193** (186)	.074 (186)	.087 (174)	-.013 (172)	.073 (188)	.132 (179)	.024 (187)	.215** (185)	.276** (189)	.296** (189)	.250** (189)	1.00

Note: *p<.05, **p<.001

Table F7

Bivariate Regression Analysis for Multicollinearity

Independent Variable	<u>Correctional Orientation</u>			<u>Professionalism</u>		
	B (SE)	β	t	B (SE)	β	t
Age (n=187)	.210 (.057)	.264	3.696**	.003 (.033)	.007	.092
Age-at-Entry (n=183)	.162 (.069)	.172	2.344*	.016 (.039)	.030	.404
Tenure (n=189)	.013 (.007)	.123	1.699	-.002 (.004)	-.037	-.507
WPAI (n=196)	.061 (.240)	.018	.255	.045 (.134)	.024	.335
Self-Select Conservatism (n=196)	-.351 (.241)	-.104	-1.455	.648 (.135)	.025	.357

Note. *p<.05; **p<.001

Table F8

Stepwise Iterations for Correctional Orientation with WPAI Measure of Conservatism

Variable Removed	Model Diagnostics	
	F-Statistic	R ² (Standard Error)
WPAI	2.901*	.129 (7.409)
Interactions-Admin	3.324*	.128 (7.387)
Security Level	3.954*	.129 (7.345)
Frequency of Interactions	4.733**	.125 (7.291)

Note: * $p < .05$; ** $p < .001$

Table F9

Full and Reduced Regression Models for Correctional Orientation with WPAI Measure of Conservatism

Independent Variable	B (SE)	β	t	B (SE)	B	t
Age (n=187)	.233 (.065)	.281	3.583**	.228 (.061)	.275	3.745**
Conservatism-WPAI (n=199)	-.066 (.281)	-.019	-.236	--	--	--
Frequency of Interactions (n=191)	.126 (.225)	.045	.561	--	--	--
Interactions-Treatment (n=191)	.154 (.225)	.065	.686	.200 (.204)	.086	.984
Interactions-Administrative (n=193)	.054 (.208)	.022	.259	--	--	--
Interactions-Family (n=189)	.453 (.260)	.168	1.745	.477 (.243)	.176	1.964
Interactions-Grievances (n=190)	-.186 (.208)	-.076	-.894	-.196 (.191)	-.081	-1.025
Education (n=201)	1.369 (1.343)	.079	1.019	1.424 (1.271)	.083	1.121
Security Level (n=200)	.394 (1.353)	.022	.291	--	--	--
R ² = .125 F = 2.454* Sc = 7.404 (df = 9)				R ² = .125 F = 4.733** Sc = 7.291 (df = 5)		

Note. *p<.05; **p<.001

Table F10

Stepwise Iterations for Correctional Orientation with Self-Select Measure of Conservatism

Variable Removed	Model Diagnostics	
	F-Statistic	R ² (Standard Error)
Interactions-Admin	2.962*	.132 (7.418)
Security Level	3.442*	.132 (7.376)
Frequency of Interactions	3.864**	.126 (7.367)

Note: * $p < .05$; ** $p < .001$

Table F11

Full and Reduced Regression Models for Correctional Orientation with Self-Select Measure of Conservatism

Independent Variable	B (SE)	β	t	B (SE)	β	t
Age (n=187)	.234 (.064)	.278	3.638***	.226 (.063)	.267	3.596***
Conservatism-Self-Select (n=199)	-.209 (.272)	-.058	-.767	-.185 (.265)	-.052	-.699
Frequency of Interactions (n=191)	.138 (.227)	.048	.607	--	--	--
Interactions-Treatment (n=191)	.137 (.221)	.058	.619	.195 (.206)	.083	.945
Interactions-Administrative (n=193)	.052 (.207)	.022	.253	--	--	--
Interactions-Family (n=189)	.492 (.257)	.180	1.911	.467 (.247)	.172	1.889
Interactions-Grievances (n=190)	-.208 (.208)	-.085	-.999	-.178 (.198)	-.073	-.901
Education (n=201)	.988 (1.346)	.056	.734	1.372 (1.297)	.079	1.058
Security Level (n=200)	.563 (1.369)	.031	.411	--	--	--
R ² = .132 F = 2.624** Sc = 7.441 (df = 9)				R ² = .126 F = 3.864** Sc = 7.367 (df = 6)		

Note. *p<.05; **p<.01; ***p<.001

Table F12

Stepwise Iterations for Professionalism with WPAI Measure of Conservatism

Variable Removed	Model Diagnostics	
	F-Statistic	R ² (Standard Error)
Interactions-Admin	1.609	.076 (4.154)
Interactions-Grievances	1.819	.075 (4.144)
Interactions-Treatment	2.058	.072 (4.136)
Education	2.381*	.069 (4.121)

*Note: *p<.05*

Table F13

Full and Reduced Regression Models for Professionalism with WPAI Measure of Conservatism

Independent Variable	B (SE)	β	t	B (SE)	β	t
Age (n=187)	.012 (.037)	.026	.328	.014 (.036)	.032	.399
Conservatism-WPAI (n=199)	.185 (.157)	.095	1.177	.149 (.152)	.077	.981
Frequency of Interactions (n=191)	.168 (.127)	.109	1.328	.176 (.120)	.114	1.468
Interactions-Treatment (n=191)	.093 (.126)	.071	.734	--	--	--
Interactions-Administrative (n=193)	-.037 (.117)	-.028	-.315	--	--	--
Interactions-Family (n=189)	.127 (.146)	.086	.870	.144 (.115)	.097	1.252
Interactions-Grievances (n=190)	-.046 (.117)	-.035	-.399	--	--	--
Education (n=201)	.384 (.756)	.040	.508	--	--	--
Security Level (n=200)	1.667 (.761)	.171	2.192*	1.693 (.750)	.174	2.257*
R ² = .077 F = 1.433 Sc = 4.166 (df = 9)				R ² = .069 F = 2.381* Sc = 4.121 (df = 5)		

Note. *p<.05

Table F14

Stepwise Iterations for Professionalism with Self-Select Measure of Conservatism

Variable Removed	Model Diagnostics	
	F-Statistic	R ² (Standard Error)
Interactions-Admin	1.508	.072 (4.141)
Interactions-Grievances	1.707	.070 (4.131)
Interactions-Treatment	1.940	.125 (7.291)
Education	2.238	.065 (4.108)
Self-Select Conservatism	2.828*	.065 (4.098)

*Note: *p<.05*

Table F15

Full and Reduced Regression Models for Professionalism with Self-Select Measure of Conservatism

Independent Variable	B (SE)	β	t	B (SE)	β	t
Age (n=187)	.019 (.036)	.042	.539	.023 (.035)	.050	.650
Conservatism-Self-Select (n=199)	.130 (.152)	.067	.856	--	--	--
Frequency of Interactions (n=191)	.168 (.126)	.109	1.330	.181 (.119)	.118	1.520
Interactions-Treatment (n=191)	.080 (.123)	.063	.646	--	--	--
Interactions-Administrative (n=193)	-.018 (.115)	-.014	-.157	--	--	--
Interactions-Family (n=189)	.133 (.144)	.090	.930	.151 (.114)	.102	1.329
Interactions-Grievances (n=190)	-.045 (.116)	-.034	-.391	--	--	--
Education (n=201)	.377 (.751)	.040	.502	--	--	--
Security Level (n=200)	1.591 (.764)	.164	2.083*	1.728 (.744)	.178	2.324*
R ² = .072 F = 1.335 Sc = 4.154 (df = 9)				R ² = .065 F = 2.3828* Sc = 4.098 (df = 4)		

Note. *p<.05