PLACE MANAGEMENT IN A CORRECTIONAL SETTING

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ABSTRACT PLACE MANAGEMENT IN A CORRECTIONAL SETTING

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Since the concept of place management was first introduced to environmental criminology in 1994, much has been learned about its application and usefulness.

Through the study of a wide variety of places, it is now recognized that how a place is managed can affect the type and amount of crime that occurs at that specific location.

Madensen's (2007) recent work with bars in Cincinnati further enhanced our understanding of the place management concept by hypothesizing that effective place management could be a result of four operational elements: organization of the physical space, regulation of conduct, control of access, and acquisition of resources (ORCA). To date, the application of place management concepts as reflected in the theory has been limited to community-based settings and has not been applied to custodial or institutional settings such as jails. This study is intended to test the concepts of effective place management in a jail setting to determine whether or not the number of incidents of inmate misconduct and disorder can be reduced thereby.

Using a mixed-method design, this study measured the impact place management interventions implemented in a county jail had on a number of outcome measures, including the number of written, major misconduct reports for both male and female inmates, and the perceptions of inmate behavior held by officers, supervisors, and

administrators. An interrupted time series (ARIMA) analysis of written inmate misconduct reports was used to evaluate whether or not the implementation of place management interventions reduced the amount of reported inmate misconduct in both male and female housing units. Qualitative analysis of the themes presented during individual and focus group interviews was used to assess changes in perceptions of inmate behavior held by officers, supervisors, and administrators, and to enhance understanding of the factors that may be responsible for producing changes in behavior. The results provide evidence that the identified elements of effective place management have broader application than previously hypothesized.

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CHAPTER 1: INTRODUCTION

This study examines whether or not the concepts of place management can be effectively applied to the custodial environment of an American jail. The current body of research with respect to place management has focused on explaining and modifying behavior that occurs in places that are community-based and whose operational functions are narrowly defined, often singular in nature. If one visits a bar, as an example, the nature and purpose of the visit are specifically defined by the type of establishment and intent of the individual. Although one may eat, socialize, or be entertained, the potential functions and activities of the location are limited in scope when compared to the entirety of one's daily routine. Custodial settings (such as jails and prisons) on the other hand, are much more multi-dimensional. Goffman (1961) referred to these types of facilities as "total institutions", suggesting that they were distinctive from community-based settings because every aspect of life occurred in the same location and was controlled by a single authority.

The distinctiveness of the jail setting initially led to the development of a range of theories that were unique to the correctional environment, based on concepts independent from those applied to explanations of community-based crime and deviance. The dominant theoretical explanations of inmate behavior concentrate on evaluating the interaction between individual-level offender characteristics and the environment to explain misconduct (Gadon, Johnstone, & Cooke, 2006). Much of the research has been designed to simply identify the correlates of disruptive inmate behavior rather than test the success or failure of interventions focused on modifying behavior. Any preventive measures that result from these theoretical approaches are social in nature, emphasizing changes in social relationships or the process of

inmate socialization (Bottoms, Hay, & Sparks, 1995). It is the emphasis on social structures and relationships that has been criticized as being outside the scope and capabilities of most practitioners (Felson & Clarke, 1998). This criticism does not suggest that the current body of theory lacks legitimacy; rather it suggests that given the higher-than-normal rates of victimization in correctional settings, attention needs to be centered on theoretical explanations that offer a basis for designing interventions that are practical and applicable to the field.

Taking a place management approach, as this study does, shifts attention from individual-level factors and social relationships to the role context and opportunity play in influencing inmate misconduct. This is a departure from the traditional explanation of inmate behavior to one that is more "situational" (Bottoms et al., 1995), the nature of which relies on an intervention specifically designed to reduce criminal opportunity (Welsh & Farrington, 2009). Bottoms, Hay, and Sparks (1995) suggested that situational interventions are ones that could be defined as (1) measures directed at highly specific forms of crime, (2) which involve the management, design, and manipulation of the immediate environment in which these crimes occur, (3) in as systematic and permanent a way as possible, (4) so as to reduce the opportunities for these crimes. In applying this definition to a correctional setting they noted that reducing the opportunity for crime and manipulating the immediate environment were the components that were most critical.

The advantage of such an approach is that an intervention designed to address the level of criminal opportunity focuses on elements of correctional operation that are more easily controlled by the practitioner. The need for effective interventions is evidenced by the

high rates of criminal victimization that are commonly reported in correctional settings. Wolff et al. (2007) suggested that in some prisons the rate of assault for a male inmate was 18 times higher than it was for a male in the general, non-incarcerated population, and 27 times higher for a female inmate. In one maximum security prison, McCorkle (1992) found that 69% of the inmates surveyed reported having to use violence or the threat of violence to avoid their own personal victimization. The problem becomes more critical when one considers that the rate of unreported victimization in some institutions was nearly three times as high as it was for most communities (Wolff et al., 2007).

Should these same rates of victimization occur in any publicly utilized community location, attention would likely be focused on developing place-specific interventions designed to reduce the amount of criminal opportunity and subsequent victimization. That has not been the case in correctional settings. With few exceptions (La Vigne, 1994), interventions designed to reduce the amount of criminal opportunity and rates of victimization have not been established. Even if the lack of attention given to these conditions signifies in some way that society has accepted such behavior as being a natural by-product of the mass confinement of antisocial individuals (Wolff et al., 2007), the fact remains that preventive measures need to be explored with the same intensity that would be witnessed in any of our community neighborhoods.

The Application of Opportunity Theory

Although much of the current research into the causes of inmate violence continues to concentrate on individual level factors (Cao, Zhao, & Van Dine, 1997; Harer & Steffensmeier, 1996; Jiang & Fisher-Giorlando, 2002; McCorkle, Miethe, & Drass, 1995),

situational or opportunity-based theories have proven successful in preventing criminal behavior in a variety of community settings and have generated increased attention (Clarke, 1992; Laycock & Austin, 1992; Mazerolle, Kadleck, & Roehl, 1998; Meredith & Paquette, 1992; Weidner, 1997). In the current context, opportunity-based theories incorporate the belief that criminal behavior can be prevented by reducing the amount and type of opportunity, increasing the risk of detection, and increasing the difficulty associated with engaging in specific behaviors (Welsh & Farrington, 2009). Wortley (2002) suggested that situational theories were perfectly suited for the field of corrections because administrators can more easily control the elements that contribute to the existence of criminal opportunity.

To date, the only situational theory that has been applied to a correctional setting has been rational choice, which was believed to have demonstrated success because it was designed to be offense-specific, allowing individual agencies to respond to particular behaviors that were problematic (Bottoms et al., 1995; Wortley, 2002). Rational choice theory was an appropriate foundational theory in these instances because the institutions were large enough in terms of inmate population to have one or several types of behavior that dominated the patterns of misconduct. Because the average size of the inmate population is much smaller than typically found in prison settings, the majority of American jails do not have one specific type of behavior that defines inmate misconduct. Although inmate disorder is still a concern, this concern is grounded in the cumulative effect of a wide range of disruptive inmate behaviors. As a result, developing an intervention designed to address the cumulative effect of misconduct in a given location, as place management does, rather than a specific type of misconduct, as rational choice does, can be more appropriate.

The most recent theoretical research into place management has focused on how effective place management¹ was developed. Madensen's (2007) work on this subject suggested that effective place management was a function of four operational elements: organization of physical space, regulation of conduct, control of access, and acquisition of resources. In her evaluation of anti-disorder measures in bars in Cincinnati, she noted that bars that embedded crime prevention measures in these operational elements were most effective at discouraging criminal conduct. Although an important development in the understanding of place management, Madensen's (2007) findings have yet to be replicated, which raises the question as to whether or not the elements she suggested are effective or important to the individual environment in which they were observed or have more general application.

This study tested the more general applicability of the conclusions drawn by

Madensen through the implementation of place management interventions in an environment
much different from that in her study. It assessed whether unwanted inmate behavior could
be reduced through the operationalization of place management concepts and identified the
elements that influenced the changes in observed or reported behavior. Chapter two
summarizes the current state of research with respect to inmate behavior, identifying the two
dominant theoretical models that have been most often applied to inmate behavior and
introduces the foundational work that has been done in the area of situational theories. It also
provides a summary of the work on effective place management recently completed by

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¹ The term *effective place management*, when used in an italicized format, is intended to identify the specific intervention design outlined in greater detail in chapter 4. It is presented in this manner to remain consistent with the descriptive language used in the field of environmental criminology.

Madensen and details the operational elements she identified, which served as the foundation of the interventions under study. Chapter two concludes with a discussion of the role gender has in inmate behavior. This is an important element in the study because there is a body of research that suggests male and female inmates need to be supervised differently. In including both male and female housing units in the present study, this research assesses the effectiveness of a place management intervention with respect to both genders.

Chapter three describes the nature of the study site, which includes a description of the architectural style, a summary of the management approach, and the identification of the housing units used as the treatment and control units. Following that discussion, chapter four describes the designs of the interventions and identifies how the broader elements of *effective place management* were applied to a jail setting. Chapter five summarizes the research methods used in the study, outlining the nature of the qualitative and quantitative data collected and the methods used in the analyses of each. The results of the study are then presented in chapter six. The chapter discusses the results of the ARIMA modeling process completed on two of the treatment units and two of the control units and the results of the thematic analyses of the qualitative data. The relationships that can be drawn between the quantitative and qualitative data are important because the study is trying to assess the mechanisms by which behavior can be changed. The combination of the different types of data provides a more robust analysis from which to draw conclusions than any single approach.

The final two chapters present a discussion of the results and possible implications and study limitations. With respect to the discussion of the results, chapter seven identifies

how, why, and by what mechanisms inmate behavior changed. It discusses the findings with respect to the operational elements Madensen (2007) identified in her study of bars and assesses the effectiveness of each with respect to the current setting. The chapter also discusses what the results mean to the issue of gender-specific supervision. The findings are used to draw conclusions about the effectiveness of situational approaches in controlling inmate behavior regardless of gender. The study concludes with a discussion of the limitations of the research and identifies possible implications with respect to the understanding of situational theory and the organizational development of jails.

CHAPTER 2: LITERATURE REVIEW

The unique set of theories used to explain inmate behavior have been characterized as being more social in nature (Bottoms et al., 1995), which suggested that inmate behavior was influenced by the interaction between individual-level characteristics and the social environment of the institution. These theories attributed inmate behavior to the development of social relationships or the process of socialization and suggested that both were influenced by one's individual characteristics. Situational theories, on the other hand, attributed behavior to the existence of criminal opportunity. Factors external to the individual influenced the type and amount of criminal opportunity and offenders responded accordingly to that opportunity. Clearly defining what is meant by the term *situational* is important because it has been used in a variety of contexts in the study of inmate behavior. Some researchers (Gadon et al., 2006; Jiang & Fisher-Giorlando, 2002) have used the term to explain how particular aspects of the physical environment affected the process of one's "prisonization", or one's psychological adjustment to confinement. Although the use of the word situational in these contexts was not inappropriate, it was clearly a more person-centered approach that attempted to use the interaction between one's individual characteristics and the social environment to explain inmate behavior.

Compared to the explanation of community-based crime and deviance there are strikingly few theoretical explanations of inmate behavior. Only two theories (deprivation and importation) have been included in this discussion because they have dominated the bulk of research attention since their introduction over four decades ago.

The Development of Correctional Theories

The first of the dominant correctional theories was introduced by Clemmer (1940) in his now classic work, *The Prison Community*. He was the first to suggest that inmates go through a process of social assimilation, whereby people from a wide range of backgrounds were "fused" together under one set of behavioral norms. He termed this assimilation process "prisonization" (p. 299) and suggested that every inmate who entered the penitentiary went through this process to some degree. Sykes (1958) suggested that inmates experienced this process of prisonization because they were caused to adapt to an environment which was characterized by the deprivation of liberty, goods, services, heterosexual relationships, autonomy, and security. He commented that the loss of these things led to the development of an anti-establishment environment, where inmates acted in a manner contrary to the established administrative standards. This anti-establishment behavior was universally adopted by the inmate population, which was what Clemmer (1940) first referenced in his earlier work. Jiang and Fisher-Giorlando (2002) suggested that this code created a culture where inmates opposed authority and led to the development of negative attitudes and aggressive behavior.

Wooldredge (1991) commented that although early support for deprivation theory could be characterized as considerable, more recent changes in the system of confinement have raised questions about the validity of the theory. The conditions of confinement have improved tremendously during the past several decades and the constitutional protections afforded inmates are greater today than at any point in the past. This led some to question whether or not the "pains of imprisonment" were as significant a factor in influencing

behavior as they once were (Wooldredge, 1991). Others have questioned whether or not the inmate population could be characterized as a single cohesive group possessing one universal set of behavioral expectations. Changes over time in the racial, religious, and political characteristics of the inmate population have led to increased levels of group conflict, diminishing the legitimacy of a single set of conduct norms (Jacobs, 1976). Along a parallel line of thought, the theory had received criticism for ignoring the role that similar changes in the social fabric of our communities could have on influencing institutional behavior (Harer & Steffensmeier, 1996; Irwin & Cressey, 1962; Wellford, 1967).

The other dominant correctional theory, importation theory, challenged the assertion made by deprivation theorists that behavior was the result of internal social forces unique to the prison environment by suggesting institutional behavior was simply a continuation or extension of the criminal subculture that existed in the community (Irwin & Cressey, 1962). Importation theorists characterized inmates as being criminal or antisocial in their orientation prior to their arrival in prison. Accordingly, misconduct was not seen as an unexpected occurrence; rather it was a continuation of the behavior that was exhibited in the community prior to incarceration (Innes, 1997). This belief was supported by research that had demonstrated that the same factors that could be used to predict inmate behavior, such as age, race, and employment, also served to increase the likelihood of deviant behavior in the community (Ellis, Grasmick, & Gilman, 1974; Flanagan, 1983; Gaes & McGuire, 1985; Goetting & Howsen, 1986; Harer & Steffensmeier, 1996; Langan & Pelissier, 2002; Wooldredge, 1991).

General Criticisms of Traditional Theories

The dominant social theories have received a number of important criticisms that deserve consideration and that assist in putting the benefits of situational approaches into context. Perhaps the most relevant of these criticisms was that the solutions offered by these theories required fundamental changes to the very nature of the American system of confinement (Wortley & Summers, 2005). Improvements in the conditions of confinement, the quality of life for the inmate population, or the type or amount of inmate socialization and autonomy were seen as structural, and, as such, were often driven by political and social forces external to the actual environment and outside of the control of the individual administrator. That same criticism had been made with respect to the application of social theories in the area of community crime prevention as well. Felson and Clarke (1998) suggested that social crime theories were largely "irrelevant" to those who deal with offenders because the suggested causes of violent or aggressive behavior, those that were psychological or involved social processes, lie outside of their control.

This, in turn, led directly to the criticism that the interventions based on these theories offered the administrator few practical suggestions as to how to control or reduce deviant behavior (Reisig, 1998). Few attempts have been made to study the effect a specific intervention had on behavior. Instead, researchers have been inclined to offer strategies that come from the anecdotal evaluation of data. Wortley and Summers (2005) pointed to the research on crowding as an example, suggesting that since a correlation existed between population density and assault rates one could infer that reducing the level of crowding would reduce the rate of assault. However, inferences like these were not viewed as practical

because administrators did not have full control over conditions such as crowding, or over commonly tested demographic variables such as age or racial composition.

Finally, and perhaps most importantly for this particular research, Bottoms, Hay, and Sparks (1995) suggested that some interventions could actually increase the opportunity for unacceptable behavior. Although they did not suggest that one approach was more effective at regulating behavior than another, they did suggest that some interventions that were designed to change the process of inmate socialization could lead to the development of policies governing prisoner interaction and autonomy that were characterized as more liberal than those one typically encounters. This, in turn, led to opportunities for inmates to interact without officer supervision, increasing the opportunity for physical or sexual assault.

A Rationale for Situational Theory

In contrast to the social approach, situational theories suggested that criminal behavior was a product of criminal opportunity. Based largely on the concepts of rational choice and routine activity, situational theorists suggested that one could regulate behavior by systematically manipulating the environment in which it occurred so as to block or reduce the amount or type of criminal opportunity (Bottoms et al., 1995; Wortley, 2002). The preventive techniques that supported this approach were unique in that they were focused on the setting or place in which crime occurred and had a crime-specific design (Welsh & Farrington, 2009). This practice was based on the belief that it was easier to alter the conditions of one's environment than the individual characteristics of offenders or offending (Guerette, 2009). Wortley (2002) summarized this concept nicely by suggesting that it was easier to create safer places than safer individuals.

The place- and crime-specific focus offered by situation theories were both well suited to the corrections environment for a number of reasons. Rosenbaum, Lurigio, and Davis (1998) noted that situational interventions worked best in settings that were characterized as having higher-than-normal levels of criminal opportunity. If one believed that crime was largely a product of criminal opportunity, the extremely high rates of victimization that existed in jails and prisons were evidence of higher-than-average levels of opportunity. Just as crime and deviance are not evenly distributed within a community, they are not evenly distributed in a corrections environment either. The locations and conditions in which behavior occurs in a corrections setting are much more limited than in a community setting, allowing for the more effective identification and control of criminal opportunity (Wortley, 2002).

Additionally, situational measures and methods can be quick, practical, cost effective, and are not constrained by the need to make large organizational or operational changes (Wortley, 2002). This provides practitioners with the ability to institute interventions that are designed to modify behavior without requiring a detailed knowledge of the social structure, patterns of socialization, or characteristics of the inmate population. Wortley (2003) commented that in this highly regulated environment, administrators possessed a great deal of control over situational variables, which was critical to the design and implementation of practical, effective behavioral strategies.

Based on the advantages of operating such a highly controlled environment, situational interventions are perfectly suited to the corrections environment. In fact, Wortley (2003) suggested that if they could not prove effective in this setting then they were not

likely to succeed in any environment. Despite this claim, the use of situational methods in correctional settings has received very little research attention. In perhaps the most extensive review of the use of situational interventions in a correctional setting, Wortley (2002) could only identify eight studies that addressed the subject, and of those studies only one (La Vigne, 1994) attempted to implement and measure the effects of a specific intervention. The others, although not directly involved in the testing of a specific intervention, served to identify the possibilities presented by a situational approach to prison control.

The Application of Rational Choice Theory

Although there was not a great deal of research on the use of situational interventions in correctional settings, the majority of studies that did exist attempted to address criminal opportunity through the use of a rational choice model. This would include the original research project that later served as the driving force behind the conceptualization of rational choice theory. In the early 1970's researchers began to examine the treatment received by institutionalized youth in England. The study showed that the probability of absconding and re-offense were more a product of the type of institution in which the youth were placed rather than personal characteristics. What differentiated the facilities from one another was not the type of offender, but rather the amount of opportunity for residents to misbehave. Different management styles resulted in different amounts of opportunity. The importance of opportunity, however, conflicted with the leading psychological, biological, and sociological theories, which suggested that offender characteristics were the more important determinants of behavior (Clarke, 1992).

The identification and recognition that opportunity played a role in defining the behavior of institutionalized youth led to the development of rational choice theory (Clarke, 1992; Cornish & Clarke, 1986). It was based on three assumptions: first, offenders made rational decisions that were intended to be beneficial and were shaped by whatever relevant, available information existed at the time of the offense. Second, there was a difference between the decision to become involved in a criminal lifestyle, known as the criminal involvement decision, and the decision to commit a particular offense, known as the event decision (Clarke, 1992). Cornish and Clarke (1986) suggested that these two distinct stages were influenced by a different set of factors. The involvement decision was influenced by a number of psychological and sociological factors which the offender was exposed to over an extended period of time and which may have no connection to the crime itself; while the event decision was influenced by one's immediate environment and situation. Finally, the third assumption suggested that a crime-specific focus was necessary because the information an offender used and processed was different for each type of crime (Clarke, 1992).

The recognition that offenders made rational decisions based on environmental and situational influences created a theoretical framework that allowed for a more dynamic view of crime. Criminal conduct was seen as something that was highly susceptible to modifications and alterations in the physical environment and structure of opportunity (Clarke, 1992). The early stages of the development of rational choice led to the suggestion that prevention could be accomplished by manipulating three environmental dimensions: increasing the risk of apprehension to the offender, increasing the effort required to commit a

crime, and reducing the rewards associated with crime. Preventing conduct now became more relevant to the practitioner and allowed for the demonstration of immediate results.

The first and perhaps only study to evaluate an intervention designed to control a specific type of inmate behavior was reported by La Vigne (1994). The inmates in the jail at Rikers Island (New York City) had manipulated the inmate phone system in order to access long-distance numbers free of charge and 800 numbers. In addition to the obvious cost associated with the violations, each was used to carry out illegal activities as well. The charges associated with the flawed telephone system exceeded \$3.2 million in 1992, the large majority of which the administration thought were directly attributed to unauthorized inmate access. As a result, officials for the Department of Corrections installed a new phone system designed to increase the effort required to make unauthorized calls, increase the risk of detection, and limit individual access. The new system reduced phone costs by nearly 50% and, in somewhat of a surprising result, reduced inmate assaults resulting from conflicts over the phone system by 50% as well.

Despite the success of the Rikers Island intervention, it took nearly a decade for the application of the theory to be addressed in any depth. Although supportive of the approach, Wortley (2002) believed that as originally presented, rational choice theory failed to accurately address the unique problems presented by the prison environment. According to Wortley, a model that concentrated crime prevention efforts solely on increasing the perceived costs and reducing the perceived benefits associated with any given behavior ignored the contribution that some environmental factors made on actually instigating behavior. He called these instigating factors "situational precipitators" (p. 56) and suggested

that an effective rational choice prison model needed to develop strategies to address them just as it had developed strategies to address the perceived costs and benefits to behavior.

To demonstrate the usefulness of this expanded rational choice model, Wortley and Summers (2005) presented the results of interventions instituted at a correctional facility located in the United Kingdom. Although the authors pointed out that the interventions were not consciously designed to address the theoretical concepts of rational choice theory at the time of implementation, they nonetheless served as "a problem-solving, behavior-specific" (p. 87) approach consistent with the newly hypothesized two-phase model. The research detailed the efforts made by the staff at Glen Parva prison in England to address several of the behavioral problems that had become apparent through facility inspections. The facility housed youthful offenders between the ages of 18 and 21, many of whom reported not feeling safe because of an excessive amount of bullying. The inspectors also commented on the loud and frequent shouting, often meant to be intimidating and threatening, coming from cell windows. The administration made detailed attempts to identify the causes of the problematic behavior and possible solutions that could be implemented. In the months that followed, the administration saw meaningful decreases in the amount of bullying and shouting from cell windows, which they attributed to the situational interventions implemented by the staff.

However, Wortley and Summers (2005) recognized the limitations of this study. The interventions initiated by the staff were done without any concern for the standards of social science research, and to complicate interpretation of the results, numerous interventions were introduced at the same time, making it difficult to associate changes in behavior to any one

initiative. Despite these difficulties, Wortley and Summers suggested that this research validated the usefulness of the modified rational choice model of prison control.

Although limited in number, the successes demonstrated by each of these studies (La Vigne, 1994; Wortley & Summers, 2005) were consistent with the ideas in the behavior-specific approach offered by rational choice theory. This behavior-specific approach, however, was the same factor that made a rational choice approach difficult to implement in some settings. When considering the practicality of its application to jails across the United States one must keep in mind that the overwhelming majority of jails are considered moderate to small in size, meaning they house fewer than 500 inmates. With so few inmates, the likelihood that one specific type of behavior will dominate an institution's pattern of misconduct is remote. That is not to suggest that it cannot happen, as was the case in Rikers Island, but merely suggests that in many facilities the control of general types of disorder is more important than the control of one specific behavior.

Developing a Place Management Approach

The advantage of a place management approach lies in the distinctions between routine activity, its founding theory, and rational choice theory. Although often discussed as complementary theories, rational choice requires a finer distinction between crimes within a given category and produces interventions that are specific to a given crime. Routine activity, on the other hand, is more place-specific and recognizes that different types of crimes may occur in the same location. The resulting interventions are designed to control a broader array of behaviors that happen to occupy the same space (Clarke & Felson, 1993). This is particularly important given what has been discussed about the lack of crime-specific

behavior in many American jails. In addition, the lack of free movement and restrictive nature of the custodial environment significantly limit the amount of places where misconduct can occur, resulting in a small number of concentrated locations. In a study of four New York state prisons, Atlas (1983) found that regardless of the type of institutional infraction, each was most highly concentrated in inmate housing units, creating a behaviorally diverse environment.

Regardless of the way a jail attempts to separate, segregate, and house inmates, the daily admission and discharge of a large number of inmates along with a limited number of housing options creates a situation where strong and weak inmates will, at various times, be placed in close proximity to one another. The advantage of a place management approach in this situation is that effective managers allow offenders and targets to occupy the same location without incident or they serve to keep potential offenders out of a given location (Sherman, 1995). Those two concepts serve as the basis for the interventions presented in this study.

The Theoretical Foundation of Place Management

Place management was a product of the development of routine activity theory. As originally presented, routine activity theory (Cohen & Felson, 1979) suggested that crime occurred when three elements came together in the same space and time: 1) a motivated offender, 2) a suitable target, and 3) lack of capable guardianship. The only controlling factor in the criminal event was the guardian, who was seen as having influence over the target of crime. The original theory was considered a micro-level theory because the point of emphasis was the actual criminal event. As such the unit of analysis was small, usually confined to

actors, spaces, or moments in time (Eck, 1995a). The potential influence a place had on the criminal event was not a focus or active element of the original theory, rather it was simply a point at which the three elements happened to converge (Eck & Wartell, 1999). A second controlling element was subsequently added to the theory (Felson, 1986) which suggested that an intimate handler, someone closely bonded to the potential offender, could prevent an individual from committing a crime. Felson (1987) later suggested that the place where crime occurred could be a key element in the prevention of crime given the dominance private spaces were beginning to exert in everyday life. Although he suggested that privately operated and managed facilities could become the most important organizational tool in the prevention of crime he fell short of integrating the concept into the theory.

Eck (1994) was the first to formally theorize the importance of the place in which crime occurred as a controlling mechanism. In his geographic analysis of illicit drug markets he determined that drug dealers looked for neighborhoods that were poorly managed. When residents were attentive to their surroundings they could actually prevent dealers from establishing markets in their general location. He called those neighborhood controllers *place managers* and suggested that how a place was managed could actually influence the type of behavior that occurred in that location. Felson (1995) would later comment that with the emergence of additional crime-controlling factors, routine activity theory now suggested that the level of criminal opportunity was at its lowest when targets were supervised by guardians, offenders were supervised by handlers, and places were supervised by managers.

The recognition of the importance places played in the control of behavior allowed the theory

to be applied in a more macro-level manner, explaining behavior in much larger geographic and social terms.

Despite being introduced well over a decade ago, very little empirical evidence exists to clearly define how and under what conditions place management influences behavior. In one of the most extensive reviews of situational crime prevention methods to date, Welsh and Farrington (2009) attempted to evaluate the effectiveness of a broad range of interventions, one of which was place management. To be given consideration, studies had to contain at least simple before-and-after measures of crime in both experimental and comparable control conditions with some attempt to statistically control for extraneous variables. Given these requirements, only two studies met the criteria for inclusion, both of which were conducted before the concept of place management was introduced. Welsh and Farrington (2009) concluded that the effectiveness with which place managers influence crime remained unknown.

In another recent evaluation of crime-prevention research, Guerette (2009) used a less stringent standard for inclusion, eventually drawing results from 206 studies. The major distinction between the two reviews was that the latter did not require some type of comparable control. Of the 206 studies considered only 15, or 8%, addressed the concept of place management, and although the specific results were not discussed the conclusion was similar: little was known about the effectiveness of place managers.

Recognizing the limitations of the current body of place management research,

Madensen (2007) attempted to provide a greater level of detail as to exactly how place

management activities impacted crime. She thought it was necessary to more clearly describe

the process of place management and more clearly define the behavior of place managers to determine which actions were likely to increase or decrease criminal activity. The current body of research lacked specificity because place management had been used as an umbrella term to describe the activities of those who owned or managed properties without concern for the specific elements that served to effectively discourage crime. Her goal was to establish particular operational elements that, when used as a decision-making framework, would effectively control behavior at a given location. This approach was necessary given the recognition that place managers existed in almost every environment in which crime occurred. Without identifying specific activities or management practices that served to reduce crime it was not possible to compare the potential impact place management initiatives had across facility type.

In order to develop a more detailed theory of place management, Madensen (2007) suggested that it was necessary to understand how the structure of criminal opportunity was influenced by the management style of any facility. She suggested that place managers could inadvertently increase criminal opportunity in three ways: 1) by increasing the number of targets at a given location, 2) by creating environments that specifically attract offenders, and 3) by failing to establish or enforce rules of conduct (p.17). It was the final factor that was most relevant to a corrections setting, and in designing the interventions for the current study specific attention was given to eliminating that specific contributing factor.

Using bars in the city of Cincinnati as her study focus, Madensen (2007) used data collected from surveys of place managers, site observations, and police incident data to identify the elements or mechanisms through which *effective place management* was

conveyed. She did not specifically test the theoretical elements proposed; rather the data collected were used to demonstrate a correlation between her suggested concepts and the rate at which crime occurred in certain establishments. She was clear to point out that the development of an *effective place management* system was a dynamic process that occurred over time and the nature of the cross-sectional data in her study did not allow for such a dynamic process to be properly tested (p. 51).

In her evaluation of the data she concluded that *effective place management* was a function of four operational elements:

- Organization of physical space the organization and design of the physical space and structure, including location, construction, repair, and upkeep;
- Regulation of conduct the promotion and prohibition of activities, including
 activities that are sought after and those that are undesirable;
- Control of access the inclusion and exclusion of people; and
- Acquisition of resources the acquisition of money and resources that can be used to carry out the first three elements (p. 19).

It was suggested that this approach successfully influenced the development of *effective* place management for three primary reasons: 1) crime prevention was embedded in existing organizational activities rather than having them separated into distinctive practices, 2) the diversity and unique purpose of different places was recognized, and 3) crime prevention techniques were highly place-specific (p. 19). The final two reasons made the broad definition of the operational elements essential in its application across facility type and allowed each to be adapted to the specific nature of the facility involved in this study.

Although Madensen's (2007) research advanced what was known about place management and attempted to fill a conceptual void by identifying the exact manner in which place managers influenced behavior, it did not provide empirical evidence on the issue. The research presented herein attempts to further Madensen's theoretical concepts by providing the first empirical test of the elements of *effective place management* in an institutional setting: using the elements as a framework, place-specific interventions are studied to determine whether or not enhanced place management decreases the amount of inmate disorder.

The Case for a Situational/Social Model

In addition to testing the elements of *effective place management* proposed by Madensen, this research also attempted to determine if the concepts could be improved upon by expanding the model to include a social component, creating the blended approach suggested by Bottoms, Hay, and Sparks (1995). Although situational in nature, relying on place managers to reduce criminal opportunity depended, to some degree, on the quality of the social interactions between the officers and inmates. The social relationship between the place manager and client was seen as critical in setting and establishing positive expectations of behavior. Madensen (2007) suggested that in order to effectively regulate behavior a place manager must manipulate both the physical and social characteristics of the environment. Further, she noted that the effectiveness of a place management design could be limited if the place manager and client did not have extended contact because it limited the place managers' ability to identify, diffuse, and respond to negative behavior. This opinion makes

place management a well-defined example of a blended, situational/social approach to the control of inmate behavior.

The potential benefits of a combined situational/social model were proposed as a result of the research conducted by Sparks, Bottoms, and Hay (1996) that involved two long-term prison facilities in England (Albany and Long Larin). Each operated under different management philosophies: one (Albany) took what the authors described as a situational approach to managing inmate behavior, while the other (Long Larin) chose a more traditional, social approach. In evaluating the two institutions, the purpose of their research was not to identify which of the approaches was most effective, but rather to describe and explain the nature of control problems that existed at each facility.

Long Larin, which chose to run a social model of behavior control, did so by concentrating on the social structure of the organization, attempting to create an environment that was characterized by inmate self-determination. Inmates were given greater freedom of movement, often unescorted, than at other facilities and were allowed a greater voice in the structure of living conditions. Although successful at reducing violent misconduct and misconduct between staff and inmates, the institution experienced increased levels of some forms of minor misconduct and the heightened exposure of some inmates to the risk of victimization. The researchers noted that the liberal regime was confronted by allegations that the staff were inattentive to supervision and that there were some areas of the institution that were "no-go" areas for staff. This perceived lack of supervision and the increased inmate autonomy created opportunities for trouble and victimization that were not found in other facilities. It was suggested that these conditions could have resulted from the fact that the

social approach employed at this facility was not as concerned with crime prevention as it was with avoiding major forms of disorder.

Albany, the other prison involved in the study, chose to operate under what was considered a situational model. The preferred method of behavior control was to limit inmate movement, limit inmate contact, and increase staff surveillance. Although the prison had success at reducing certain types of behavior, it experienced higher rates of violent incidents than did the other similar facilities. The researchers noted that the outcome of sacrificing quality-of-life issues for the sake of security and control, as some situational methods did, was to stimulate frustration and anger. The over-control exerted in this facility created extra conflicts and antagonism among the population because the inmates knew that some of the behaviors that were being punished in this facility would be disregarded in others. The end result of the restricted environment may have been to produce some of the behaviors it was designed to prevent.

Bottoms, Hay, and Sparks (1995) noted that the problem with the individual approaches to the control of behavior was that supporters of situational methods ignored the role social interaction played in the control of behavior, and supporters of social methods ignored the role that environment played. They suggested that what was needed was an approached that blended the advantages of both methods into a single, combined model. Byrne and Hummer (2008) supported this contention by suggesting that if the social nature of the institution was not addressed, situational strategies would not be effective. They suggested that changes to the social nature of the environment may actually have an indirect effect on situational strategies, increasing the likelihood of success.

More than a decade after their original research, Sparks and Bottoms (2008) commented that the one element or aspect of social reform that would benefit situational methods was the concept of legitimacy. Originally introduced through research commissioned by the British government, legitimacy, or the lack thereof, was found to be an important issue in a number of disturbances that occurred in England in 1990 (Sparks et al., 1996). Legitimacy, as it related to the concept of order, was first defined as the degree to which the inmate population sees the exercise of power as justified. A number of researchers had suggested that the more justified the inmates believed the exercise of power to be, the more likely it was that they would comply with organizational expectations (Liebling, 2004; Sparks & Bottoms, 2008; Sparks et al., 1996).

The concept of legitimacy was largely attributed to the development of a structure that was characterized by fairness and consistency (Liebling, 2004; Sparks & Bottoms, 2008). Liebling (2004) attempted to measure the importance of fairness through her research at five local prisons in England. She found that the strongest predictor of order at the facilities was the perceived level of fairness. Prisons that had lower scores of perceived fairness had higher levels of disorder. As a result, she concluded that fairness and order were mutually exclusive concepts and were both dependent, to some degree, on social relationships.

In building support for her belief in the importance of social relationships, Liebling (2004) noted that in institutions where staff/prisoner relationships were distant and uncomfortable written sanctions were the most common response to inmate behavior.

Similarly, Sparks, Bottoms, and Hay (1996) also commented on the importance of social

relationships in the establishment of the perception of legitimacy. In their study, the prison at Albany, which operated under a more situational philosophy, managed to limit some types of disorder because of the strong staff/prisoner relationships developed by some of the officers. This limiting effect existed despite the fact that the inmates at Albany viewed the regime as deliberately and personally punitive. Sparks and Bottoms (2008) viewed the issue of fairness as so critical that they suggested that it was the most important factor in determining whether or not prisoners see the exercise of authority as legitimate.

The other commonly cited element in the development of legitimacy was consistency. In reviewing the conclusions drawn from the 1990 disturbances at several prisons in England, Sparks, Bottoms, and Hay (1996) noted that it was not only the perceived level of fairness that determined the degree to which inmates complied with institutional expectations, it was also the perceived degree of consistency by which the standards were enforced. They suggested that unpredictability in decision-making could be seen as a measure of dominance and lead to the perception of illegitimacy. This may arise because inconsistency in staff behavior could be seen as a failure of the institution to carry out the functions of justice.

Research evaluating other components or agencies within the criminal justice system had also suggested the importance of legitimacy in the expression of authority. In his study of police legitimacy, Tyler (2004) noted that the perception of fairness played a key role in the community's response to police authority. He suggested that people were more willing to accept the expression of authority if it was viewed as being fairly exercised, even if the outcome was not favorable to those involved. Similarly to the manner in which Sparks, Bottoms, and Hay (1996) noted the importance of the consistent application of standards in

the development of the perception of legitimacy in correctional settings, Tyler (2004) suggested that the perception of police legitimacy was influenced by the degree to which people viewed the department's producers as fair. He called this concept procedural justice (p. 91) and suggested that some believed police legitimacy depended on whether or not it existed.

Recognizing the advantages of both situational and social interventions, this research was able to test the effectiveness of a combined model by assessing the perceived importance of the concepts surrounding legitimacy. Place management was the ideal situational model with which to combine the concept of legitimacy because it recognized the importance of the social interaction between the manager and client. Madensen (2007) clearly articulated that the effectiveness of a place management intervention could be limited if the manager did not understand the value of social interaction and if the social interaction was limited.

Gender-responsive Supervision

Although females in the community engage in criminal conduct less often than their male counterparts, in institutional settings female inmates commit institutional infractions at surprisingly higher rates than male inmates (McClellan, 1994; Pollock, 1986; Tischler & Marquart, 1989). Although much of the research suggested that the type of disorder they become involved in was less serious than that committed by male inmates (Tischler & Marquart, 1989), some evidence pointed to the fact that they could display higher rates of aggressive behavior as well (Pollock, 1986; Tischler & Marquart, 1989).

In discussing research findings with respect to female misconduct, it should be noted that there were a more limited number of studies from which to draw conclusions than there

were for male inmates; and in a manner similar to the research on male misconduct, all of the studies presented in this chapter evaluated behavior that occurred in large, state correctional systems. Two of the more extensive quantitative studies of female misconduct originated from data collected at the Texas Department of Corrections (TDC). McClellan (1994) compared male and female rates of misconduct from samples drawn over a one-year period at two male and two female TDC facilities, concluding that female inmates received greater numbers of infractions than did male inmates. Only 9.8% of female inmates received no misconduct citations during the study period while 43% of male inmates received no citations. When increasing the benchmark to one or fewer misconduct citations, there were still only 17% of the female population that fell into that category as compared to 63.5% of male inmates. In evaluating how many citations the average misconduct-prone inmate received, McClellan reported that the average number of citations accumulated by female inmates was 15.1 per inmate as compared to 2.1 citations for the males. Nearly 30% of the female population received more than 21 citations while only 2% of the male population exceeded that same level.

In the second TDC study, Tischler and Marquart (1989) tracked the number of misconduct hearings completed at two male and two female institutions over a four-year period. They separated the data according to inmate custody level, comparing the number of infractions committed by minimum custody male and female inmates and maximum custody male and female inmates. Their findings revealed no discernible difference in the rate of infraction among male and female minimum custody inmates over the four-year period. With respect to maximum custody inmates, however, the results demonstrated that female inmates

received a significantly higher number of institutional infractions each year than their male counterparts. In three of the four years the rate of misconduct for female, maximum custody inmates was twice as high as it was for males, and in one year it was nearly four times as high.

In both of the TDC studies the authors analyzed misconduct by offense type as well. McClellan (1994) found that women committed a greater number of less serious violations than did men. Separated into three levels (1-3), with 3 being the least serious, 43% of female misconducts were categorized as level 3, while only 11% of male misconduct was classified at that same level. An interesting finding in this one-year study was that both male and female inmates received similar rates of level 1 infractions: 4% for women and 3% for men. Of those infractions, the majority of female violence was directed toward an officer, which was not the case with male inmates. The lengthier four-year study conducted by Tischler and Marquart (1989) had somewhat similar findings in that the majority of institutional misconduct for both males and females was for less serious level 2 and level 3 infractions. Unlike McClellan's study, however, the rates of misconduct by level were not statistically different for males and females. Interestingly, when evaluating instances of inmate-on-staff assault, the differences between genders was only significant for minimum custody inmates, with females committing a significantly higher number of assaults than males.

Regardless of the type of misconduct being committed, the evidence suggested that the amount of disruptive behavior engaged in by incarcerated women far exceeded that of women in the community. The disparity of behavior seen among men and women in the community seemed to disappear once the setting was changed. There have been a number of

explanations that have been offered to explain this change in pattern. McClellan (1994) noted that the female prisoners in her study were subject to a much different style of supervision than were male inmates. There were more rules placed on female inmates and the style of supervision was less forgiving. Behavior in the female facilities was responded to quickly by citation, where the officers in the male facilities often tried to resolve inmate conflict before issuing a citation. Britton (2003) made a similar observation through her research, noting that the disparity in the rates of misconduct was complicated by the fact that females were supervised more closely and subject to more rules than were male inmates. She called this more stringent form of supervision "hypersurveillance" (p. 158).

The more stringent style of supervision noted by McClellan (1994) and Britton (2003) may result from the fact that officers hold different expectations and opinions of female inmates than they do of male inmates. Through their extensive research on officer perceptions, both Pollock (1986) and Britton (2003) reported that female inmates were seen by officers as more difficult to manage and the vast majority of officers, nearly 75%, would prefer to work with male inmates. Pollock (1986) reported that 89% of officers interviewed reported that they viewed female inmates as being more emotional than male inmates. The problem with emotionality was that the officers thought that it was a quality that could easily translate into hostility toward the officer. In response to questions about their behavior, 85% of officers reported that female inmates acted out more frequently than male inmates and that they were more likely to have tantrums or outbursts in which the officer was the target of verbal abuse. Also, 64% said female inmates were less predictable than male inmates and 77% said they were less compliant. The conclusion drawn by Pollock from the opinions

expressed by the officers was that the negative opinions and expectations held for female inmates influenced the type of treatment and/or leniency they received when it came to disruptive behavior. Not surprisingly, nearly 75% of officers reported that there could be situations in which they would treat female inmates differently than male inmates.

Britton (2003) also studied the attitudes and perceptions of prison officers, noting a number of similar findings. She commented that a number of officers thought the female inmates were excessively emotional and more prone to irrational outbursts than men.

Violence among women was more often attributed to their emotional nature than it was with men. Officers also thought that female inmates were more manipulative and less compliant, with 66% of the female officers in the study stating that female inmates were less likely to comply with an officer's directives and were less likely to accept a negative answer. The perceived questioning of authority frustrated many of the officers and it was not hard to imagine how this frustration could result in harsher treatment for female inmates.

One of the problems associated with this notion of "hypersurveillance" was that it could contribute to the increased number of female misconducts and the resulting negative perception held by officers. Britton (2003) suggested that the differences in supervision tended to turn relatively minor behavior into instances of major misconduct. Similarly, Pollock (1986) commented that a more the more formalistic style of supervision used against female inmates could actually exacerbate rather than diffuse potential conflicts.

Different styles of supervision could also prove problematic based on the nature of the environment. The officers and administrators who suggested that different styles of supervision were required came from single-gender state facilities. Although an officer could

learn a different style of supervision when moved between facilities, expecting officers within facilities to utilize or practice different styles of supervision is simply not practical. The majority of jails are not large enough to have separate male and female facilities and the officers who supervise female inmates also supervise male inmates. It is not reasonable from an operational perspective for an officer to be expected to practice one style of supervision and then employ a different style the next day based on a change in post assignment.

Arguably, jails would not benefit from different styles of supervision even if the evidence suggested that it was the most effective means at controlling behavior.

This study specifically tested the belief that female inmates require a different style of supervision by applying a supervision concept that was designed absent of any consideration for gender. The interventions were intended to be implemented system-wide and were proactive in nature, meaning the goal was to prevent negative behavior from occurring. The systems Britton (2003) and Pollock (1986) called hypersurveillance or formalistic were reactive in nature, which suggested that officers were not expected to prevent negative behavior but were simply expected to respond to it once it occurred. Viewed from a situational perspective, the high rates of misconduct for male and female inmates suggested that the opportunity for disruptive behavior to occur was similar for both genders. Knowing that the physical environment in which the inmates live is similar, developing an intervention based on the nature of the environment rather than the gender of the offender would seem to be a logical crime prevention approach.

Conclusion

In summary, the literature review identified a number of different themes that were important in considering the appropriateness of the designed interventions. As a number of researchers noted, correctional environments were well suited for situational interventions (Rosenbaum et al., 1998; Wortley, 2002, 2003) and despite the fact that few had been attempted, those that had demonstrated success at reducing problematic behavior (La Vigne, 1994; Wortley & Summers, 2005). Although a place management approach had not been documented in the research, the approach has value given that it is more place-specific than offense-specific (Clarke & Felson, 1993). That is an important fact considering the majority of misconduct, covering a wide array of behaviors, occurs in inmate housing units (Atlas, 1983).

The identification of the operational elements of *effective place management* meant that the interventions could be designed with a defined structure in mind. Additionally, the broad nature of the elements was well suited for adaptation to any environment, even one as operationally diverse as a jail. Madensen (2007) also pointed out that a place management approach was most effective when managers understood the value of social interaction and had extended contact with clients. This recognition might offer the opportunity to expand her model and the concept of the legitimacy of authority. The addition of this social concept might offer the ability to better control behavior as suggested by some (Sparks et al., 1996).

Finally, available research demonstrated that female inmates were written up for institutional infractions as often, if not more often, than male inmates. The supervision they received, whether intentional or unintentional, necessary or discriminatory, was different

than that given male inmates. In all, the research established an interesting backdrop for the implementation of the interventions under study in the present research.

CHAPTER 3: RESEARCH SETTING

The jail in which this study took place is located in Northampton County, Pennsylvania. All of the jails in the state were run by county governments and were not under the control of the locally elected Sheriff, as was the case in many parts of the country. The Pennsylvania jail system was unique at the time the study took place because an inmate could serve a sentence of up to five years in the county jail as compared to the majority of states in which an inmate could only serve a sentence of up to one year. The effect of that difference could be witnessed most prominently in an inmate's average length of stay. Most jails in the United States post average lengths of stay in the range of 8 to 20 days, while Northampton County posted average lengths of stay during the study period of 72 to 84 days. Another unique feature of the Pennsylvania jail system was that each of the county-operated facilities carried the title of "prison" rather than jail. Despite the unique nature of the Pennsylvania system and the traditional designation of local confinement and detention facilities as prisons they fit the definition of jails. To respect both the tradition of the facility and the purpose of the research study, either the terms jail or prison may be used to describe the facility wherever appropriate.

Architectural Design

Northampton County operated a jail that had three distinctive architectural styles. The oldest parts of the jail, built in 1871 and 1920, were constructed in a linear design. Linear-style designs are often called "first-generation designs", and are characterized by long rows or hallways in which cells line one or both sides of the space (Zupan, 1991). In both the 1871 and 1920 designs, housing units were stacked one upon another, which was typical

of the construction for the era. On each of the linear units the officer was positioned in a manner that prevented easy and continual observation of the inmate population. Officers must enter the units and walk the long halls in order to physically observe each inmate.

Subsequent additions, one built in 1984 and one in 2006, added two additional architectural designs: podular-remote and podular-direct. Podular-remote, often referred to as "second-generation designs", houses inmates in large, square or rectangular housing units in which cells line the outside walls of the space. The space not used by cells is called a dayroom. Typically, inmates have access to the dayroom for large portions of the day and experience much more limited cell confinement than is experienced in linear designs. The officer is placed in a central control room that is separated from the inmate living and congregation areas (Zupan, 1991). In many instances the control room looks out over multiple housing units and was the case in Northampton County. The final architectural style, podular-direct, has only become popular since the early 1970's and is often called "newgeneration" or "third-generation" design (Zupan, 1991). The only significant difference between it and podular-remote is that the officer is no longer confined to a central control room and is now placed in continual, direct contact with the inmates, meaning that his or her workstation is inside of the housing unit.

Staff Supervision

Although the term "supervision" is used in every correctional facility in the United States, it has no universally recognized definition. Some practitioners use the term to refer to the number of officers assigned to monitor a housing unit or units while others use it to describe the style of officer contact. Since this study was designed to enhance the level of

officer supervision it is important to understand that the term is used throughout this study as a description of the style of officer contact. The styles of supervision referred to during the course of this research project were either passive or active. Passive supervision refers to the practice of observing inmates and reacting to their behavior. It involves limited interaction with the inmate population and places little emphasis on preventing negative behavior before it occurs. It is similar to the behavior displayed by a police officer patrolling a district in his police vehicle. He or she observes behavior while having limited interaction with the constituency and has limited ability to prevent behavior from occurring.

Active supervision, on the other hand, is a system where continual interaction between an officer the inmate population is desired. Continual interaction is different than continual contact, as many officers who work in podular-direct facilities have continual contact but choose to limit their interaction by remaining firmly entrenched behind a desk or podium. Active supervision requires the officer to manage the unit by continually interacting with the inmate population, by moving among them, by getting to know who they are and how they are likely to behave, and by trying to predict, prevent, and manage negative behavior. In facilities where officers and inmates have limited contact, the style of supervision is most often considered passive, largely because the officers and inmates have such limited interaction with one another. In a linear design, as is the case with most of Northampton County's housing units, officers make rounds through the units once or twice an hour and react to issues raised by the inmate population. A round could take anywhere between 3 to 15 minutes, meaning that the inmates are left unsupervised for the majority of the day.

In the move to direct supervision, many facilities teach their officers new supervision strategies in an attempt to promote a supervision style that is considered active rather than passive. Being in continual contact with inmates is not natural to many officers and requires a different set of skills in order to be successful. When the direct-supervision housing units opened in Northampton County in 1984, the administrative staff decided not to train the officers in a new supervision style and chose to allow them to supervise the units as they deemed appropriate. As a result, the style of supervision practiced in Northampton County, regardless of the mix in unit design, was considered passive.

Officer Post Assignment

Northampton County operated under what could be considered a permanent postrotation system. In the corrections profession there are three basic post-assignment patterns.

The first style of officer assignment is called "continual rotation", in which an officer is
assigned a different work post every day. The second style of officer assignment is called a
"periodic rotation". In it, an officer is assigned to a given post for a brief period of time,
ranging anywhere from one week to 90 days. The final style of assignment, and the one
operated by Northampton County, is called a "permanent post" rotation. In this system an
officer bids on a given post, and once assigned, may work that post for a period of months or
years until he or she is removed or requests another assignment.

On each shift a primary- and secondary-post position was identified by officials in Northampton County. The primary-post officer was assigned to the same position (in this case a housing unit) until he or she requested another post assignment, was promoted, received a specialized assignment, or changed shifts. If the primary-post officer was not

working on a given day the secondary-post officer was assigned to that position. This style of supervision was intended to build some level of consistency in the delivery of services. It allowed for the officer to become familiar with the operational practices of the post and the inmates assigned to the housing unit.

As a result of this post rotation system, the officers who worked the housing units involved in the study did so consistently. In addition to the post rotation system, posts were assigned based on gender concerns as well. Although any officer could be assigned to work any post, some attempt was made to have female inmates supervised by female officers. During the study periods, none of the male and female officers who were assigned as primary or secondary officers for one of the units worked another in the same capacity. All of the female officers involved in this study worked only on the female housing unit.

Inmate Classification System

Northampton County placed inmates in different housing units using what is considered a risk-based, objective classification system. Upon admission to the facility each inmate was assigned a classification designation determined by the use of an objective classification instrument. Although a variety of classification tools exist, Northampton County used what is referred to as a point-additive instrument. Offenders were given a numerical score based on their standing relative to seven measureable areas: the severity of the current offense, the severity of the offender's prior conviction record, the offender's escape history, the severity of an offender's prior institutional conduct, the number of prior felony convictions, the severity of the offender's drug and alcohol history, and three demographic features (age, residency, and employment status). Based on the inmate's

additive score, he or she was classified as minimum, medium, or maximum custody. Housing was assigned based on one's designation, with minimum, medium, and maximum custody inmates being housed separately from one another.

The only exception to that practice was in the housing of female inmates. During the initial stages of the study, only one housing unit existed for women, requiring the administration to house all three custody levels in the same block. Within that housing unit, however, the different custody assignments were separated by cell and were given use of the common dayroom at different times. In June of 2006, the females were moved into a different housing unit that allowed for greater separation. The new unit was divided into two halves, with one-half housing only minimum custody inmates and the other housing the remainder of the female population.

There is research that details the impact risk-based classification systems have on reducing inmate misconduct (Austin, 1993; Austin, Baird, & Neuenfeldt, 1993). Many facilities that had implemented risk-based classification systems saw decreases in both violent and disruptive inmate behavior (Austin et al., 1993; Champion, 1994). Although this research was not designed to measure the impact classification had on behavior, the impact needed to be held in the proper context. Northampton County implemented a risk-based classification system in March of 2001, which could influence the results to some degree. The period for which data were collected did overlap the implementation of the classification system, with at least 12 months' worth of data being provided prior to the implementation of a classification system. However, a significant number of post-classification measurement points existed, which allowed for the impact of classification to be identified and assessed.

Intervention Housing Units

Four housing units were studied during this research project: three served as treatment units, where the place management changes were introduced, and one served as the control unit where no operational changes were made. It should be noted that one intervention occurred before Madensen (2007) published the results of her research, which formally introduced the elements of *effective place management* for the first time. Despite that fact, the 2004 intervention (described later) was included in the study along with the subsequent post-publication interventions, because even though the initial intervention was completed prior to the presentation of the place management concepts, both it and the subsequent interventions were identically designed and served to test the same operational elements. Given the fact that these concepts had never been empirically tested, there would be value in examining the results of both interventions for research purposes.

The first intervention was introduced on E-Tier in September of 2004 and concluded the end of May 2006 with the opening of a new housing wing and the transfer of the inmates and officers. A detailed summary of all of the housing units involved in the study is provided in Table 6 (p.73). The discontinuation of the first intervention occurred for a number of reasons. First, the inmates who occupied the unit involved in the intervention were moved to a larger unit and the officers assigned to that particular unit were not trained in the place management techniques. In addition, members of the administrative team commented that the facility became so overcrowded after June of 2006 that the mindset of the administrative staff changed. They moved from a system that was intent on managing behavior to one in which the emphasis was purely on warehousing large numbers of inmates. The

administrative staff realized the problems associated with this warehouse approach and eventually decided to reinstitute the place management intervention because it was thought that inmate behavior had deteriorated to the point of significant concern.

The two other treatment units were part of the intervention that began in November 2009. One was a 96-bed, medium custody male unit (B-2) and the other was a 70-bed, female unit (A-2). Adding the female inmates was challenging because they had been housed in multiple units during the period of the study. From January of 2000 until May of 2006 they were housed in one podular-direct housing unit containing both dormitory space and individual cells; with minimum custody inmates occupying the dormitory space and all other types and classifications of inmates occupying the cells. In June of 2006 they were moved to a 70-bed podular-direct unit in the newly constructed wing. That unit was divided into two living units separated by a partition, creating two distinctive halves to the unit (A-2 East and A-2 West). Despite these changes, the amount of female misconduct was aggregated as one measure of misconduct for the purposes of this study, and the references to unit A-2 included misconduct that occurred on both units. Although there was some concern that changes in housing could have influenced behavior, making the causal link between the current intervention and any observed changes more difficult, there were enough data to model the effect each event had on behavior.

Unit B-2 was a 96-bed, podular-direct housing unit holding medium custody, male inmates that was opened in June of 2006. It was evaluated as part of the most current intervention. Since the inmates who first occupied the unit came from a number of other

housing units scattered throughout the institution it was not possible to track their behavior prior to the opening of the unit.

The control unit for the study, G-Tier, was a medium custody, male unit, built in a linear-style housing design. The lack of a dayroom required the inmates to be confined to their cells for the entire day unless they had a specific reason to be off the unit. Inmates living on this unit were not subject to any of the changes in the style of supervision that the inmates on the treatment units experienced, nor were the officers who worked the unit afforded place management training.

CHAPTER 4: INTERVENTION COMPONENTS

This research evaluated the results of interventions that occurred at two different periods in Northampton County. In total, four housing units were involved in the study; three that served as treatment units where the interventions occurred, and one that served as a control unit, where no operational changes were introduced. The first intervention period involved one housing unit (E-Tier) where the operational changes were introduced in September of 2004 and concluded in May of 2006. The second intervention period, which involved the introduction of operational changes in two additional housing units, began in November of 2009 and continued throughout the study period. The fourth unit involved in the study served as a control group and was used as such for both intervention periods.

The interventions evaluated in this study were designed around the belief that *effective place management* was a skill that could be taught. Eck (1995b) suggested that if place managers were ignorant to the importance of their role in crime prevention, then training them to recognize the relationship between management practices and illicit behavior could be an effective way to reduce certain types of problems. With the development of Madensen's (2007) operational elements (organization of the physical space, regulation of conduct, control of access, and acquisition of resources) it was possible to develop training curricula that allowed the concepts to be adapted to a corrections environment. Prior to the introduction of the interventions being studied, the jail administration believed that the officers assigned the responsibility of supervising the housing units took a passive approach to their work and were generally ineffective at managing inmate behavior. The intent of the training and subsequent operational changes

was to create more effective place managers by enhancing the knowledge and skills of the corrections officers and by making the control of behavior their primary objective.

Officials in Northampton County sought to build interventions that centered on the identified elements in the passive system of supervision that contributed to poor place management. The administration thought that a lack of a sense of ownership, limited involvement on housing units, and a poor sense of awareness about preventive approaches were issues that had to be addressed in order to build a more effective system of supervision. The issues of ownership, involvement, and attentiveness were also ones that were identified in empirical research as being important for the development of place management in community settings (Eck, 1994; Felson, 1995; Mazerolle et al., 1998).

As a result, training curricula were created that attempted to develop a greater sense of ownership among housing unit officers, have them more actively involved in multiple aspects of the housing unit operation, develop a greater sense of *place* or *space* awareness, and foster the belief that the control and regulation of behavior was an officer's primary function. Once the role of the officer was redefined, the administration had to determine how they could most effectively implement and support the changes. In an interesting turn of events, the administration identified the same operational elements or mechanisms that were later presented by Madensen's research. Table 1 outlines how each of Madensen's elements was modified and operationalized in the interventions studied and is followed by a more detailed explanation of the development of each element.

Table 1 Identification of Place Management Elements

Element	Operationalization for Interventions under Study
Organization of physical space	Assign responsibility for organization, repair, and upkeep of housing unit to the officer
Regulation of conduct	 Establish acceptable standards of conduct for the inmates Set and convey acceptable standards to the inmates Enforce established standards
Control of access	Identify who is permitted to stay and who must be removed from the housing unit
Acquisition of resources	De-centralize the supply and resource distribution system

Intervention Training Format

The distinctive interventions (one beginning in September of 2004 and one in November of 2009), although designed around the same place management elements, were presented in two different training formats. This was due to several factors, the first being that the training curricula were developed through the cooperative efforts of two different sets of employees. The changes in the administrative team were a result of employee turnover and the subsequent process of promotion. Another reason for the differences in training curricula was a result of the administration's commitment to turn this intervention into a facility-wide approach to inmate supervision. During the 2004-2006 intervention, the administration was not sure if this method of supervision was one that was going to be implemented in the facility as a whole, or whether it would remain a pilot program reserved for certain units. If the most recent interventions were successful at reducing inmate behavior the administration wanted to expose additional officers to the new method of supervision,

which required a different type of curriculum. In both instances the researcher assisted in the development of the training curricula.

Once the administration identified how the broad operational elements of *effective* place management could be adapted to the corrections environment, a 16-hour employee training was created and presented to the officers, administrators, and support staff assigned to each of the treatment units. As was the case in each instance, the officers were instructed in specific housing unit teams. Since the organization assigned posts according to a permanent rotation system, the primary and secondary officers from all three shifts received their training as a unit. This practice was intended to be the most efficient way to produce consistency in the operation of each unit.

Additionally, in each training session support staff and contracted service providers who provide services to the unit were also present. As an example, classification specialists, identified as non-security, civilian staff, were considered important participants in the training process because they were responsible for assigning inmates to each of the housing units. Since the role of the officer was being changed, the administration thought it necessary for the classification staff to understand how that role was being developed, how it was being supported by the administration, and how it might potentially influence their interaction on the housing unit. The last hour of the training was devoted to providing some type of instruction to the inmates. Since the proposed active system of supervision was very different from the existing style, the administration informed the inmates of the changes in order to establish a solid understanding of how the role of the officer would change.

Organization of the Physical Space

Madensen (2007) identified *organization of the physical space* as the first element of *effective place management* and defined it as follows: "the organization and design of the physical space and structure, including location, construction, repair, and upkeep" (p. 19). Table 2 summarizes the organizational changes that were made in an attempt to operationalize this element.

Table 2 Organization of Physical Space

Key Concepts	Changes in Operational System
Assign responsibility for the organization of the space to the officer	 Make the unit officer personally responsible for housing unit conditions Create a decentralized system of unit decision-making
Develop unit design that enhances supervision	 Remove the officer's desk Encourage flexibility in the placement of interior dayroom furnishings

The key concepts in adapting this element to an existing correctional setting were organization, and repair and upkeep of the housing unit. Historically in Northampton County, individual housing unit officers were not responsible for the organization of the interior furnishings and condition of the housing units to which they were assigned. The result of this lack of accountability was housing unit conditions that were considered less than acceptable by the administration. As a result, the administration decided to specifically assign the responsibility for the organization, repair, and upkeep of the housing unit to officers. One of the officer's primary job responsibilities in the place management approach was to ensure that the housing unit was well organized, clean, and in good repair.

In developing the training curricula for the interventions, the administration highlighted two issues that specifically dealt with this element. The first was the introduction of policy changes relative to the officer's level of responsibility on the housing unit, and the second was to emphasize the impact the housing unit design and layout had on the ability to effectively supervise inmates. With respect to the first point of emphasis, prior to the design of the interventions, an inmate worker was assigned to each housing unit and was given the responsibility of cleaning all common areas of the unit and reporting any unit damage to the assigned officer on a daily basis. In return for his work, the inmate was paid a monthly salary (between \$30 and \$60). The administration thought that this type of system placed more of the responsibility for the cleanliness and organization of the unit on the inmate worker than the officer. As a result, under the new organizational design the inmate worker system was replaced by one in which the officer was responsible for ensuring that all inmates participated in the maintenance and upkeep of the unit. It was the officer's responsibility to devise a system of shared inmate responsibility and to ensure that the system was carried through. It was believed that in order for the officer to take a stake in the condition of the unit he or she must be made personally responsible for it.

To allow the officer to take a more active role in the conditions of the unit, the administration allowed the officer to take on a greater level of responsibility outside of the unit as well. The old operational system was a centralized system in which one person was responsible for much of the materials, supplies, and decision-making authority that an officer needed to operate a housing unit. The policy changes instituted allowed the officer greater control of the factors that impacted their ability to comply with the requirements of this

element. They were now permitted to directly secure cleaning supplies, store material on site, and make decisions relative to how the tasks associated with the care and upkeep of the unit were accomplished. If an officer felt the need to hand out cleaning supplies he or she could do so freely from a supply that each housing unit was given. Prior to this intervention those materials were closely regulated and could not be accessed by the officer without administrative approval.

With respect to the second point of emphasis, one of the benefits of the design of each of the housing units was that none had furnishings that were permanently affixed to the floor. The officers were permitted to manipulate the layout of the furnishings in any manner they saw fit and for any purpose they thought appropriate. They were instructed that an active system of supervision required continual movement and interaction with the inmate population. The ability to redesign the layout of the unit was intended to allow the officer to create spaces wherein he or she felt comfortable, ultimately increasing the amount of interaction with the inmates. If, as an example, the officer was supervising a card tournament that involved a large number of inmates, he or she was be free to move the furnishings around on the unit to allow for ease of movement and more effective management of the event.

Regulation of Conduct

The second operational element identified by Madensen (2007) was *regulation of conduct*, which was defined as, "the promotion and prohibition of activities, including activities that are sought after and those that are undesirable" (p.19). Although easily adapted to the corrections environment, this element provided Northampton County perhaps the

greatest challenge because the passive system of supervision made little attempt to regulate behavior, largely because of limited contact between officers and inmates. This system was simply designed to react to and punish behavior once it occurred. Table 3 summarizes the organizational changes that were made in an attempt to operationalize this element.

Table 3 Regulation of Conduct

Key Concepts	Changes in Operational System
Develop an active approach to behavior control by increasing the officer's involvement in the unit	 Mandate officers collectively establish acceptable standards of inmate conduct Convey established standards of conduct through individual and unit briefings
Develop standards of consistent rule enforcement	 Establish a system of behavioral incentives and disincentives Incorporate positive and negative reinforcement techniques
Identify and respond to aggressive and inappropriate behavior	 Encourage officers to immediately identify and respond to aggressive behavior Encourage officers to immediately identify and respond to the needs of vulnerable inmates, changing cell assignments within individual housing units when necessary

In order to change to an active system of supervision in which the regulation of conduct was seen as a primary function, the administration trained its officers in four main areas: 1) identifying acceptable standards of conduct, 2) conveying those acceptable standards, 3) enforcing behavioral expectations, and 4) identifying and responding to aggressive or inappropriate behavior. With respect to the first point of emphasis, it was more difficult than one might imagine to actually identify acceptable standards of inmate behavior.

In the corrections profession acceptable standards of behavior vary based on the culture of the individual institution and the perceptions and attitudes of the officers, supervisors, and administrators. The research conducted by Hewitt, Poole, and Regoli (1984) illustrated this point distinctively. During their involvement with one state prison, officers were asked to identify the number of institutional infractions they saw inmates commit during a particular 90-day period and, even though the officers reported witnessing over 1,000 infractions, none of the inmates received a written misconduct report. The results suggested that some level of crime and disorder was acceptable in the context of the setting in which it occurred.

Notwithstanding these challenges, once acceptable standards of behavior were identified, the next step was to identify an effective method of conveying those expectations to the inmate population. In the passive system of supervision operated by Northampton County, the only method of conveying any set of behavioral expectations was through the distribution of the inmate handbook. The officers were not expected to discuss acceptable standards of conduct once the inmates were assigned to housing units or when changing from one unit to another.

In an attempt to redesign this practice, the training curricula instructed the officers in the value of inmate orientations and taught them exactly how to conduct both individual and group orientations. The individual orientations were to be done upon an inmate's assignment to the housing unit and were intended to clearly outline the behavioral expectations of the officer in advance of the inmate's assimilation into the housing unit. The group orientations were designed to address behavioral issues as they arose, inform inmates of changes to the operation of the unit, and to make regular communication between officer and inmates seem

a natural and expected part of institutional life. In conveying behavioral expectations officers were also instructed in the value of indirect conveyance, which was the belief that an officer's actions often spoke louder than his or her words. Officers were encouraged to model positive behavior and to act in a manner that promoted communication and built respect between an officer and an inmate.

The third element that the administration deemed important to impress upon corrections staff was the importance of enforcing behavioral expectations. In attempting to identify and define the concept of risky facilities, Eck, Clarke, and Guerette (2007) suggested that one of the common features of high-crime places was that they tended to have fewer rules and lax enforcement. Felson et al (1996) added to the importance of lax enforcement by noting that when inaction persisted over time the behavior of those occupying the space became more difficult to change. Northampton County administrators agreed with these suggestions and, as a result, placed a great deal of emphasis on enforcing the behavioral expectations that were set.

In the passive supervision system employed in Northampton County prior to the interventions, the chief method of enforcing whatever minimal expectations existed was through the use of inmate discipline. The administration in Northampton County wanted to change that focus and emphasize a component of Madensen's definition that could be overlooked. They operationalized the term *promotion* to mean the creation of a system of incentives and disincentives that encouraged positive behavior consistent with the established expectations. The pervasive attitude among corrections staff in the institution was that inmates should comply with certain behavioral expectations simply because they were told to

do so. This suggested that inmates should respect authority simply because an authoritarian relationship existed.

The use of incentives and disincentives was difficult to assess because a rigidly designed system was not forced upon the officers. The administration recognized this practice would not be well received by all officers. Each was encouraged to understand the value of positive and negative reinforcement but it was not mandated to them. Each officer was free to create any incentive within reason that could assist in the enforcement of behavioral expectations. For example, officers could choose to reinforce positive behavior with extra privileges, such as extra recreational time, an additional visit, an extra food tray, or extended television hours.

Finally, with the other operational elements addressed, the administration thought it was important to teach the officers how identify behavior that did not meet the established expectations and how to respond appropriately. Modules were included in the curricula that taught the officers how to identify aggressive and vulnerable inmates, how to properly manage that behavior, and how to use the housing design to best separate and isolate inmates who behaved in a manner that caused concern. As an example, an inmate who was thought to be more vulnerable might be best placed in a cell closest to the officer's podium, allowing for greater visual observation for much of the shift.

Control of Access

The third operational element identified by Madensen (2007) was *control of access*, which was defined as, "the inclusion and exclusion of people" (p.19). Table 4 summarizes the organizational changes that were made in an attempt to operationalize this element.

Table 4 Control of Access

Key Concepts	Changes in Operational System
Permit officers to exercise proper discretion in the assignment of inmates to the housing unit	 Encourage officers to remove inmates who do not comply with behavioral expectations from their assigned unit Use dayroom access as a method to control inmate behavior

Operationalizing this element meant that a housing unit officer would be able to determine who was permitted to stay on a housing unit and who had to be removed.

This could cause significant operational problems for an agency like Northampton County that operated under an objective, risk-based classification system. These types of systems were designed to separate prey from predator, which meant more aggressive and seasoned inmates needed to be housed separately from more vulnerable and less aggressive inmates. They used a formalized measurement instrument meant to limit the use of discretion. Limiting the amount of discretion capitalized on the predictive accuracy of the classification instrument, maintained the integrity of the instrument, and limited an agency's liability exposure from incidents that occurred as a result of arbitrary and capricious decision-making. Although some discretion was permitted, it was tightly regulated both with respect to who could exercise it and under what supervisory conditions. Once an inmate was classified as minimum, medium, or maximum custody using the classification instrument the manipulation of that classification was limited and controlled. Prior to the implementation of the interventions, only a few members of the administrative team were permitted to modify an inmate's classification.

Risk-based classification systems also required the development of a carefully designed housing philosophy and a detailed housing plan or scheme. Philosophically, administrators had to decide which inmates they were comfortable comingling and under what conditions. Northampton County developed a philosophy that required inmates to be housed by custody assignment, meaning minimum, medium, and maximum custody inmates could only live with those in the same custody assignment. The only exceptions occurred in the housing of females and special populations, such as medical, suicide observation, and segregation. Even within those categories, however, there was an attempt made to limit the amount of open contact inmates of different custody assignments had with one another.

The housing plan or scheme was a detailed accounting of who will live in which of the housing units. Having different architectural designs allowed the administration to house inmates in designs that were most advantageous to the institution. Although Northampton County had a large number of housing units (between 13 and 18 during the study period) they were also severely overcrowded. At one point during the study period, 100 inmates were housed at another county facility. The overcrowding and the decision to separate and segregate certain types of inmates made housing an inmate a detailed and sometimes complicated operation.

The operation of this type of system was done with considerable thought and with the primary goals of maximizing operational efficiency and reducing the exercise of discretion. Since operationalizing this element meant providing officers with the ability to exercise discretion, the administration was concerned with regulating or directing that discretion in a manner that was beneficial to the organization and maintained the integrity of the

interventions. The administration thought that if it could provide instruction to the security staff on the philosophy and purpose of classification, as well as how to operate an active style of inmate supervision, it could effectively manage officer discretion. Once an officer completed the training, he or she was allowed to change an inmate's cell assignment within the unit and dictate whether or not an inmate was removed from the unit completely. Both of these functions were exclusively controlled by the administration prior to the development of the interventions.

Acquisition of Resources

The final operational element of Madensen's (2007) model of *effective place management* was *acquisition of resources*, which was defined as, "the acquisition of money and resources that can be used to carry out the first three elements" (p.19). In theory this element could be easy modified to a correctional setting; however, actually implementing such an element could prove more difficult, having more to do with the territorial nature of job assignments than the nature of the environment itself. In Northampton County, as is the case in many facilities, resources were tightly controlled by the administration, or at the direction of the administration. Resources, whether toilet paper, blankets, or the repair of a shower head, were controlled in an attempt to manage tight budgets. Changing this practice meant dismantling a centralized system in favor of a more decentralized system controlled by individual housing unit officers. Table 5 summarizes the organizational changes that were made in an attempt to operationalize this element.

Table 5 Acquisition of resources

Key Concepts	Changes in Operational System
Permit officers to control the distribution of supplies and the completion of unit maintenance	 Decentralize the system of managing institutional resources by allowing officers to control unit supplies Mandate a higher level of administrative responsiveness to officer requests Encourage proper use of officer discretion in managing administrative matters

Prior to the implementation of the interventions, the property clerk, maintenance director, and any others who controlled the distribution of resources took their direction from the Captain of Operations. An officer could not request extra toilet paper, blankets, food trays, or the repair of a unit fixture directly. All requests were funneled through the Captain, who would ultimately decide whether or not the request required attention and what priority that request should be given. Few, if any, challenges were made to the decision-making authority of that Captain, which meant his decision was final.

To operationalize this element, the administration had to create a decentralized system in which the officer could request resources directly from the source. The changes to the operating system were not at the officer level but at the administrative level.

Administrative staff members were instructed that requests made by officers working the units under study were to be honored in a timely manner. Officers were given a great deal of discretion in deciding what was in the best interest of their housing unit as long as the purpose was to more effectively manage the inmate population.

A decentralized system also required that the officer had the necessary authority to make administrative decisions. Although not traditionally considered a resource, officer authority was seen by the administration as one of the most important resources in the implementation of the interventions. Northampton County had operated under a system in which the officer had very little authority to make operational and organizational decisions. Those were typically the responsibility of the corrections supervisor (Lieutenant). However, in order to successfully operationalize the other three elements previously discussed, the housing unit officer was given the responsibility for making the majority of decisions related to the housing unit.

In summary, although the interventions implemented in this study occurred at two distinct time periods, each involved the same operational concepts. Given the broad nature of the definitions applied to the elements of *effective place management*, translating the concepts into operational practices was not a difficult task. Fortunately, the operational changes were dramatic, which assisted in identifying the level of importance each had on changes in behavior.

CHAPTER 5: RESEARCH METHODS

This research relied on a mixed-method design out of a desire to more accurately assess changes in behaviors, because of the nature of the data available, and in an attempt to establish a causal link between the interventions and changes in inmate behavior. Although collecting and evaluating quantitative and qualitative data for each of the housing units involved in the study was considered the optimal design method, one of the units (B-2) had not been opened long enough to provide enough aggregate data for what would be considered a robust interrupted time series analysis. Although there is no definitive rule, it is widely accepted that in order for a robust pre-intervention time series analysis to be undertaken the series must contain at least 50 observations (Cook & Campbell, 1979). Anything less might lead to making misleading assumptions about the patterns displayed. Since the number of observations for B-2 did not come anywhere near 50, an interrupted time series analysis was not conducted for that unit.

Ouantitative Data

This research evaluated major misconduct reports written by officers working in three of the four housing units under study. Major misconduct was considered any type of behavior that rose to the level of seriousness which the officer thought required disciplinary segregation. Major misconduct reports could accuse the inmate of class A, B, and C policy violations. All could result in possible disciplinary segregation, with class A and B violations resulting in up to 45 days of segregation and class C violations resulting in exposure of up to 20 days. The inmate handbook identified 36 types of behavior that were considered class A violations. There were 19 that were predatory (those that involved physical force or the threat

of force), 9 that were violations of institutional security (drug use, possession of contraband, etc.), and 8 that were considered insubordinate (concealing one's identity, failure to follow rules, etc.). In contrast, there were 15 class B rule violations with only one (simple assault) being assaultive. The remainder of the class B violations was considered property related or disruptive to the institutional setting or schedule. Class C violations were considered nuisance violations.

It was the writing of the misconduct report that was measured in this study and not the outcome of the misconduct hearing. This distinction was made because there were a number of reasons a hearing examiner could find an inmate not guilty or dismiss a charge that were not related to the behavior itself. Allowing the results of the dispositional hearing to serve as the method of measurement could under-value the actual amount of inmate misconduct that occurred on any particular unit. Additionally, misconducts reports written for behavior that occurred outside of the housing unit were also excluded from the analyses. The research was concerned with evaluating whether or not the officer had become more effective at regulating inmate behavior on the housing unit. Allowing behavior that occurred under the supervision of another officer not involved in the intervention could misrepresent the influence exerted by the housing unit officer.

The quantitative data assisted in answering two research questions, and related hypotheses:

- Do place management interventions reduce the amount of inmate misconduct?
 H 1: Implementation of place management interventions results in fewer major,
 written misconduct reports in the treatment units, while no changes should occur on the control unit.
- 2) Do place management interventions designed without concern for differences in gender reduce inmate misconduct with respect to both male and female inmates?
 H2: Implementation of place management interventions results in fewer major, written misconduct reports in both the male and female treatment units, while no changes should occur in the control unit.

It would not be unusual for a jail that used a passive style of supervision (such as Northampton County) to experience high rates of major misconduct. In passive systems, officers do not typically address negative behavior, meaning they do not address or manage minor behavior in an attempt to prevent it from becoming more serious. Inmates act out in response to conflict before the officers know that a conflict exists. Passive systems also do not require officers to set, convey, and enforce behavioral expectations, which allow inmates to determine what behavior is considered acceptable, and produces inconsistent enforcement among officers. These two conditions create situations that put offices in conflict with inmates because both groups have different sets of behavioral expectations.

Active systems, such as the one implemented in this study strive to correct those deficiencies and seek to manage behavior in a more effective manner. Better management leads to less conflict among inmates and less conflict between officers and inmates, thereby reducing the amount of major misconduct. Accordingly, it was hypothesized that the

implementation of the place management interventions would lead to reductions in the number of major misconduct reports written by officers, and that this would happen regardless of the inmates' gender.

Data Collection

Northampton County had supplied quantitative data from all four housing units. Unit B-2, opened in June of 2006, had fewer than 40 pre-intervention, monthly observations, which fell well short of what was considered acceptable for a robust interrupted time series analysis (Cook & Campbell, 1979). As a result, it was evaluated only through the use of qualitative data and will be discussed in greater detail shortly.

For the intervention that was implemented in September of 2004 (E-Tier), the administration provided copies of the actual inmate misconduct reports that were written from January 2000 through May 2006 for the entire institution. The reports written against inmates living on the treatment and control units were separated and then aggregated into monthly misconduct counts. Each monthly aggregate count was represented by an observation in the time series. Monthly aggregate periods were chosen because there were not enough major reports written in shorter time periods to complete a robust time series analysis.

For the intervention that was implemented in November of 2009 (A-2), the administration supplied hearing board tabulation forms that served as the basis of the analyses. The form included information about the date of the infraction, the inmates housing unit, charge(s), disposition date and finding, and location of the incident. The form was used to track every written misconduct and dispositional hearing held by the hearing board. The

data related to the treatment and control units were separated and aggregated into monthly misconduct counts, represented by the observations in the time series.

Quantitative Analysis

The study evaluated monthly misconduct data using an ARIMA (Auto Regressive Integrated Moving Average) time series analysis with the intent of isolating and evaluating any direct impact the interventions had on inmate misconduct. Interrupted time series analyses are considered strong quasi-experimental designs, and are popular in social science research, often used to test the impact of new laws or the introduction of treatment interventions. Time series designs have two common features: in each instance a social process is represented as a time series, and the intervention being measured breaks the series into two distinct segments, one pre-intervention and one post (McDowall, McCleary, Meidinger, & Hay, 1980).

The time series design is represented using the diagram below:

$$....O_1 O_2 O_3 O_4 O_5 O_6 X O_7 O_8 O_9 O_{10} O_{11} O_{12}....$$

In this example, each O represents an individual observation at a given point along a time series and X represents the introduction of a discrete intervention. The analysis of the time series is a statistical comparison of the pre- and post-intervention segments. In this particular study, each O would represent the total number of misconduct reports written in a given housing unit in one month and X would represent the point at which the place management interventions were implemented.

A time series design usually focuses on a test of the null hypothesis, evaluating if the intervention had an impact on the time series. The null hypothesis states,

$$H_o: b_{pre} - b_{post} = 0,$$

which suggests that there is no difference between the pre- and post-intervention series levels, indicating the intervention did not have a statistically significant impact on the series. This test may seem unnecessary on some time series designs where the change in pattern is obvious, but visual observation alone does not always provide a clear interpretation of the results. McDowall et al. (1980) noted that there were three potential sources of noise that could obscure the clarity of the results: trend, seasonality, and random error. Trend referred to an upward drift throughout most of the series, seasonality described a series of spikes that occur at recurring intervals, and random error was meant to explain random fluctuations that occurred even when any trend or seasonality was removed from the series. The ARIMA models used in this study accounted for all three types of noise, producing a series in which the impact of the intervention was clearly tested and measured (McDowall et al., 1980).

The noise feature of a time series, commonly referred to as the stochastic component, follows certain laws of probability, and has systematic and unsystematic features. The goal of the statistical analysis is to determine the nature or structure of the systematic element of the noise so it can be predicted and controlled. The systematic element of the stochastic process is responsible for the autocorrelation between observations commonly found in criminal justice data and once the process has been identified it can be added to the model equation. By identifying and controlling for the autocorrelation between observations it is possible to more accurately predict the behavior of the series. With only the unsystematic elements of the stochastic process remaining, it is possible to determine unbiased estimates of standard

deviations and draw accurate inferences and conclusions from the tests of statistical significance (McDowall et al., 1980).

An ARIMA model has three structural parameters through which the stochastic process is realized: p, d, and q, with each representing a different relationship between the observations in the series. They are represented in the model equation (p,d,q) where the value of each parameter is determined through statistical analysis. The parameter represented by d is important because it denotes whether the series is stationary or non-stationary. Stationarity refers to whether or not the series has a secular trend to it, meaning that there is a systematic upward or downward trend in the series over the observation period. Since only stationary series, those without systematic trend, can be analyzed, identifying whether or not a series is stationary or non-stationary is critical (McDowall et al., 1980).

If the series is found to have a systematic trend it is corrected through a process called differencing. Differencing involves subtracting the first observation in the series from the second, the second from the third, the third from the forth, and so on. What results is a series that appears stationary yet the nature of the data has not been compromised. By differencing the series the trend that exists is actually absorbed into the model, not eliminated (McDowall et al., 1980). A series that is differenced is represented in the following equation where d is replaced by the integer 1: (p,1,q). This suggests that the series has been differenced once. If a series has to be differenced more than once in order to make it stationary then the value of the integer would change accordingly.

The letter p in the equation represents the autoregressive component of the model. When there is a direct relationship between adjacent values or observations in a series the value of p will exceed 0. An equation represented by the formula (1,d,q) means that the current observation can be predicted by the value of the observation immediately preceding it plus a random shock or error. In essence, this model suggests that past observations can be used to predict future observations (McDowall et al., 1980). It is possible for an observation to be dependent upon more than just the preceding observation. If it were to be dependent on the previous two observations it would be represented as, (2,d,q).

The final parameter in an ARIMA model is q, which represents the moving average component. This parameter describes a series which is characterized by the persistence of a random shock from one observation to the next. In this type of model the current observation can be predicted by the random shock present in the previous observation and is represented in the model equation (p,d,1). It is possible for the current value to be influenced by more than simply the shock present in the observation immediately preceding it (McDowall et al., 1980). If that were the case the value of q would reflect the number of previous observations which exerted influence over it, such as (p,d,2) if the shock from the previous two observations were predictive of the current value.

In the end, the resulting model produces a time series that can be analyzed to determine the effect of the discrete intervention. Removing the noise associated with time series data makes the analysis more clearly identifiable even when the series has patterns that make it difficult to assess visually. The intent is to ensure that one accurately assesses the influence an intervention had over a series of observations, avoiding the suggestion that an intervention had influence when it did not, or conversely, determining that it did not when, in fact, it did.

Model Building Process

The quantitative analyses involved the use of autoregressive moving average (ARIMA) techniques to test the first two hypotheses on four different dependent series. The analyses were conducted in two stages, the first involving the identification of the appropriate ARIMA white-noise model using the pre-intervention data only. This approach avoided complication in identification of the noise component due to confounding effects of the intervention (McCleary & Hay, 1980). Once the appropriate ARIMA models were identified, the second stage involved the introduction of the interventions in each of the ARIMA models.

The first step in the model building process was to identify whether or not the series were stationary. In this iterative process, the goal was to create a series which controlled for nonstationarity and autocorrelation. In the end, series were produced that were stationary² without outliers and had observations that were normally and independently distributed around a zero mean with constant variance (McDowall et al., 1980). The model building phase of the analysis began with the examination of the Autocorrelation Function (ACF)/Partial Autocorrelation Function (PACF) pattern for the raw data for each dependent series, indicating whether differencing the series were necessary. Once completed, the modeling process moved to the estimation stage, where the parameters for each of the selected models were evaluated to determine statistical significance. The final step in the modeling process, the diagnosis stage, required an evaluation of the residual ACF plot and Q statistic to ensure the residuals were white noise. Once the best fitting models were selected,

-

² One dependent series (E Tier major misconduct) had an outlier value. The value was removed and replaced using linear interpolation.

the intervention components were added to the models to determine if their introduction resulted in a statistically significant change in inmate behavior.

Thus, once the dependent series were properly identified, the impact of the place management interventions was tested by adding dummy variable series, which were coded 0 for the pre-intervention periods and 1 for the post-intervention periods. The critical issue to be determined by the introductions of the intervention series was whether or not the interventions added significantly to predicting the behavior of the dependent series. If the intervention series increased the model's ability to predict the series, the intervention components could be statistically significant (Cook & Campbell, 1979).

A zero order transfer function was selected as the appropriate intervention model in each of the series because the change in the style of supervision on the treatment units was dramatic and occurred on a clearly identifiable date. The officers who worked the intervention housing units provided a briefing to the inmates on the date the interventions began notifying them of changes in the units' operation, which more clearly suggested that a zero order model was appropriate.

The values in one of the dependent series needed to be standardized to account for major shifts in the inmate population. The dependent series used to evaluate major misconducts written against female inmates was standardized to a measure of misconducts per 100 inmates because the average daily population of the female inmates varied greatly during the course of the study, ranging from a low of 40 inmates to a high of 108.

Standardizing the results was not necessary in the other housing units because there was little variation to the unit populations. The two male units, one a treatment unit (E-Tier) and one

used as the control unit (G-Tier), remained at or near capacity for the entire duration of the study.

The same housing unit (G-Tier) was used as the control unit for both intervention periods. During the first intervention it was used as a control for E-Tier and during the second intervention period it was used as the control for A-2. The period over which the data were collected for the control unit mirrors the time frame of the comparable treatment units. Table 6 provides a detailed summary of all the housing units involved in the study.

Table 6 Housing Unit Identification and Data Collection Summary

					Number of Pre-	Number of Post-	
Unit	Unit			Dates of Time Series	intervention	intervention	Intervention
Name	Designation	Gender	Type of Data Collected	Analysis	Periods	Periods	Date
			Quantitative Data 1. Written major misconduct reports Qualitative Data				G 1
E-Tier	Treatment Unit	Male	Semistandardized interviews Focus group interviews	January 2000 - May 2006	56	21	September 2004
L Hei	Treatment Omt	Iviaic	Quantitative Data	January 2000 Willy 2000	30	21	2001
G-Tier	Control Unit	Male	Written major misconduct reports	January 2000 – May 2006	56	21	na
			Quantitative Data 1. Written major misconduct reports Qualitative Data				Name
A-2	Treatment Unit	Female	Semistandardized interviews Focus group interviews	April 2001 – August 2011	103	22	November 2009
G-Tier	Control Unit	Male	Quantitative Data 1. Written major misconduct reports	April 2001 – August 2011	103	22	na
G-TICI	Control Clift	iviaic	Qualitative Data 1. Semistandardized interviews	April 2001 – August 2011	103		November
B-2	Treatment Unit	Male	Semistandardized interviews Semistandardized interviews Semistandardized interviews	No time series analysis	na	na	2009

Threats to Validity

The main threat to most time series designs is the effect history has on the interpretation of the results. The threat of history means that it is possible that some other force or event had an influence on the outcome of the results rather than the planned intervention (Cook & Campbell, 1979). As an example, if one were conducting a study on the attitudes the community had toward police during the time surrounding September 11, 2001, the results would surely have been confounded by the events that occurred on that day and the days that followed. One of the best controls to the challenges associated with history is to include a non-equivalent dependent series in the evaluation (Cook & Campbell, 1979; McDowall et al., 1980). The addition results in a design that is depicted as follows:

Series
$$1...O_1$$
 O_2 O_3 O_4 O_5 O_6 X O_7 O_8 O_9 O_{10} O_{11} $O_{12}....$

The logic behind the additional series was that if changes were to occur in the pattern of misconduct for only the treatment series, it would be difficult to attribute that change to some historical event because the non-equivalent series was completed over the same time span. If history were a contributing factor in one series, it would be expected to produce change in both series. In a design that has a dependent series of interest and a non-equivalent dependent series, each should behave without influence from the other. If the interventions were to demonstrate an effect, only the dependent series of interest should change. Because it was not similar to the dependent series of interest, the non-equivalent series should behave according to its own trend throughout the implementation of the interventions. Thus, the addition of the

control unit (G-Tier) in the current study, a non-equivalent dependent variable, served as an important design element to address the history threat.

Another threat to validity that needed to be addressed was instrumentation. Changes in administrative procedure could have led to changes in the way records were kept (Cook & Campbell, 1979). Officers could have viewed the number of written misconduct reports to be an administrative measuring stick of their performance as place managers. If this were so, it was also possible that the type of report written by the officers would change, or they would stop writing reports completely.

To add to the usefulness of the qualitative data and to counterbalance the threat of instrumentation, officers were asked about their perception of the changes in inmate behavior during their individual interviews. If changes in their perceptions matched changes in the number of recorded misconduct reports it would be possible to draw a connection between the intervention and those observed changes. In addition, the officers were asked to identify reasons for the perceived changes in behavior to better link the changes in operation to the changes in behavior.

It was also possible that the officer selection process caused problems for the validity of the results. In some cases the administration hand-selected those who were to participate in the implementation of the interventions. However, that hand-selection was limited given the nature of the union environment. For example, with respect to the implementation of the intervention on E-Tier in 2004, those officers were not selected by the administration because they were already assigned to their posts through the union bidding process. The officers, regardless of their desire to participate, were trained for the intervention because their unit

was believed to be in need of improvement. The same was true for the female housing unit. Given the nature of the gendered supervision requirement and the limited number of female officers on each shift or platoon, the administration trained those who were normally assigned to the female units, which diminishes the influence selection might have on the eventual results.

The only housing unit in which selection might be an issue was B-2, the 96-bed, medium custody male unit. Even though the administration did have a greater role to play in the selection of the officers assigned to this unit, several of those chosen had been assigned to the unit prior to the implementation of the intervention. If these officers had the skills to control inmate behavior prior to the intervention, the fact that it had the reputation as the most dangerous unit in the institution would suggest that they were not actively utilizing those skills, thereby diminishing the potential challenge raised by the selection process.

Qualitative Data

The inclusion of qualitative data provided a sound method with which to check the integrity and the inferences drawn from the numerical data collected. This process, known as triangulation, strived to obtain different but complementary data on the same topic so as to provide a more accurate assessment of the subject (Creswell & Clarke, 2007; Gibbs, 2007). Creswell and Clarke (2007) suggested that the strength of a mixed-method design was that triangulation could actually become a planned component of the design when both qualitative and quantitative methods were implemented during the same period.

The collection of qualitative data was used to explore a number of research questions, and related hypotheses:

- 3) Do place management interventions change staff perceptions of inmate misconduct?
 - H3: After implementation of the place management interventions, officers, supervisors, and administrators perceive that inmate behavior has improved.
- 4) Do corrections officers believe that place management interventions can be effective at reducing inmate misconduct in both male and female housing units? H4: Officers believe that the place management interventions are effective at reducing misconduct in both male and female housing units.
- 5) Do place management interventions produce changes to the way officers, supervisors, and administrators perceive the legitimacy of an officer's authority? *H5: After implementation of the place management interventions officers, supervisors, and administrators perceive that the legitimacy of an officer's authority improved.*

The collection of qualitative data was also added to the study design in an attempt to control for possible threats to causal inferences about the interventions and any potential changes in inmate behavior. The challenge in studying changes in the role played by corrections officers was that the nature of the environment placed them in positions which received very little direct supervision. Officers worked in isolation from one another for most of the day and, for the most part, worked in isolation from their immediate supervisors, only seeing a lieutenant once or twice a day for minutes at a time. If an officer were to refuse to take a more active role in the housing unit it would be difficult for the administration to identify that decision, because of the isolated nature of the officers' work. As a result, the

interviews conducted with corrections officers were designed to identify whether or not each had embraced the concepts of place management and had made an attempt to institute a more active style of inmate supervision. If one or more officers demonstrated an unwillingness to accept the concepts and behaviors associated with the interventions it would be difficult to establish a causal link between the designed interventions and any observed changes in inmate behavior.

Data Collection

Northampton County had facilitated the collection of data from a number of different rounds of focus group and semistandardized, or semi-structured interviews. Two focus groups were completed in May 2009 before the interventions were designed. The purpose of the focus groups, one with administrators and one with supervisors, was to assess the nature of inmate behavior to determine if any interventions were necessary. After the determination was made to progress with the design and implementation of the place management interventions, three subsequent rounds of interviews were completed. In this research a round of interviews was intended to describe a period of time in which officers, supervisors, and administrators were all interviewed using the same set of questions. In the first round of interviews 15 officers were interviewed: two on July 13, 2009 and 13 between December 1, 2009 and January 21, 2010. The two officers interviewed on July 13, 2009 were involved in the first intervention and the remaining 13 officers were involved in the second set of interventions. The first round also included individual interviews with three supervisors and a focus group of five administrators.

The second round occurred between March 31, 2010 and April 7, 2010 and had the same number of participants: 15 officers, 3 supervisors, and 5 administrators; and the final round occurred between March 28, 2012 and May 1, 2012 and included 10 officers, 3 supervisors, and 5 administrators. In each round of interviews the same employees were interviewed. There were fewer officers represented in the final round of interviews because some no longer worked for the organization and some were reassigned to other posts that were not part of the interventions.

In coding the responses from the participants for this research, the officers and supervisors were identified in the order in which they were interviewed. Officers are identified by numbers 1-40 and supervisors 1-9. The administrative focus groups are numbered 1-4, representing the order in which they were conducted and the only supervisor focus group is identified as supervisor focus group 1.

In situations where focus groups were conducted transcripts from recorded interviews existed and were provided. However, during the semistandardized interviews with corrections officers and shift supervisors a recording device was not used. The interviewer took notes during the discussions and dictated a summary of the interview using the field notes immediately after its conclusion. The dictation occurred on the completed interview before any additional interviews took place to avoid any confusion in interpreting the comments made by individual officers or supervisors. In consultation with the Director of Corrections and the Warden, the researcher decided not to tape record the interviews with officers and shift supervisors so they would not feel unduly threatened, intimidated, or hesitant to provide information.

The largest portion of the qualitative data was collected through individual interviews. Considered the most commonly used qualitative method (Snape & Spencer, 2003), individual interviews take a number of different forms. Berg (2001) suggested that interviews fall into one of three categories: standardized (formal or structured), unstandardized (informal or non-directive), or semistandardized (guided-semistructured or focused). Semistandardized interviews, which were used in this research, contain a number of predetermined questions that are asked of each interviewee in a systematic and consistent manner. This interview method differs from standardized interviews in that the interviewer is permitted to stray from the predetermined questions and probe areas or answers presented by the subject of the interview. The probative nature of the semistandardized interview process can demonstrate the researcher's awareness of the subject's world and allows for an understanding of the content from the subject's perspective (Lewis, 2003).

The second source of qualitative data provided for this research derived from focus group interviews. In a number of ways, this style of interviewing was quite different than the technique used in the interactions with the corrections officers. As compared to semistandardized interviewing where data are generated though the interaction between the researcher and the subject, focus groups allow data to be generated by the interaction among the group participants. This process allows an individual participant to listen to the viewpoints of others, reflect on what others have said, and develop a more detailed understanding of his own views. This, in turn, may produce responses that are sharper and more refined than one might find from an individual interview (Finch & Lewis, 2003).

Additionally, focus groups have a synergistic quality that individual interviews lack. By working together to generate data the group process allows for a far larger number of ideas, topics, and issues to be covered (Berg, 2001). Because of the dynamic interaction among group members, the viewpoints expressed are less influenced by the researcher and take on the level of emphasis given to them by the group. In this manner, the group actually may assume the interviewing role that the researcher displays in the semistandardized interview process (Finch & Lewis, 2003).

Estimates of the most effective size for a focus group range from between six to eight participants (Berg, 2001; Finch & Lewis, 2003); however, mini-focus groups of between four and six have been recognized as being effective as well (Krueger & Casey, 2009). Berg (2001) noted that there were two basic forms: guided and unguided. In this research guided focus groups were conducted, with a predetermined set of questions and subjects selected by the researcher, and covered during the interview process.

In this research all of the completed interviews that occurred with the administrative team occurred in focus group formats and had five participants. The shift supervisors (Lieutenants) were interviewed once in a focus group format, which took place prior to the 2009 intervention. Scheduling conflicts prevented them from being interviewed in that format once the interventions were established.

Qualitative Analysis

The results of the interviews and focus groups were analyzed to identify common themes that were present in the individual responses. Gibbs (2007) noted that this process of identification, often referred to as coding or indexing, referred to passages in a text in a

manner similar to the way a book index served to identify passages in the book. Gibbs also identified a number of different areas or subjects that could be coded (p. 47-48), with those that were germane to this research design listed below:

- 1. Specific acts or behaviors
- 2. Strategies, practices, or tactics
- 3. Meanings
- 4. Participation
- 5. Relationships or interactions
- 6. Conditions or constraints
- 7. Setting

These themes assisted in evaluating the research questions posed by this study and in developing causal inferences between the intervention and any changes in inmate behavior.

CHAPTER 6: STUDY RESULTS

As was noted previously, this research relied on a mixed-method analytic approach.

This approach was intended to provide a more thorough assessment of the effect place management had on inmate behavior and to establish a causal link between the intervention and changes in behavior.

Time Series Analyses

Prior to completing the interrupted time series analyses, the raw data were plotted for visual effects. Figures 1-4 display the raw dependent series analyzed and Table 7 presents the descriptive statistics for each of the pre-intervention series. A visual review of the dependent series associated with the treatment units (Figures 1 and 3) suggested a change in the series pattern after the introduction of the interventions while a review of the dependent series associated with the control unit (Figures 2 and 4) did not suggest a similar change in those series. Although this visual examination was not indicative of statistical significance, it did suggest that there may be some effect from the interventions.

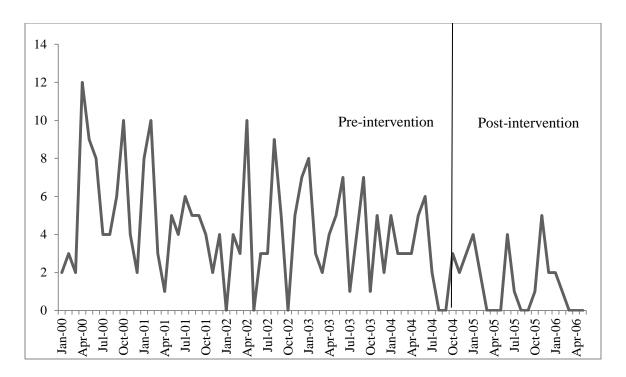


Figure 1 E-Tier Monthly Major Misconduct Report Totals (Treatment Unit)

Figure 1 displays the results of the time series for major misconduct reports written against inmates living on E-Tier during the period January 2000 through May 2006. The intervention line splits the pattern into two distinct sections: pre- and post-intervention. For the 56 months preceding the intervention the mean number of major misconduct reports written against inmates living on E-Tier was 4.27. In only four of the months (April 2000, October 2000, February 2001, and April 2002) were there 10 or more major misconduct reports written, and in the same number of months (January 2002, May 2002, April 2002, and August 2004) there were none.

There was a definitive change in the pattern of major misconduct reports written after the implementation of the intervention. The pattern changed from a mean of 4.27 for the 56 months prior to the intervention to a mean of 1.43 for the 21 months following the

intervention. There were no months in which the number of written, major misconduct reports exceeded five after the implementation of the intervention, and 10 of the months experienced no major misconduct.

Figure 2 displays the results of the dependent series for the housing unit that served as the control for the treatment unit (Figure 1).

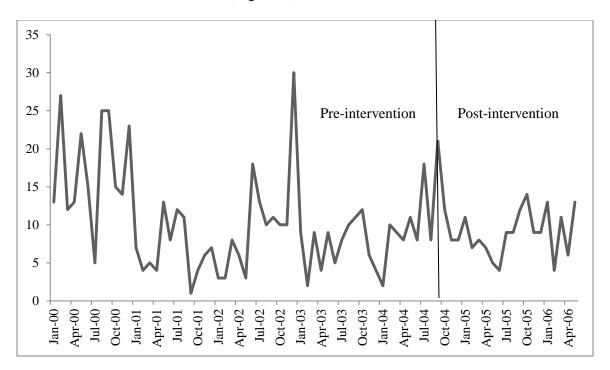


Figure 2 G-Tier Monthly Major Misconduct Report Totals (Control Unit)

In using Table 7 to assist with the interpretation of the raw data, the mean number of major misconduct reports written against inmates living on the control unit was 10.34. The first 12 months of the series displayed a much higher number of written misconduct than did the remainder of the series. Five times during the first 12 months the number of written misconducts exceeded 20. That only occurred on one other occasion during the entire time

series (December 2002). There was never an occasion during the pre-intervention series where no misconducts were written.

A visual examination of the post-intervention time series did not indicate a change in pattern. Although no spikes in misconducts appeared, as was the case in the pre-intervention time span, the mean number of written, major misconduct reports remained somewhat similar at 9.61 per month. In the 21 months that followed the intervention the lowest number of major misconduct reports written in any one month were 4.

Another noticeable pattern appears in the evaluation of the data depicted in Figure 3, which represents the monthly major misconduct reports written against the female inmates from April 2001 through June 2011.

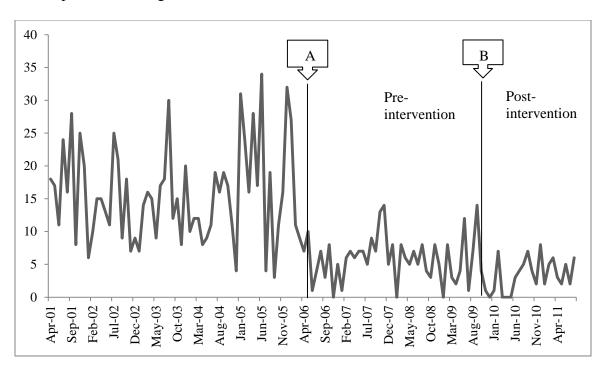


Figure 3 Female Monthly Major Misconduct Report Totals (Treatment Unit)

The line that identifies the month of May 2006, noted by the letter "A", separated two visually different patterns of misconduct. This noticeable reduction in the number of written misconduct reports coincided with the opening of a series of new housing units at the facility. The construction of the new units meant that the female inmates were separated into different housing sections based on their custody assignment, each having separate dayroom space. The minimum and medium custody inmates were separated from those who were designated as maximum custody, new commitment, medical and suicide observation, disciplinary segregation, and administrative segregation inmates. The visual pattern changed once again beginning in the month designated by the letter "B", November 2009. This coincided with the introduction of the place management interventions.

A visual examination of the post-intervention period did suggest a change in pattern from both the overall pre-interventions series and the 42-month period identified between letters A and B of Figure 3. The overall pre-intervention mean was 11.56, while the post intervention mean was 3.59. If one were to suggest that the pattern displayed between A and B was more reflective of inmate behavior prior to the implementation of the intervention, there was still a noticeable change in pattern from that period. For the 42 months immediately preceding the intervention the mean number of written, major misconduct reports was 5.93, as compared to a mean of 3.59 post-intervention.

Figure 4 displays the raw data for the housing unit (G-Tier) used as the control for the female unit intervention.

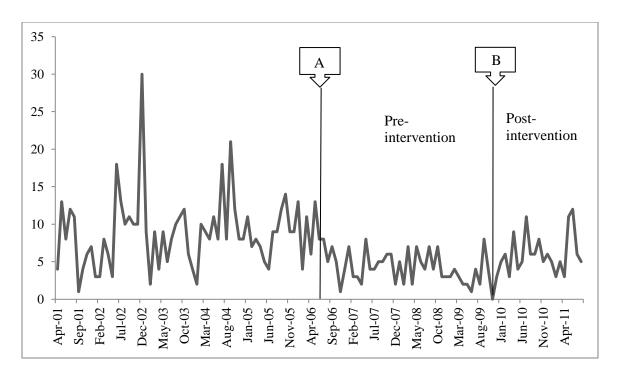


Figure 4 G-Tier Monthly Major Misconduct Report Totals (Control Unit)

In visually evaluating the data displayed, one can see two changes in misconduct pattern. As was the case with the pattern represented in Figure 3, there was a noticeable decrease in the slope of the pattern beginning in May 2006 and continuing to October 2009. Although for the entire pre-intervention series the mean number of written, major misconduct reports was 7.13, the mean for the period represented by letters A and B was 4.64. This decline in the pattern coincides with the opening of a series of new housing units at the jail. As was the case with interpretation of the female misconduct data, the additional space created by the opening of the new housing units could have affected the control unit. The second change in the pattern of written, major misconduct reports occurred with the implementation of the place management interventions on the treatment units. Beginning in November 2009 the number of misconduct reports increased to a monthly mean of 5.77.

Table 7 Descriptive Statistics for the Pre-intervention Time Series

Dependent Time		Pre- Intervention		
Series	n	Mean	SD	SE
Series 1				
Treatment unit (E-Tier)	56	4.27	2.62	.35
Series 2				
Control unit (G-Tier)	56	10.34	6.60	.88
Series 3 (per 100)				
Treatment Unit (Female)	103	11.56	7.74	.76
Series 4				
Control unit (G-Tier)	103	7.13	4.50	.44

Results from the Modeling Procedure

Table 8 displays the univariate ARIMA models for each of the dependent series. The length of all the dependent series and the aggregation of the data into monthly counts allowed for the examination as to whether the series were influenced by a seasonal trend. This evaluation was not only important to the proper identification of the ARIMA model but also because the administrators commented during their focus group interviews that other jail statistics, such as the rate of admission and discharge, were subject to seasonal fluctuations. Interestingly, none of the dependent series displayed seasonal trends.

Although systematic trends are quite common in time series data, only one of the series (series 4) was non-stationary and had to be differenced. This suggested that only one of the series had any type of systematic increase or decrease in the level of the observations, which, if left uncorrected, would render an ARIMA analysis impractical. Once differenced series 4 was characterized by a first order moving average process (0,1,1).

Two of the series were characterized by autoregressive underlying processes. The series associated with major misconduct reports written on the control unit (series 2) was a

first order, autoregressive model, which meant that any particular observation could be predicted by the value of the observation that immediately preceded it and random shock.

The series associated with the major misconduct reports written on the female unit (series 3) was a second order, autoregressive model, which meant that any value could be predicted by the preceding two values and some measure of random shock.

Series 1, which was the series associated with the major misconduct reports written on one of the treatment units, E-Tier, displayed the characteristics of another model that was considered to be uncommon: a higher order mixed model (Cook & Campbell, 1979). It was characterized by an underlying second order autoregressive, moving average process.

Table 8 ARIMA Parameter Estimates and Fit Statistics: Pre-intervention Data

Dependent			First	Second	Third	Fourth
Timer Series		Box-Ljung	Parameter	Parameter	Parameter	Parameter
and ARIMA	Normalized	Statistic	t ratio	t ratio	t ratio	t ratio
Models	BIC	(Q Statistic)	(SE)	(SE)	(SE)	(SE)
Series 1			Ф1	Ф2	θ	θ
Treatment unit			t = 8.91**	t = -65.93**	t = 2.85**	t = -3.00**
(2,0,2)	2.104	NS	(.03)	(.02)	(.105)	(.323)
Series 2			Φ			
Control unit			t = 2.45*			
(1,0,0)	3.845	NS	(.129)			
Series 3						
(per 100)			Ф1	Ф2		
Treatment unit			t = 2.54*	t = 3.80**		
(2,0,0)	3.961	NS	(.09)	(.09)		
Series 4			Ө			
Control unit			t = 18.81**			
(0,1,1)	2.974	NS	(.05)			

Abbreviations: Φ = autoregressive parameter, Θ = moving average parameter, NS = non-significant *p<.025; ** p<.01

Intervention Impact Findings

The results of the intervention components, presented in Table 9, demonstrated a statistically significant change in the each of the dependent series associated with the

intervention housing units. The analyses were designed to examine the immediate impacts the interventions had on the writing of major misconduct reports because the style of supervision was so dramatically different from the one being replaced. The nature of the differences in the two systems was used to draw the conclusion that any results that may appear would be immediate. There did not appear to be any compelling reasons to believe that the potential impact would be lagged or anticipated.

Consistent with what could be seen from a visual observation of the raw data, major misconducts reports written against inmates living on E-Tier dropped by approximately 3 per month, which represents a decrease of 69%. This change in the pattern of written misconduct was statistically significant. With respect to the female housing unit, major misconduct reports were reduced by approximately 7 per month, a decrease of 68%, and, as was the case with the other treatment unit, the change in pattern for the female unit was statistically significant. As one might expect from a review of the raw data associated with the control units, the intervention component did not reach statistical significance in any of the series associated with the control unit (G-Tier). This would suggest that the intervention of the place management interventions on the treatment units had no effect on the number of major misconduct reports written against inmates living on the control unit.

Table 9 Intervention Parameter Estimates

	Intervention Estimate
Dependent Time Series	(SE)
-	t ratio
	w = -2.885**
Series 1	(.540)
Treatment unit (E-Tier)	t = -5.344
	w =376
Series 2	(1.973)
Control unit (G-Tier)	t =190
	w = -7.377*
Series 3 (per 100)	(3.053)
Treatment unit (Female)	t = -2.416
	w = .265
Series 4	(.234)
Control unit (G-Tier)	t = 1.134
di a 00 % distriction of the	

^{*} $p \le .025$; ** $p \le .01$

In summary, four dependent series were analyzed using an ARIMA modeling process. Two of the dependent series used data drawn from treatment units and two of the series used data drawn from a control unit. The aggregated data represented the number of major misconduct reports that were written against inmates living on each of the treatment and control units during each of the months involved in the study. In each series the number of pre-intervention observations exceeded 50 and the number of post-intervention observations exceeded 20. The statistical tests indicated that the changes in the pattern of major, written misconduct reports on the treatment housing units post-intervention were statistically significant, while no significant changes were detected in the control unit series.

Qualitative Results

As was noted previously, the qualitative data were collected through the use of semistandardized interviews with housing unit officers and supervisors, and focus group

interviews with administrators. Three complete rounds of interviews and two preintervention focus groups were conducted at varying points during the intervention processes and were subject to a thematic analysis to determine common threads in participant responses. In all, the results from 40 officer interviews, 9 supervisor interviews and five focus groups were evaluated.

Each round of interviews was clearly different from one another with respect to the direction of the questioning. The pre-intervention focus groups and first round of interviews were focused on the assessment of inmate behavior, both pre- and post-intervention, and an assessment of the officers' prior level of knowledge of the new supervision strategies. The second and third rounds of interviews, although still concerned with continued changes in inmate behavior, were more focused on identifying the importance of the individual elements of the place management interventions, and eliciting information about the perceptions of gender and legitimacy held by the officers, supervisors, and administrators.

The results are presented in a similar fashion, with the prior knowledge of the officers discussed first, followed by an evaluation of inmate behavior prior to and immediately following the interventions. Determining whether or not the officers had any prior experience with the supervision concepts presented to them was an important factor in assessing the impact of the interventions. Without this knowledge it would be possible to suggest that the officers possessed and were applying the skills necessary for proactive supervision prior to the implementations and that any changes witnessed were a result of some factor(s) other than the concepts introduced through the training.

Once changes in inmate behavior are assessed, the discussion shifts to the elements of *effective place management*. The challenge in framing this discussion is that it was difficult to identify many of the comments made by respondents as being representative of one individual component of *effective place management*. The comments often referenced the importance of a number of elements, which could suggest that they were more inter-related in this environment than perhaps others. For that reason the findings related to the elements of *effective place management* are presented under the heading of management of the physical space. The presentation of the results ends with an assessment of the officer's perceptions of gender and the role legitimacy had to play in regulating behavior.

Prior Knowledge of Supervision Strategies

In the first round of interviews a total of 15 officers were interviewed and none expressed any prior knowledge of the supervision concepts presented in the training. One officer noted that her initial academy-based training was one in which "there was not much interaction [encouraged] with the inmates. It was basically a passive style of supervision" (Officer 3). Another officer noted that his academy-based training was "mostly defensive tactics and some report writing, some review of the code of ethics, but beyond that it was mostly defensive tactics." He continued to comment that it was basically, "a CYA-type training" (Officer 1). A third officer suggested that she was a little bit surprised by the training associated with the current interventions because it was so different from that to which they were accustomed to (Officer 4). Reviewing the comments made by all of the officers suggested that the supervision strategies that were introduced as a result of the

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³ This phrase refers to a suggestion that some training is designed to provide protection from liability for the officer or administration.

interventions were not familiar to the officers and were not being used at the facility prior to implementation.

When asked whether or not the officers had the knowledge necessary to properly manage inmate behavior before the interventions, one of the administrators made a comment that further supported those made by the officers. He commented,

It's [managing behavior] such a foreign concept in corrections to manage behavior and try to change behavior through management that I think there is a learning curve. As they get better at it they'll understand it better and be able to think I have more of an impact on changing behavior. I think right now that I don't know if that's really on the forefront of what they think they're doing. So I think as they see the change in behavior and I think they'll have a couple of high moments where they say I did this and look what happened and they'll learn from that and improve from that. So I think the whole aspect of managing inmate behavior, they'll get better at it. In the very beginning I don't think that's one of the core concepts of what they're doing (Administrative focus group 3).

Inmate Behavior Prior to Implementation

Each of the officers, supervisors, and administrators was asked to characterize inmate behavior prior to the interventions. Some of the comments are presented in Tables 10 and 11. They are presented in two different tables because the comments made regarding the two male housing units referred to a higher level of violence and aggression than was true of the comments that were made about the female unit.

Table 10 Assessment of Inmate Behavior Prior to Implementation – Male Units

Administrator and Supervisor Comments	Officer Comments
"We let them revert back to their old criminal thinking mentality"	"It was the worst housing unit in the jail"
"We let inmates be inmates"	• "It was lawless"
"I think it was like the wild west"	"It was just a bad place to work"
• "The inmates ran the roost"	"I'll describe it in two words: strength rules"
"B2 has a reputation, even with people who've never been there before"	"They [the inmates] still owned a street mentality"
"Tough" place	"It was a gladiator block"
A lot of "strong-arming"	"It was a me-first place where everybody was trying to get over on one another"

Regardless of who was interviewed with respect to the behavior of the male inmates prior to the interventions, there was a consistent response: the inmates behaved violently and aggressively. One officer referred to one of the male units as "the rookie block" (Officer 10), suggesting that inmate behavior was so bad that veteran officers would refuse to work the post. He continued to comment that when he showed up for work he would have knots in his stomach knowing he would have to work that unit. Speaking about the same unit, one administrator noted,

That [unit B-2] was such an undesirable post that the turnover in that unit was dramatic. It was like when you came to the new shift, or you came on to the shift, that's where you got assigned because no one else that was here a while really wanted to work the post (Administrative focus group 1).

Another administrator followed that comment by stating, "They [the officers] also felt that they were getting punished by having to work that unit" (Administrative focus group 1). A third administrator summarized inmate conduct on one of the units by then saying,

I think to answer your question about misconducts; it was beyond misconduct, that's how bad it was. They [the inmates] were actually running the unit [B-2] and the officer was just there in place, to make sure no one got murdered (Administrative focus group 1).

With respect to the same male unit, one officer commented that it was known as the "gladiator block" because there was constant violence (Officer 13). The unit had a blind spot, hidden from the officer's workstation that was referred to as "knock out alley" (Officer 10) because the more aggressive inmates would take others there to settle a dispute or demonstrate their physical superiority. On this unit one officer commented, "the strong made the rules and intimidation certainly existed" (Officer 7). Some called one of the male units a "terrible" place to work, with one noting that there were a lot of inmates fighting the system and there was a predominant "me-first" attitude with the inmates trying to get over on one another to meet their own needs (Officer 14).

The theme of violence was repeated by the comments made by supervisors with respect to the assessment of male inmate behavior. One of the supervisors noted that half of the inmates on B-2 (96-bed male unit) were locked in for half of the day to ensure that the entire group did not comingle at the same time. When asked why that was the case he stated, "When we try and let them out together, within a day or two they're fighting" (Supervisor focus group 1). Trying to explain the violence another supervisor commented, "They're trying to strive for the money of the jail: contraband. One group's trying to take over from

the other" (Supervisor focus group 1). A third supervisor concluded the conversation by saying,

And B-2 has a reputation, even with people who have never been here before. I listen to a lot of classification interviews in that little room next to my office. And it's pretty consistent. They [inmates] sit down and say, 'You're not sending me to B2, are you?' And these are people who have never been in prison before. So word of mouth starts right there in the intake housing unit (Supervisor focus group 1).

Comments with respect to the second male unit were no different. One officer suggested that the unit "was lawless", and that as an officer "there was an uncertainty because, you never know [what would happen], there was a total lack of expectations" (Officer 1). A fellow officer commenting on the same male housing unit said, "They [the inmates] were doing whatever: smoking, fighting, or whatever the case may be. They were doing what they wanted to" (Officer 2). Perhaps one officer's comments best summarized the behavior of the male inmates prior to the implementations when he stated, "I'll describe it in two words: strength rules" (Officer 7).

Although some officers described the behavior of the female inmates as "very confrontational" (Officer 11), most often their behavior was described in more subtle terms. One officer noted that there was a lot of bickering and arguing on the unit (Officer 3), while another suggested that the behavior of the inmates was "sneaky", and that they tried to get away with something and "get over on" the officer all of the time (Officer 12). Each of the officers interviewed who worked the female unit said it was an undesirable post, with one of the officers referring to it as "a terrible unit" (Officer 11).

Table 11 Assessment of Inmate Behavior Prior to Implementation – Female Unit

Officer Comments	
• "a lot of bickering"	• "a lot of arguing"
"inmates did not follow many rules"	"very confrontational"
"a lot of misconduct"	"a terrible housing unit"
"inmates were always trying to get over on you"	• "sneaky"

Inmate Behavior Post Implementation

There was a striking difference between the descriptions given of inmate behavior after the interventions were implemented as compared to those prior. The aggressive, violent, stressful terms the officers used to describe the behavior were gone. Regardless of whether they were speaking about male or female inmates, each of the officers interviewed commented that the inmates they were supervising were much more controlled, better behaved, and more positive. One of the officers who worked a male unit noted, "They [the inmates] approach each other with respect. They became more compliant with expectations...It was that it became a good place to live" (Officer 1). Another suggested, "I'm not sure how to word it: compliant, more compliant? When asked, or when an order was given to do something it was carried out without question" (Officer 10). Yet another male officer commented, "Quite frankly, the strongest thing I can say is that it [the intervention] works" (Officer 7). He went on to say that he was very much a skeptic. He thought that B-2 was a lost cause, and that he has been surprised how well it functioned under the new system.

In a similar vein, one officer commented, "this housing unit was a disaster in the passive system, and now it's well organized in the active system" (Officer 5).

One of the officers who worked the female unit commented that in the first six weeks of the new system she wrote one misconduct report. When asked if that was a typical sixweek stretch in the old system she laughed and said, "absolutely not" (Officer 11). Another one of the officers who worked the female unit made similar comments, suggesting that there was very little bickering on the unit and very little misconduct (Officer 3). Three officers on the female unit noted changes in the level of stress on the unit. One of those officers stated that stress and tension were things you could feel when you walked on a housing unit, and that the changes to the style of supervision had created an environment that was less stressful for the inmate (Officer 4).

The supervisors noted changes in inmate behavior after implementation of the interventions as well. When asked if he had noticed changes in inmate behavior, one supervisor responded, "yes, absolutely" (Supervisor 1). He went on to state that with respect to the female unit the transformation had been "amazing". He said the unit was not loud, there was a lot of activity, and there were very few misconduct reports written on that unit. Another supervisor echoed that comment but with respect to each of the units. He noted that lock-up was half-empty and there was just less conflict on the housing units (Supervisor 2).

The administrators also made a number of comments in support of the changes in inmate behavior; with one of them commenting,

I just see a whole lot more respect on the unit when I go on, than I had in the past. I see a better attitude in the officers and the inmates, and anyone else going on the unit. The volunteers themselves who are public and don't know a lot about the system have noticed changes in the system. I've had a couple people say to me, it's really a

different environment I'm going into now. I take those comments highly because they don't know what's going on. They don't actually realize what created that difference (Administrative focus group 2).

Another administrator followed with a similar comment.

We can provide you with a letter that a local pastor that runs a program, she's a pastor but she doesn't run a faith-based program, she runs relationships, fatherhood, things of that nature. Sent me a letter that says the attitude of the men and the increase in the level of participation has been incredible since the system has been implemented. They seem to have more hope, and they're more active and willing to participate more with what's going on in the unit (Administrative focus group 2).

And finally a third administrator stated,

Without a doubt, it's been referenced by inmates themselves, it's been referenced by our correctional staff, our lieutenants, by volunteers that come in from the public. Over and over again we've heard about changes in behavior, changes in attitude, more positive outlook, more cooperation (Administrative focus group 2).

Continued Changes in Inmate Behavior

The second round of interviews occurred roughly four months after the interventions began, with the same set of officers, supervisors, and administrators being interviewed. Each group was asked if they continued to see changes in inmate behavior several months into the changes in supervision. All but one of the 15 officers thought that behavior had continued to improve since the last round of interviews. One officer noted that he thought the inmates were less disruptive and that there had been fewer instances of aggressive behavior (Officer 18); while another commented that she could not even recall the last time she had written an inmate misconduct report (Officer 26). Yet another noted that her unit was less disruptive and more orderly, noting that it was an excellent unit to work (Officer 22). One officer simply summarized behavior by saying that his unit had become an "elite tier" (Officer 19).

There were two officers who suggested that although inmate behavior had improved, there were days that were challenging. The first officer commented that some inmates

respond very well to the program, some wanted to be left alone, and some wanted to try and use the new system as a means of manipulating the officer (Officer 20). The second officer stated that most of the inmates tended to follow the rules but he stated," the unit definitely has its days" (Officer 23). When probed about their responses the officers noted that the high rate of inmate turnover made the unit challenging at times. They noted that in a recent period they had received 35 new inmates onto their tier in a two-week period. This turnover created a more challenging environment than one in which there was more limited inmate turnover.

Each of the lieutenants who were interviewed also noticed continued improvement in inmate behavior. One stated that the inmates had been engaging in fewer instances of aggressive behavior and that the numbers of written misconduct reports decreased (Supervisor 5). Echoing the comments made by two of the officers, one lieutenant stated that there was little to no violence on the female unit but that the male unit (B-2) had its "ups and downs", which was something he also attributed to the high inmate turnover on the unit (Supervisor 6).

Two of the lieutenants also commented on the level of stress and tension on the units. They both suggested that the level of stress or tension on a housing unit was something that could be felt immediately after walking onto the unit. Each indicated that it was obvious from walking onto the intervention housing units that the stress and tension had been greatly reduced (Supervisors 4 & 6).

The administrators also agreed that behavior continued to improve. One of the administrators commented that not only did he believe that the number of written misconduct reports had decreased but that the type of misconduct had changed as well. He stated, "I think

we've really seen a change in that we don't have as many assaultive type misconducts, which for our purposes is what we want" (Administrative focus group 3). Another administrator added that with respect to the female inmates the misconduct they did see was being committed by new admissions that had not yet had the opportunity to be influenced by the supervision system. He stated,

An indicator to me that it is working is that for instance on our A2 unit, if you have looked at the misconduct levels, they've dropped tremendously but what is ironic is that a lot of those that were generated were from new commitments. And never again was it an issue with those commitments after they were moved into the population and got to see what things were like (Administrative focus group 3).

Place Management Elements

As was discussed earlier, previous research (Madensen, 2007) identified four operational elements that were viewed as important to the development of *effective place management*: organization of the physical space, regulation of conduct, control of access, and acquisition of resources. The training developed by the administrators was intended to address each of the elements and correct deficiencies they felt existed with respect to each element. The ideal situation would be for the results to be presented so that the importance, or lack thereof, could be clearly identified with respect to each individual element. However, the comments made by many of the respondents often referenced the importance of a number of different concepts, which suggested that the elements were more inter-related than initially thought.

Management of the Physical Space

One of the goals of the designs of the interventions was to increase the sense of ownership the officers took in managing the housing unit. The administration attempted to do

this by turning much of the decision-making authority over to the officers. Giving the officers greater levels of responsibility and holding them accountable for the condition and behavior of the unit was intended to make each officer take a greater role in how the unit was managed. In evaluating the respondents' comments, the successful change in the officer's role could be clearly identified. Many of the respondents commented on the importance of changes to the officer's level of responsibility, and increased physical presence on the unit.

Each of the officers interviewed commented that their role on the housing unit had changed in the active supervision system. One officer noted that she's not just a guard anymore; she's expected to be much more (Officer 4). Echoing that sentiment, another officer commented, "They want us to be unit managers" (Officer 3), while another suggested that his job was to be a problem solver and be active with the inmates (Officer 13). And yet another stated, "You actually have a purpose, you're not just a babysitter, and you actually have a function and a role to play and a purpose" (Officer 14).

Addressing the level of responsibility more directly, one officer commented that a much greater level of responsibility had been given to the officer, which created a system that was more effective at managing the inmates (Officer 7). This change in role prompted one officer to comment that he was actually proud of his job now because he was expected to be more professional; he took pride in putting on his uniform and coming to work. In the old system he was actually embarrassed to put on his uniform and come to work because he thought it was such a "lousy" job (Officer 5).

The tone of these comments suggested that the officers approved of the changes in their role. It is possible to imagine that when employees are given a greater level of responsibility and the expectations of their performance change, a resentment or resistance could develop. That was clearly not the case in this instance. Each of the respondents spoke approvingly of the changes in their role and commented on how these changes led to a better style of management.

The increased level of responsibility also meant that the officers would have to become more active on the housing unit, increasing their presence by interacting with the inmates more frequently. The increased activity was frequently commented on by each group of respondents as being an important factor in the change of inmate behavior. One officer commented that he felt that he now understood how to manage behavior and that he was more efficient at managing behavior as an active manager than as a passive manager (Officer 5). In support of that comment, another officer suggested that behavior could be better controlled in an active system. She continued by suggesting that in an active system the inmates were much more willing to approach the officer and, in turn, the officers appeared much more approachable (Officer 11). Offering a similar response, one officer noted that the inmates were more responsive because the increased level of interaction leads to a better relationship between the officer and inmate (Officer 15).

In summarizing the importance of increased officer/inmate interaction, one male officer stated, "the more active the officer, the more successful the program" (Officer 19), and he went on to stress the importance interaction had in creating a greater level of communication between the officer and inmate. A colleague also commented about the level of interaction, suggesting that interaction between officers and inmates made a difference (Officer 21).

Each of the supervisors interviewed also cited the importance of officer interaction and involvement. During his interview one supervisor commented that they [the lieutenants] had tried to keep the solitary time an officer spent on a housing unit to a minimum, which allowed more time for the officer to observe and prevent certain behaviors from occurring (Supervisor 5). In support of the opinion, one of his partners commented that they [lieutenants] had seen changes in behavior because the inmates were more occupied, suggesting that highly interactive officers did a better job of creating an increased level of activity on the housing units (Supervisor 6).

In an attempt to summarize the changes in the level of officer involvement, one of the lieutenants suggested that in the old way of doing business officers could just sit on the housing unit and push buttons and send inmates to and from wherever they were supposed to go without much thought. He phrased it as the "care, custody, and control method." In contrast, he said in this new system the officers had to interact, they had to be active with the inmates for 8 hours, and they had to "work the block." He noted the mindset of the officer changed to, "this is *my* [the officer's] block and not *their* [the inmates] block", which was a clear reference to the level of ownership felt by the officers (Supervisor 1).

Yet another lieutenant made similar comments. He said the officer could not sit back and watch things on a housing unit, he or she now had to be active and had to get out of his or her chair and wander around the housing unit and get to know the unit. He said the old system was much more of a "don't bother me" type of system, where the officers were accustomed to locking the inmates in their cells and did not want to be bothered with anything that they had to say. He thought that in this new system, the officers had established

better communication systems with the inmates and had a better rapport with them because they were more active. He went on to say the officers had literally become miniature lieutenants. He said that they were now supervisors and were responsible for supervising inmates rather than watching them (Supervisor 2).

Members of the administrative team also noted that they saw changes in both the level of ownership on the part of the officers and in their movement away from a reliance on the podium. One administrator suggested,

You find officers out on the unit now instead of sitting by a podium hiding or in an office where they just aren't concerned. You see them out and involved in the unit now. I have an officer that came to me and said this is unbelievable. I said what's unbelievable? She said, 'To think prior to this I might have gotten reprimanded for this; it's unbelievable that I can have this interaction with an inmate.' So you know they're appreciating that they have that ability to do that (Administrative focus group 2).

One of the administrative team members also commented on how they judged the level of commitment the officers have to the unit. He noted.

I've just noticed a lot more calls personally from officers trying to be proactive and solve problems. You know hey, this is coming up in a week or this is happening in a week. They're actually planning and looking into the future what they see coming up or what they want and asking if they can change something or if they can perhaps do something and just be proactive with problems before they occur (Administrative focus group 2).

And another administrator commented on the level of control that he had noticed on the housing units.

I think they have better control because they have more commitment to the unit. They've bought in the whole concept of I am the manager of the unit, so they have a more concerted effort and concern about what happens on the unit. I really think that yeah, they definitely have better control of the unit (Administrative focus group 2).

If the role of the officer had actually changed in the manner that was noted by the supervisors and administrators, one would expect that the role of the supervisor would change as well. In order to provide support for this suggestion, the supervisors were asked to identify how their roles had changed, if at all. In response, one lieutenant commented that in the old system he would just walk onto a housing unit, bark out orders, tell the officer that he would return in 10 minutes, and then check to see if his orders had been carried out. Now, in the new system of supervision, he noted that his role was not to make decisions but to coach the officer through the decision-making process and provide advice when needed (Supervisor 2).

In a similar fashion, a lieutenant suggested that his job had actually gotten easier because they had given control of decision-making to the officers. He noted that in the old system the phone would ring off the hook with requests from officers for him to make decisions. That simply did not happen in the new system because they were requiring the officers to make decisions about inmate issues that affected the housing unit (Supervisor 3). A similar comment was also made by another Lieutenant who stated that he thought the biggest change he had seen was that very few inmates had questions for him when he walked onto a housing unit. To him, that meant that the officers were actively working the housing units. He said that his officers took the initiative and solved problems and he could tell that because there were not as many problems for him to solve once he showed up to the unit (Supervisor 4).

The Importance of Behavioral Expectations

Another clearly identifiable theme was the officers' belief that behavior had changed because of the development of a clear set of behavioral expectations and consistent enforcement. This was seen as critical to the success of the program by members of the administrative team because they thought there was little attempt to enforce behavioral expectations in the old system. One of the administrators summarized the importance of behavior expectations by saying,

The inmates are starting to realize, 'it's in my best interest to follow the program, it's in my best interest to comply because it's going to make my life easier, it's going to make my stay here easier' and just as we talk about in training, most people want to do the right thing. They never really had the means to apply it and that wasn't the norm before, that wasn't what was expected when you come to jail (Administrative focus group 2).

Addressing the issue of the enforcement of behavioral expectations, one of the officers noted that the passive system was very lax with rule enforcement while the new, active system was stringent on rule enforcement (Officer 5). Mirroring this comment, a different officer commented that the new style of management did not allow him to be as lax with rule enforcement as he was in the old system (Officer 6). This emphasis on rule enforcement was echoed by other officers who noted that there were clearer expectations of behavior established in this system of supervision. One summarized his comments by suggesting that in the old system there was no clear set of expectations, but in this active system "a different bar had been set" (Officer 13). One simply stated, "in the old system there was no level of expectation and now there is" (Officer 15). And yet another attributed the changes in behavior to the development of a consistent approach by the officers. He suggested that now you have an entire group of officers who believe in an active

management approach, which led to consistent enforcement and better inmate behavior (Officer 10).

To demonstrate a commitment to the establishment of clear behavioral expectations, some of the housing units had behavioral expectations posted on the walls and on others index cards containing a summary of the unit expectations were provided to each inmate. In both cases the expectations were identified for the inmate as part of his or her orientation to the unit. In the case of one of the male units, the poster containing the behavioral expectations for the inmates also contained a list of behaviors the inmates could expect from the officers.

Another operational element with respect to eliminating lax rule enforcement that could be identified in the analyses of respondent interviews was the importance of establishing a system of behavioral incentives and disincentives. One officer noted that she thought that a system of incentives and disincentives gave the inmates a reason to behave; if they did not, some of their privileges were restricted and that potential loss was important to them (Officer 26). One of the administrators suggested that the inmates tended to self-regulate their behavior because they did not want to lose the privileges they had earned. He stated,

What I found on those units, especially on the A2 [the female unit] unit is that the existing population takes control. They grasp the new commitments and say, 'look we don't want to ruin what we have here, this is the way things are and this is the way things need to be.' There are no further issues with those people who are committed (Administrative focus group 3).

Another administrator commented,

I think basically because people like to be treated well, and that's what we're doing. We're treating people with dignity and respect and we're also giving them a goal to

work toward. Carrot and stick, you know we're dangling that carrot out there and like I said, people like to be successful. So when we give them the opportunity to be successful, it repeats itself. People want to continue to be successful. That's why I think we got a good working relationship going (Administrative focus group 2).

The Importance of Unit Access

Members of the administration thought that in order to enhance an officer's level of ownership he or she must be given the authority to determine who remained on the unit and who needed to be removed. In addition, the group thought it important to allow officers to restrict inmate access to the dayroom and to determine which inmates were best suited to live in which cells. These concepts were once strictly controlled by the administration, with little to no input given to the officer.

During one round of interviews each of the officers was asked if they thought they had the ability to remove an inmate from the housing unit, and, although only a few indicated that they actually did remove any inmates, many of the officers stated they did feel that they could have if they had seen a need. Their comments suggested that they thought that this was an important management tool even if they had never had to use it. The goal was to gain compliance through strong management, which meant the control of behavior of those on the unit. In responding to a question about the officers' ability to remove inmates from the housing unit, one of the administrators summarized his experience with the 2004 intervention by stating that in the beginning of the intervention the officers were asking for inmates to be removed quite regularly. But after the first three weeks the requests virtually disappeared. He continued to suggest that the reason the officers no longer asked for different inmates was because there was no guarantee that the inmate they would receive was any better behaved

than the one that was just removed; and, perhaps more importantly to this study, he noted that he thought the officers became better managers. Once they figured out to manage behavior by using the tools they were given, there was little need to remove inmates from the unit.

But several officers did comment that they used their authority to move or remove inmates. Of those who did suggest that they used the new responsibility, one noted that being able to manipulate cell assignments within the unit was very important in decreasing the amount of conflict on the unit (Officer 26); while a second commented that she changed cell assignments regularly and that her changes were consistently approved by the administration (Officer 27).

When asked how the process of removing an inmate worked, the administrator responsible for inmate movement suggested,

First I'd ask [the officer] what the issues are, if it's something that we can resolve, without removing him. If not, absolutely, that's your [the officer's] call, you're the unit manager. If you feel it's that evident he's not going to comply and help that unit then we're going to remove him (Administrative focus group 2).

In identifying why it was important to allow the officer to have control of access over the housing unit, one member of the administrative focus group noted that he did not want one inmate's defiant attitude to spread to others. To illustrate the importance of the concept, another member, during the same conversation, told the following story,

We had one individual that was removed and, whenever it was, a day or two later upon going onto the unit, I had a couple of inmates say to me, thank you for taking him off the unit because he [the inmate who was removed] was creating problems over here that we don't want. We don't want to be held liable for his actions (Administrative focus group 2).

One administrator suggested that it provided credibility to the officer by reinforcing his or her control to the inmates. He noted, "it's ownership; that plays a crucial role in how much the officer feels they're in charge of the unit" (Administrative focus group 2).

The Importance of Decentralized Decision-making

As explained earlier, prior to the implementation of the interventions, the decision-making process, the control of unit supplies, and the exercise of authority could be best described as a centralized system. The facility Captain and supervisors (lieutenants) held the most responsibility, with little being shared by the officers. The administration did not think that this system was conducive to building officer ownership and responsibility and moved to create a more decentralized system. Many of the comments presented earlier supported the decentralization of the decision-making process, but a number of the respondents made specific reference to the importance of the decentralization of the unit supplies. In this decentralized system the officer was given more responsibility for the allocation of resources on his or her unit. This element was so important to the success of the interventions that the administration actually delayed the implementation of the 2009 interventions on two occasions. In describing the reasons why they made that decision, one administrator suggested,

Yeah that's why we delayed it, we were concerned about number one, do we have enough people trained to staff the units in the event of vacations, holidays, and such? Do we have the proper auxiliary people trained that understand when an officer is asking for supplies or he needs this, it can't wait until Monday because this officer isn't here? No, when they need it, it's needed now. We need to respond to the needs of the inmate population. I think that was one of our biggest concerns, our biggest concern actually was supply chain. To be honest because, we kept saying 'oh we got everything ready', and then something else would come up with that supply chain. How can you have an expectation to keep cells to a standard when we're not providing the tools to keep them there? (Administrative focus group 2)

During the same discussion, another administrator summarized the importance of the supply chain by saying,

It's probably the most important in the eyes of the inmates. That's the first thing they talk about so we've realized if we're going to be successful, we need the inmate to cooperate and if we can't give them the basic needs, because that's what the supply chain really is the basic needs, if we can't start with the basic needs then they're not going to pay attention to anything else we're trying to do with them. (Administrative focus group 3)

During the second round of interviews, the administrators were asked if the changes that were made to how supplies and materials were distributed on the unit were perceived as successful and they indicated they thought they were. When asked if the officers had control over supplies such as indigent packs (hygiene items given to inmates with no money on their commissary accounts), toothpaste, and other supplies, one administrator responded,

Absolutely, and it happens. That's why we put the extra stuff on the units now so they don't even have to ask for it. It's one phase that has absolutely worked; talk about basic needs, every issue is addressed from the food to the clothing to what have you (Administrative focus group 3).

When asked their opinions about the ability to hand out supplies and replace broken or defective institutional items such as mattresses and towels, the officers supported the comments made by the administration. Many of them noted that the changes to this system were significant, with one officer noting that she handed out supplies and materials in a manner that she was never able to in the old system. She characterized the change in the system as "tremendous" (Officer 20). Another noted that given these changes, the officers now appeared more responsive to the needs of the inmates, which, in turn, produced better inmate behavior (Officer 18). A third officer said that the changes in the way they handed out materials and supplies was "a big plus" to the system and that if the inmate was in need of

something they, as a group of officers, were able to immediately respond and if the inmate made a request for a services or resources, it was provided (Officer 21). And yet another officer reported that she kept track of who was indigent (has no money on an institutional account) and who was not and that she handed out hygiene packs to those who were indigent on a regular basis. The same officer also reported handing out new uniforms and other resources when necessary (Officer 27).

Gender Perceptions

The third and final round of interviews was directed at determining the perceptions of the significance of gender held by the officers, supervisors, and administrators, and at determining the importance that respect and fairness had on perceptions of legitimacy and control. With respect to gender, each of the respondents was asked whether or not they thought that male and female inmates required different types of supervision. Each of the officers who thought they were able to answer that question (one said he could not) stated that men and women did need to be supervised differently. Most of the officers stated that the differences centered on their belief that female inmates were needier than male inmates. In response to the question as to whether females needed to be supervised differently, one female officer responded by saying, "Yes, because women are needier. The level of intimacy is different for females than males and the sets of inmates have to be watched or it could lead to trouble" (Officer 31). One officer commented that because of the differences in the neediness between the genders, officers who worked with female inmates needed to be more understanding and have higher levels of officer/inmate communication (Officer 32).

The administrators' comments were similar to those made by the officers. As a group they thought that female inmates needed to be supervised differently because their individual and collective needs were different. Whether the differences in needs be emotional, physical, or as a result of the issues that led to their incarceration, one administrator noted that the "basic needs of female inmates have many more layers [than male inmates]" (Administrative focus group 4). He continued to explain his analogy by suggesting that the layers were similar to that of an onion: when you peel one layer away another can be seen. During the same conversation another administrator capitalized on the analogy by sharing the results of a needs survey he gave to the female inmates. To his surprise, 70% of the female inmates self-reported that they had a recognized mental health diagnosis. Although he had not yet conducted the same needs assessment with the men, he suggested that he would be surprised if the percentage was that high (Administrative focus group 4).

The supervisors, on the other hand, disagreed with the officers' and administrators' assessments that females needed to be supervised differently. Each of the lieutenants was quick to offer the opposite response to that question and appeared very firm in their response. Although one recognized that female inmates have different needs than male inmates, he said that the basic routine and structure to the housing unit remained the same.

The officers, supervisors, and administrators were also asked whether or not they thought that the interventions were effective at controlling the behavior of both male and female inmates. Regardless of who was asked the question, each group commented that the new supervision system was effective at controlling inmate behavior for both male and female inmates. One officer commented that the basic concepts of treating people with

respect and meeting their basic needs were common to both genders and, as a result, the style of supervision introduced by the interventions worked well for both (Officer 35). Another, in making the comparison between male and female inmates stated, "The women bought into it [the style of supervision] a little easier and quicker. The men are more street savvy, but if you lay out the expectations it will work [for them]" (Officer 36).

Finally, with respect to the significance of gender, each of the respondents was asked whether or not they thought the supervision system was implemented differently on the male and female housing units. All but one of the officers stated that the system was implemented differently on the male and female units. One noted, "Yes, the system [supervision system] has been implemented differently. The female officers are more consistent with the inmates than the male officers are and they are stricter. This comes from a more consistent post rotation system" (Officer 33). Along a similar line of thought, one commented, "The female officers are stricter with the inmates than the male officers are and they stick to a routine more than the male officers do" (Officer 31).

As a possible explanation, one of the male officers suggested that the female officers had to be stricter because they did not have the luxury of an "RHU" (Restrictive Housing Unit, commonly referred to as the "hole") like the male officers did (Officer 37). Similarly, another suggested that the reason the female officers, who worked the female unit, were stricter and kept to a more consistent routine was because they did not have the leverage to use housing as a means to control behavior. He noted that if a male inmate did not comply with the behavioral expectations set by the officer he could be transferred to a less desirable housing location (other than RHU) within the institution (Officer 34). The location he

specifically referred to happened to be the control unit for this study, and was a linear housing unit with no dayroom access that was built in the 1870's. The dramatically less desirable living conditions, he suggested, helped the officers control behavior. The officers assigned to the female unit did not have the same benefit. He noted that there were no less-desirable female housing units and the officers had to manage behavior where it occurred. His suggestion was that this fact necessitated differences in the implementation of the supervision system.

In addition to being stricter, several of the officers noted that the female housing unit maintained a much more consistent structure and routine than did the male unit. In response to questioning as why this might be the case, one officer suggested that the line of questioning was attempting to compare apples to oranges. He noted that the system had to be done differently because inmates were different from one another and could not be dealt with universally. He went on to suggest that the style of supervision differs among inmate types independent of gender. He used male, mental health inmates as an example, noting that they had to be supervised differently than male, general population inmates (Officer 35).

Another reason given to explain why the interventions may have been implemented differently came from an officer, who noted,

Men and women don't want the same activities. A technique [for keeping inmates occupied] that might work for men might not work for women. Men don't like to clean and are not as concerned with hygiene where women might be more motivated in this area (Officer 35).

Others gave a similar reason for the perceived differences, with one suggesting that men and women liked different things and it was easier to provide programming for the women (Officer 36). The differences in the nature of the inmate were also noted by other officers as a

possible explanation for the differences in the way the units were operated. One noted, "Females adapt much easier than men do. They do not resist change as much; the success of the program with respect to the women comes from their willingness to change" (Officer 37). In a similar statement another noted, "It is a woman's nature to be organized and the males have to be pushed" (Officer 33).

In contrast, the supervisors and administrators did not feel that the interventions were implemented differently with respect to the male and female units. One of the administrators noted that although the concepts were similar he thought that the officers who worked the female unit bought into the system more readily and, as a result, "tweaked" the style of supervision to a greater degree than did other officers (Administrative focus group 4). One member of the group said, "The difference is in how it [the supervision system] is applied by the officers. The different needs women present make them more in need of individual attention." Later in the discussion one of the administrators made the observation that the implementation comparisons were not accurate because the women "never achieve 100%" separation". What that referred to was the separation of custody types identified through the process of classification. Because there were so many male housing units, the males were segregated by custody assignment: minimum custody inmates lived only with other minimum inmates, mediums with other mediums, and maximums with only maximums. But that was not the case with the female inmates. Fewer housing unit options forced the custody assignments to be comingled more often than was done with men.

In his response to the perceived differences in implementation, one of the supervisors suggested that unintentionally, through the process of officer/inmate interaction,

implementation for the housing units took their own direction (Supervisor 7). In support of that comment, another of the Lieutenants noted that different inmate temperaments resulted in differences in supervision (Supervisor 8). None thought that this was unusual or out of the ordinary. From the conversations with the administrators and supervisors it seemed that the suggestion that there were differences in the implementation of the interventions based on gender was an outsider's view of corrections and one that tried to provide too much definition to the process. This belief was summarized most succinctly by an officer who stated, "This is not a cookie-cutter system [style of supervision], it would work differently on any tier" (Officer 35).

Perception of Legitimacy

The third and final round of interviews was also designed to assess whether or not the officers' perceived level of legitimacy had changed as a result of the interventions. This line of questioning was pursued to try and determine a causal mechanism that might indicate why inmates respond well to better management. Liebling (2004) suggested from her findings that when an inmate viewed authority as legitimate he or she was more likely to be compliant with institutional rules. She noted that legitimacy was linked to an inmate's perception of fairness and consistency. Since the changes in staff behavior were addressed in both the first and second round of participant interviews, the questions posed with respect to legitimacy in the third round of interviews dealt with the perception of legitimacy itself, the perception of fairness, and the development of a more consistent form of supervision.

Legitimacy

With respect to the larger concept of legitimacy, each group of participants was asked whether or not they believed that the officers were treated with greater respect by the inmates after the implementation of the interventions and whether or not they thought the inmates were more compliant with officer requests and demands. A majority of the officers thought that the inmates did treat them with a greater level of respect after the implementation of the place management interventions. Several of the officers did point out, however, that they felt that the measure of respect was more a reflection of the officer's change in attitude toward the inmate rather than the implementation of the intervention itself (Officers 33, 35, & 36). This change in attitude led to the belief that respect had to be earned not assumed. These comments were interesting in that a change in the officers' attitudes and behaviors was exactly what the interventions were designed to accomplish. The strength of the intervention almost seems to be hidden from the officers because they believed the interventions were designed to change inmate behavior, not their own.

There were some officers, however, who did feel it was the supervision system that fostered the understanding that one had to give respect to get it. One commented that because there was so much interaction between the officer and inmate in this system respect becomes more important than ever. This system, in his opinion, required officers to learn how to interact and deal with inmates to a much greater degree than did the old system (Officer 35). Another officer commented that in this system the inmate did not feel as if he or she was being treated badly. He went on to comment, "You can get more from an inmate if they do not feel as if they are caged" (Officer 32). Another suggested that in this system the officer

was seen by the inmate as more of a person rather than a "CO", and that those who expressed a willingness to work with inmates enjoyed greater levels of respect (Officer 33).

The supervisors and administrators were also asked whether or not they perceived changes to the level of respect given to officers. Although both groups stated that they did feel there were positive changes in the way the officers were treated, they differed on whether it was a function of the intervention. As with some of the officers, the supervisors suggested that the level of respect shown to officers was more a function of the nature of the officer rather than the supervision system. They suggested that if the officer was willing to work with the inmates then they received respect; if they were not, then they were not afforded the same treatment. The administrators, on the other hand, suggested that the system of supervision generated more respect for the officer because he or she was seen as the "go to guy", or the decision-maker on the housing unit. In the old system, one administrator noted, the officers did not make many decisions nor did they make many demands or requests of the inmates (Administrative focus group 4).

To parallel the comment made by that administrator, the officers were also asked if they perceived that the inmates were more compliant with their requests and demands after the implementation of the interventions. Each said that they thought the inmates were more compliant, with some attributing this to the increase in interaction between the officer and inmate (Officer 35), some to the development of respect (Officer 33), some to better rapport (Officer 32), and some simply to the fact that the inmates seemed to like the new supervision system (Officer 31). The responses made by the supervisors and administrators with respect to this question were similar to those expressed by the officers. One supervisor suggested this

was because the officers had a greater level of interaction with the inmates, had established a different level of trust, and were seen as more approachable by the inmate population (Supervisor 7).

Consistency and the Existence of Formal Procedures

The comments made with respect to the concepts of consistency and the existence of formal procedures were difficult to distinguish from one another because most of the officers noted that the development and enforcement of formal procedures was one of the more important elements of the interventions. This was not unusual considering the officers were accustomed to working a system that lacked consistency and was characterized as having lax rule enforcement.

A number of respondents commented about the importance that clarity of behavioral expectations had on developing a more consistent style of supervision. One noted, "Everybody [officers and inmates] has a responsibility and everybody has to work as a team" (Officer 31). Another commented, "If you are consistent [with expectations] then they [the inmates] know how to behave and act" (Officer 33). In support of these comments, one of the administrators noted during the final focus group interview that, "Consistency is key: inmates respect consistency" (Administrative focus group 4).

In response to the comments made regarding the clarity of rules and the consistency of operation, the officers were asked whether or not the housing units functioned in a more predictable manner than in the past and whether or not there was a more identifiable routine. With complete agreement each of the officers suggested that the level of predictability and routine was greater in the place management system of supervision. Although some of the

officers commented that this was hard to accomplish and took some time, they did recognize it as an important concept. In providing an example of the level of routine, one officer suggested that one only needs to observe the meal process to truly appreciate the value of routine (Officer 32). He noted that once the feeding process concluded the inmates "instinctively" began to clean up and break down the feeding line without any instruction or direction from the officer.

Interestingly, the administrators cited the same example in their response as to whether or not a consistent routine had been accomplished. One of the administrators noted that the feeding process had a "militaristic" style, which he used to demonstrate the ultimate level of routine and predictability (Administrative focus group 4). The administrators went on to note that they thought that routine and structure were a function of programming as well. They suggested that there was a concerted effort to increase the level of inmate programs to assist in the development of order and routine. They, along with the shift supervisors, noted that inmates appreciated programming and wanted to participate as much as possible because it added structure and routine.

Each of the participants was also asked whether or not routine and predictability were important to the control of inmate behavior. Each of the groups thought that it was, with one officer suggesting that without it there would be "mayhem" on a housing unit (Officer 35). Another officer noted that if the routine or structure to a unit was changed it "throws the inmates off", making their behavior harder to manage (Officer 34). One of the lieutenants mirrored that comment by suggesting that, "change brings resistance, and consistency brings good behavior" (Supervisor 8).

Perception of Fairness

Since it was not possible to ask the inmates whether or not the new style of supervision was perceived as fair, the officers, supervisors, and administrators were asked for their observations on this issue. Each of the participants did suggest that the inmates perceived the style of supervision as being fair. Several of the officers noted situations in which, while walking through other parts of the jail, they were stopped by inmates who had been removed from an intervention housing unit for failing to comply with the behavioral expectations and asked to receive a second chance at housing in that unit. Each of the officers who told a similar story suggested that this demonstrated the perception of fairness as the units the inmates were removed to do not operate similarly to the intervention housing units (Officers 32 & 35). To further demonstrate support for the perception of fairness, one of the administrators commented that if one were to question every female inmate who had been subject to each style of supervision each would agree that the place management style of supervision was fair (Administrative focus group 4).

Quantifiable Nature of the Place Management Elements

In an attempt to identify the level of importance of the individual elements of *effective* place management, the officers, supervisors, and administrators were asked whether or not they could quantify how often they employed a particular supervision strategy. None of the participants could do so. The closest a respondent came to being able to quantify the use of an intervention strategy was with respect to the ability to remove an inmate from a housing unit, or change a cell assignment within a unit. In some instances the officers said they would

occasionally remove an inmate from the unit or change a cell assignment, but none could get closer to a quantifiable figure than phrasing such as that.

Summary of Qualitative Findings

The thematic analyses were completed on data collected using two different types of qualitative methods: individual, semistructured interviews and focus group interviews. The data were collected in interviews with officers, supervisors, and administrators. In total, 40 officers and 9 supervisors participated in semistandardized interviews and five focus groups were completed, four with members of the administrative team and one with supervisors. Each individual and focus group was asked the same set of scripted questions during each of the three rounds of interviews, and each of the individuals or groups was asked probative, unscripted questions in response to issues that were presented during their initial responses that warranted further exploration.

The two pre-implementation focus groups, one with administrators and one with supervisors, were completed on May 20, 2009. The first round of interviews was completed between December 1, 2009 and January 21, 2010, with all of the officer interviews being completed within 45 days of implementation of the interventions. The second round of interviews occurred between March 31, 2010 and April 13, 2010, approximately four months after implementation, and the third round occurred nearly 28 months after the initial implementation, between March 28, 2012 and May 1, 2012.

In trying to assess the integrity of the intervention, each of the respondents were asked a series of questions to determine whether or not the officers possessed the place management skills they were being asked to implement prior to the start of the interventions.

The responses were consistent in that the respondents did not feel that the officers had any knowledge of place management skills or practices prior to the intervention. Establishing this fact was seen as an important element in eventually attributing changes in behavior to the implementation of the interventions.

With respect to inmate behavior, each of the respondents was asked to characterize inmate behavior pre- and post-intervention. The descriptions of the type of inmate behavior that was typical varied, ranging from aggressive, to disrespectful, to nuisance behavior. The post-intervention descriptions differed quite markedly from the pre-intervention descriptions, with the majority of respondents commenting that there were fewer violent incidents and the level of compliance to facility rules and order had increased. These opinions remained consistent over the course of the study period.

Getting the respondents to identify the importance of the individual place management elements proved more challenging; however, a number of common themes could be drawn from the data that supported the importance of one or multiple elements. Officers, supervisors, and administrators agreed that there was a change in the role of the officer with respect to how he or she managed the housing unit and each of the groups expressed the opinion that there was an increase in the amount and quality of officer/inmate contact. The respondents also noted that there was a more consistent enforcement of behavioral expectations, that officers were given greater control of who remained on the housing unit, and that there was a shift form a centralized system of decision-making to a more decentralized, officer-driven approach.

When asked to consider the issue of gender, the respondents did note that the genderneutral, place management approach would be, and in fact was, successful at reducing
unwanted inmate behavior from both male and female inmates. Some of the respondents,
mainly officers, did comment that the place management interventions were implemented
differently on the male and female housing units because the needs of the two groups of
inmates were not the same. The officers who referenced the differences were most likely
speaking from their perception rather than direct knowledge. During the study period none of
the female officers worked the male treatment unit and none of the male officers worked the
female treatment unit, which meant none of the officers had direct knowledge of how the
other unit was being run.

Finally, in evaluating the responses as they relate to the issue of legitimacy, there was strong agreement that the interventions created an environment where inmates were more compliant and respectful. The officers, supervisors, and administrators stated that the interventions helped to create a system of supervision that was more consistent, emphasized the quality of officer/inmate interactions, and placed value on stringent rule enforcement.

CHAPTER 7: DISCUSSION

The research questions presented with this study dealt with changes in inmate behavior among both male and female inmates, changes in the perception of behavior, and changes in the perception of legitimacy of authority. A mixed-method design was used with the intent to provide a broader understanding of these subjects than would have been possible through the evaluation of either the quantitative or qualitative data alone. Studies on inmate misconduct consistently reported that using official, institutional reports to determine the rate at which inmates engaged in certain types of aggressive or negative behavior underestimated the frequency of that behavior (McCorkle, 1992; Wolff et al., 2007). Relying on quantitative data alone could lead one to believe that a behavioral intervention was effective when, in fact, it was not. The use of both qualitative and quantitative data was intended to rectify this fact.

The mixed-method design was also intended to help identify the causal links that may exist with respect to the individual elements of *effective place management*. Identifying the elements involved in establishing an effective, place-based intervention was important, but determining why those elements were critical was important as well. The qualitative data was intended to elicit reasons as to why behavior changed, not simply to identify whether or not the elements identified by Madensen were properly operationalized. In discussing the significance of the findings, the chapter begins with a discussion of inmate behavior and then progresses to a discussion of the elements of *effective place management*. Those elements for which the least direct evidence exists are presented first, followed by the elements that require greater consideration. The discussion is presented in this manner because the data

clearly suggested that there was an identifiable connection or intersection between the situational concepts of place management and the social concepts of legitimacy. That connection was most clear with respect to two of the elements. Through this method of discussion it is possible to suggest an expanded place management model that incorporates what has been reported about the importance of legitimacy. The chapter ends with a discussion of the issues related to gender and its influence on behavior and the perception of control.

Changes in Inmate Behavior

Several of the research questions related to determining whether or not the place management interventions could reduce the amount of major misconduct and change the perceptions of inmate behavior among officers, supervisors, and administrators. Regardless of whether one considered the quantitative or qualitative data, each set provided evidence to suggest that the place management interventions did positively influence inmate behavior. A review of the quantitative data demonstrated that written, major misconduct reports were reduced on the male, treatment unit, E-Tier, by 69%, and on the female, treatment unit, A-2, by 68%. In neither of those interventions were written, major misconduct reports reduced significantly on the control unit.

The inclusion of control unit was important because it was designed to address some of the issues that could cause a challenge to the validity of the results, namely history and maturation. It also allowed for one to make a more direct causal link between the implementation of the interventions and changes in inmate behavior. If either history or maturation were a valid challenge to the results one would expect changes in the patterns of

misconduct to be similar for all of the housing units because history and maturation would affect the population as a whole similarly, not simply those units involved in the implementation of the interventions. Since a similar change was not observed in the control unit for either the 2004 or 2009 interventions, this suggested that history and maturation were not a concern.

If one were only to use the results of the quantitative analyses to make inferences as to changes in inmate behavior, it would be possible to hypothesize that the officers simply changed how they responded to inmate behavior: relying less on written reports. Previous research had demonstrated that officers were often reluctant to report institutional infractions even if those infractions were violent (Goetting & Howsen, 1986; Hewitt et al., 1984; McCorkle, 1992). Hewitt, Poole, and Regoli (1984) reported that over a 90-day period officers reported observing over 200 inmate assaults yet never issued a single misconduct report. Adding a qualitative component to the assessment of inmate behavior provided credibility to the quantitative data and strengthened the conclusion that the place management interventions reduced the amount of major misconduct on the treatment units. If the observed changes were a result of the officer's unwillingness to report certain types of behavior rather than the result of better management, one would expect that the perceptions of behavior held by each group of respondents would not change. That was not the case. The references to the units as being "lawless", a "gladiator block", a "rookie block", or "a terrible place to work", clearly suggested inmate behavior that was violent and difficult to control prior to the implementation of the interventions. Those comments were not heard after the

interventions were implemented and were replaced by comments that suggested the inmates were more compliant, respectful, and well managed.

The suggestion that officers were reluctant to report institutional infractions was also refuted by the officers' assessments of rule enforcement both prior to and immediately following changes to the supervision system. Many of the officers commented that prior to implementation of the interventions there were very few behavioral expectations placed upon the inmates and the rule enforcement that did exist was lax. However, the same officers noted that the place management system required strict rule enforcement, which was seen by them as a critical component of the successful control of inmate behavior. If, as the officers suggested, strict rule enforcement did exist after the interventions, one would expect the numbers of written infractions to increase if inmate behavior did not improve. But, as a number of respondents commented, the inmates responded quite well to the structure and routine of the new system, lending credibility to finding that there was a reduction in major misconduct.

The combination of quantitative and qualitative data also helped support the causal link between the interventions and changes in inmate behavior because of the ability to assess continued change over time. If positive changes in behavior continued over a long period of time it would be easier to link changes in the style of supervision to changes in inmate behavior. A temporary decline in misconduct, one in which behavior began to rise to pre-intervention levels shortly after implementation, could have suggested that the observed changes were more a result of inmate manipulation than intervention effect. It could have also indicated that the changes in officer behavior did not remain constant; meaning that the

implementation of an active style of supervision was temporary. However, each group of respondents remained positive about the changes in inmate behavior during the study period. The strong support shown over the length of the study strengthened the argument of a causal link between the implementation of the interventions and the changes in inmate behavior.

Another important observation made from review of the data was that the interventions affected a wide variety of behaviors. The previous situational interventions that were discussed in this research were designed to deal with the specific types of behavior (La Vigne, 1994; Wortley & Summers, 2005). This research, however, was designed to be much more general in nature. The goal was to reduce overall disorder on the housing units not one type of behavior as compared to another. The suggestion made by this research was that a place management design, one that focused on the place-specific nature of misconduct rather than the offense-specific nature, would be effective at reducing the general levels of disorder more typically found in jails. Although a number of officers, supervisors, and administrators specifically noted concern about violent and aggressive behavior, a number also commented about more general forms of disorder. Many of the comments spoke to improvements in the general climate of the units, where respondents used language such as "better controlled", "more respectful", and "more compliant" to describe inmate behavior. Even four months into the interventions one of the officers noted that her unit was less disruptive and more orderly than it ever was. These types of comments provided support to the conclusion that the place management interventions were effective at reducing general forms of disorder.

Another concept that could be used to provide evidence as to the general improvement of inmate behavior was the suggestion that the level of tension or stress on the

housing units lessened. Corrections officers, supervisors, and administrators routinely suggested that tension and stress were elements that could be felt when one walked onto a unit. By characterizing the unit as having a "wild west" or "street" mentality it was not surprising that they were stressful places to live and work. Some of the officers reported that the environment was so stressful that they experienced health problems (Officer 10), or problems with their relationships at home (Officer 4). After the interventions, those same officers suggested that the units were so well run that they would object to losing their assignments and being placed somewhere else in the institution.

Finally, with respect to the changes in inmate behavior, the most important piece of evidence might be the uniformity of the responses across groups. Given the fact that officers spend the majority, if not the entirety, of their day in contact with the inmates, it would not be surprising if they were to express different opinions than supervisors and administrators who spend relatively little time interacting with inmates. The fact that all of the respondents reported positive changes in inmate behavior corroborates what some officers termed "amazing" transformations in the units.

It should be noted that of all the interviews that were conducted, only one stood in stark contrast to the others. During the second round of officer interviews one of the officers was clearly bothered by her participation in the interview. Her assessment of the situation was negative, as was her assessment of inmate behavior, and she was reluctant to express any opinions at all. She complained about the inmates, the preferential treatment she believed the inmates were receiving with this new style of supervision, and about the disrespect she perceived certain officers were given by the administration. At one point during the interview

the moderator stopped taking notes in an attempt to calm her obviously uncomfortable attitude. There seemed to be no apparent explanation for her responses and those who were interviewed after her had noticeably different observations and experiences, despite working the same housing unit. The opinions she expressed have not been discounted in this research, but they were so dramatically different from those expressed by other respondents that they have been taken to be isolated, and not reflective of the overall experiences resulting from the interventions.

Identification of the Importance of the Individual Place Management Elements

Assessing or exploring a possible equal link between the intervention elements

Assessing or exploring a possible causal link between the intervention elements and changes in inmate behavior was an important function of the qualitative process. Although Madensen (2007) hypothesized the importance of four *effective place management* elements, her research was designed to identify common components, not to test their importance to change. This research provided the opportunity to ask corrections officers, supervisors, and administrators about their perceived level of importance. One noticeable conclusion drawn from the evaluation of the individual and focus group interviews was that it was difficult to clearly establish a causal link between some individual elements of the theory and changes in inmate behavior. That is not meant to suggest that one does not exist; rather it suggests that the elements are so closely related in this particular environment that disentangling the significance of each was difficult. The nature of the original environment from which the elements were first identified (bars) was much more limited in scope than that of a jail environment. It was possible that the complexity of the environment made identifying the significance of each element more challenging. The section that follows identifies the

changes in the operational systems that were viewed as important to the control of inmate behavior.

Organization of the Physical Space

This element was perhaps the most difficult to identify, not because evidence did not exist but because the evidence was so heavily inter-connected to other elements. Prior to the implementation of the interventions the administrators continually reported that in order to be successful at regulating behavior they had to increase the level of responsibility the officers were given with respect to the general conditions of the housing units. It was apparent from the qualitative data that the officers did assume a greater level of responsibility, but that responsibility was most often attributed to concepts associated with *regulation of conduct*. There was some evidence that suggested this element contributed to the development of responsibility, but it was not strong.

In addition, one of the goals in the operationalization of this element was to create a decentralized system of unit decision-making. Again, there was evidence to suggest that a decentralized system was created, but the importance of that system was most often mentioned with respect to the distribution of material and supplies, not the repair and upkeep of the housing conditions. The decentralized distribution of materials and supplies was a component of the fourth element, *acquisition of resources*. The lack of strong evidence for this element seemed to be a reflection of the inter-related nature of all four elements rather than a statement that it played no role in the control of behavior.

Control of Access

The data supported the importance of this element, but a causal link was difficult to establish because relatively few officers reported that they had the needed to remove inmates from housing units. During the second round of interviews each of the officers was specifically asked if they felt they had the authority to remove an inmate from a housing unit if he or she did not comply with the established behavioral expectations. Without exception the officers noted that they did feel they had that authority, and they also uniformly noted that having that authority was an important part of their ability to control inmate behavior. However, only two officers reported that they actually used that authority and requested that someone be removed from the unit. One of the officers thought that it was so important to the control of behavior that not having the option to remove an inmate required that they be supervised differently. He suggested that this was why the female unit was perceived as being supervised more strictly than the male units, because they had limited housing options and removal from the unit to a less desirable housing assignment was not a way in which they could redirect and regulate negative behavior.

The importance of this element could be detected in the stories told by both officers and administrators. Interestingly, they told strikingly similar tales in which inmates, who were removed from one of the male housing units for poor behavior, approached them in another area of the jail and requested a second chance at living on the treatment unit. The inmates, according to those who told the story, indicated that they were now willing to comply with the behavioral expectations of the units and promised positive behavior if they were permitted to return. The story ended by each officer or administrator noting that when

the inmates who made such requests were returned to the unit they were never again a behavioral problem, suggesting a causal link between control of access and the control of inmate behavior.

Establishing a Relationship between Place Management and Legitimacy

The final two elements of the *effective place management* model appeared to be heavily influenced by the concepts associated with legitimacy. The relationship between elements of situational and social models provided support for the suggestion that a blended approach would be effective at controlling behavior. In evaluating the responses given by the officers, supervisors, and administrators the themes drawn from the concepts of *regulation of conduct, acquisition of resources*, and legitimacy were highly correlated. This led to the conclusion that these concepts could serve as the foundation for a combined model.

Acquisition of Resources

In operationalizing this element the goal of the administration was to create a decentralized distribution system whereby the officer would be able to readily distribute supplies and materials to the inmates on the housing unit. The administration thought that such a system would allow the officer to immediately address the basic needs of the inmate and develop a better understanding of what the unit needed to operate efficiently. Staff interviews clearly identified the importance of decentralized decision-making both as it related to development of ownership and the acquisition of resources for the units. From an administrative perspective, the element was so important that the implementation of the 2009 interventions were delayed twice because administrative staff did not think that the supply chain was established in such a fashion that would allow the officers to be successful in

controlling resources. In support of that belief, several of the officers noted during the second round of interviews that being able to meet an inmate's basic needs by providing them with immediate resources and materials played an important role in the regulation of behavior.

One officer noted that the change in the supply chain, giving the officer immediate control over supplies and materials, had a "tremendous" effect on behavior.

The supervisors and administrators repeatedly commented that creating a system that decentralized decision-making was important to the development of a sense of ownership among the officers. Holding the officer accountable and forcing decision-making at its lowest level was important because in the old system of supervision the officer was required to make very few decisions and did not take an active interest in the decision-making process. The administrators also spoke of the importance of this element with respect to the development of the officer's reputation. They commented that giving the officer the ability to meet and influence an inmate's basic needs by distributing supplies and resources provided the officer with a sense of credibility and caused him or her to be seen with greater respect. The supervisors noted that those who took this role more seriously received better compliance from the inmates and were treated with greater respect.

This was a definite shift in the role and behavior of the officer. The comments made by the respondents clearly indicated that this element changed their relationship with the inmates. Being responsive to the needs of the inmates directly related to the quality of the contact between the officers and inmates and changed the dynamic of the relationship. If inhumanness could influence the perception of illegitimacy (Sparks & Bottoms, 2008) it

would seem plausible that the humane interaction between officers and inmates could influence the perception of legitimacy.

Regulation of Conduct

In the review of the qualitative data, the second of Madensen's elements, *regulation* of conduct appeared to be the most critical concept in the control of inmate behavior. As with acquisition of resources, it also appeared to provide a useful and logical link to the combined situational/social model initially proposed by Sparks, Bottoms and Hay (1996). The goal of the situational model was to reduce the amount of criminal opportunity by increasing the officers' involvement on the housing units, establishing a uniform set of behavioral expectations, and produce a more consistent form of rule enforcement. Those situational concepts merge quite well with the social goals of the legitimate expression of authority by producing the perception of consistency and fairness, both of which were noted in prior research as being critical to the development of legitimacy (Liebling, 2004; Sparks & Bottoms, 2008; Sparks et al., 1996). From the thematic analyses of the qualitative data, an officer's involvement on the housing unit and the development of clear and consistent standards and rules were most often reported as being critical to the regulation of inmate behavior.

Active Supervision

The comments made by all of the respondent groups clearly identified the active, mobile status of the officer as being a critical part to the control of inmate behavior. In supportive comments made relative to the changes in the level of interaction between officers and inmates, one of the officers commented that he was surprised by the supervision

strategies presented in the implementation training because in the old system of supervision they would have been reprimanded for the same level of officer/inmate interaction that was being demanded in the new system. The comments made by supervisors and administrators clearly supported the officers' suggestions that the level of interaction had increased. All of the shift supervisors suggested that on their inspections of the housing units it was apparent that the officers were not relying on the podiums and were "working the unit" to a greater degree.

After the interventions were implemented every officer who was interviewed commented that the new system of supervision required a higher level of activity and involvement in the unit than did the old system. This level of activity was given credit by many officers for creating a better system of communication between the officers and inmates. In turn, it was felt that the improved level of communication made the officers seem more approachable, creating a greater willingness on the part of the inmate to comply with directions. Not only were they viewed as more approachable, but one of the administrators thought that they were now seen as a legitimate resource for the inmate. Because they were making the majority of the decisions that were related to the housing units, the administrator noted that the officers were seen as the "go-to-guy" by the inmates: a status, in his opinion, that generated greater levels of respect and compliance.

This improved level of communication was one of the advantages Sparks, Bottoms, and Hay (1996) spoke about when they suggested that a blended management regime could prove more effective at managing inmate behavior than either the singular situational or social approach. They commented that an institution as a whole could fail to acquire

legitimacy simply because the officers lacked a personal and humane approach to the inmates. In later work, Sparks and Bottoms (2008) suggested that when officers were interactive with inmates they developed "personal credibility" (p.95), which ultimately led to greater compliance to their directives.

In her work on the morality of correctional environments, Liebling (2004) also noted the importance of the officer/inmate relationship as it specifically related to the writing of major misconduct reports. She suggested that in correctional systems where the officers and inmates have a distant relationship the officers were more likely to use written discipline in response to inmate behavior; noting that proximity to the inmate had a way of breaking down stereotypes and building relationships. The results of this research suggested that she could be correct with respect to the influence a distant relationship had on the reliance of written discipline. However, it would appear from an examination of the qualitative data that the important factors in reducing the use of written discipline were the level of officer activity, involvement, and/or a sense of ownership, not simply proximity to the inmate. Proximity alone did not appear to create a strong relationship, nor did it build personal credibility. It appeared from the results of this research that it was the quality of the relationship and not necessarily the proximity that was critical.

Having podular direct housing units, the officers in Northampton County were in close proximity to the inmates prior to the implementation of the place management interventions yet written discipline was common. To highlight the value of the quality of supervision over the quantity of it, a number of officers and supervisors commented that it was the change in the attitude of the officers that was the critical component to the control of

behavior, not simply the change in the structure of supervision. Once the officers became more responsive to the inmates and tried to manage through better quality interaction they developed this sense of personal credibility.

The Importance of Behavioral Expectations

Another commonly cited theme that tied the importance of regulation of conduct to the idea of the legitimacy of authority was the successful transformation from a system of lax rule enforcement to one in which behavioral expectations were enforced more consistently. Lack of rule enforcement was cited in the literature as a contributing factor to criminal behavior at any given location. In their review of risky facilities, those small proportions of facilities that account for a large proportion of crime, Eck, Clarke, and Guerette (2007) suggested that risky facilities had fewer rules and lax enforcement when compared to similar types of facilities that had fewer instances of criminal conduct. Felson et al (1996) furthered the discussion of lax enforcement by suggesting that when lax enforcement at a given location persisted over time it became harder to change the behavior of the individuals who occupied or used that space. Officials in Northampton County agreed with this suggestion and thought that the lax rule enforcement that had existed in the treatment housing units over time contributed to the negative, violent, and disruptive climate that was previously described. Although they recognized the influence the long-standing method of operation had on inmate behavior, their hope was that it would not be difficult to change.

Many of the respondents noted that they thought the increased emphasis on enforcing a stringent set of behavioral expectations in the new supervision system was critical in the control of inmate behavior. Although some officers noted that it took a while to create a

system where consistent enforcement was accomplished, it was thought to be an important factor in producing positive change. In post-implementation interviews each set of respondents noted that they thought the consistent, stringent, enforcement of standards of conduct was indeed developed and was critical to the success of the interventions.

The value given to consistent, stringent rule enforcement by each group of respondents emphasized the importance of awareness that was first noted by Eck (1995b). He commented that if place managers were ignorant to the importance of their role in crime prevention then training them on the importance of their role should produce changes in unwanted behavior. Clearly, from the data collected during the qualitative phase of the study, the officers did not understand the value or importance of their own role prior to the implementation of the interventions. Once they received the training and a clearly defined role was given to them there were immediate changes in unwanted inmate behavior.

Understanding how consistent rule enforcement might affect inmate behavior was important in establishing the link between situational methods and the more social concept of the legitimacy of authority. Liebling (2004) suggested through her research that there was a direct relationship between the nature of rule enforcement and the quality of life the inmates experienced. She commented that the consistent enforcement of rules and procedures, along with the development of strong officer/inmate relationships created the perception of fairness. The development of this perception by the inmate population was seen by her as essential to the control of behavior. She noted that when inmates spoke of fairness, most often they spoke of the consistent application of rules and procedures.

She also noted that the perception of fairness was related to the clarity of rules as well. When investigating the importance of clarity as a component of fairness Liebling (2004) asked inmates whether or not rules and regulations were clearly defined by the staff. The answers they provided suggested that clarity was highly correlated to an inmate's perception of fairness. That same question, whether or not rules and regulations were clearly defined, was asked of the officers, supervisors, and administrators in this study. Each of the respondent groups noted that rules and regulations were clearly defined and that clarity was an important factor in the control of inmate behavior.

The belief in the importance of clarity was also evident in the design of the interventions. All too often in correctional settings an inmate's orientation to the facility, the explanation of the rules, regulations, and behavioral expectations, came at the hands of another inmate. This inmate-driven orientation led to what was originally identified as an anti-establishment, anti-authority code of conduct, where negative and disruptive behavior was the expected norm (Sykes, 1958). This type of orientation allowed the inmates to demonstrate control over the conditions of confinement and led new inmates to believe that the organization of the units were controlled by the strongest inmates rather than the officers or administration. Some jails would actually select an inmate who was responsible for this orientation, which was a clear sign of the transfer of authority from the officers to the inmates.

Officials in Northampton County designed the supervision system to include an officer-driven inmate orientation that was to be conducted when the inmate was first admitted to the housing unit. They identified a standard set of rules and regulations that

would be explained during each orientation to ensure the delivery of a consistent message.

They also taught officers how to conduct unit briefings, similar to what officers' experience at the beginning of each shift. Assembling all of the inmates together at one time allowed the officer to address problem behavior and convey behavioral expectations to all of the inmates.

The Perception of Authority

One of the interesting observations that can be taken from the analyses of the dozens of staff interviews that were conducted for this study was the complete agreement in the answers to certain questions. That was certainly the case when the respondents were asked whether or not the officer's level of perceived authority had increased. Without exception, each of the respondents noted that the officers were treated with greater respect, the inmates were more responsive to staff requests and directives, and that the management of the housing units was seen as fair by the inmates.

What was striking about the agreement regarding the perception of authority was that it appeared across levels of responsibility. Officers, supervisors, and administrators, spent different amounts of time interacting with inmates and the nature of interaction were different. Officers were somewhat isolated in their exposure to the inmate population in that they worked a particular housing unit and only saw the behavior of the inmates under their direction. Supervisors were exposed at a much broader level, having the responsibility for overseeing a large number of housing units containing a wider variety of inmate types. Administrators often had inmate contact that was more crises related and was driven by negative behavior, whether it be in the formal disciplinary process, answering grievances, or responding to inmate requests. The fact that all three groups identified positive changes in the

perception of an officers' level of authority served as a kind of triangulation in assessing whether or not the perception was accurate.

Hierarchy of the Place Management Elements

Something that could not be accomplished through a review of the qualitative data was to determine the order of importance or the frequency with which the elements of effective place management were utilized. Concepts from each of the elements was noted by each category of respondents as being important to the control of behavior but none was specifically mentioned as having greater significance than another. Some were mentioned more often, but that fact did not serve to indicate that one had greater value than another. This is not something that diminishes the value of the results, nor is it something that should be viewed as surprising given the complexity of the jail environment. Consider for a moment the task of managing a housing unit that contains 96 inmates: it would include the supervision of feeding, recreation, visitation, programming, and the distribution of medication; conducting new admission orientations and discharge inspections; and establishing behavioral expectations, rule enforcement, conflict resolution, and disciplinary control. It would be unrealistic to think that an officer could record or remember the number of times he or she was required to enforce behavioral expectations, or the number of times he or she passed out hygiene supplies in response to an inmate's request. The complexity of the unit served to inhibit detailed identification as to the level of importance of any single action or activity.

Evaluating the Influence Inmate Gender has on Behavior

Another important issue addressed by this research related to the ability to compare intervention results across gender groups. There have been few studies conducted that were specifically designed to control or modify inmate behavior; and there have been even fewer, if any at all, that were designed to compare interventions across genders. The gender comparison studies that do exist have been designed to compare the rates of disciplinary misconduct (Britton, 2003; McClellan, 1994; Pollock, 1986; Tischler & Marquart, 1989) across groups not the results of behavioral or place management interventions.

Comparison of Inmate Behavior

The quantitative and qualitative data collected in this study helped answer the research questions related to the issue of inmate gender and discipline. First, the qualitative data was used to determine if an intervention designed without concern for differences in gender could reduce recorded inmate misconduct with respect to both male and female inmates. And secondly, the qualitative data was used to determine if corrections officers believed that place management interventions could be effective at reducing inmate misconduct in both male and female housing units.

A review of the ARIMA interrupted time series analyses indicated that positive, statistically significant changes took place in both the male and female treatment units, while no such changes were demonstrated in the control units over the same time period. In fact, the percentage change was nearly identical: a 69% reduction in written, major misconduct reports in the male unit (E-Tier) as compared to a 68% reduction in the female unit (A-2). Although the female unit reported a greater change in the mean number of written

misconduct reports, when the results from the male unit were aggregated to misconducts per 100 inmates the results were nearly identical.

The analyses conducted on the qualitative data led to similar findings, with both male and female officers reporting positive changes in behavior on their respective units. Although the female officers did not describe the behavior of the female inmates to be as aggressive and violent as the male officers described the behavior of the male inmates, they did note positive changes after implementation that were as dramatic as those described on male units.

These results were important for several of reasons. First, a number of research studies reported that female inmates were supervised more strictly than their male counterparts and were subject to higher levels of written discipline (Britton, 2003; McClellan, 1994; Tischler & Marquart, 1989). In addition, these studies noted that although the rates of female institutional infractions were higher, the conduct was noted as less violent than that of male inmates, and was often characterized by behavior that would be overlooked if committed by a male inmates. The results suggested that the reporting of female misconduct was more a product of operational disparities or officer bias than the existence of negative or aggressive behavior. If that were indeed the case in Northampton County, if the nature of the reporting practices were driven more by the officers than the inmates, it would be unlikely that positive changes in the female housing unit would be observed or reported, given the uneven standards to which they were held. If reporting practices, not the behavior of the inmates, drove the reporting of misconduct then it would be unlikely for the officer's perception of inmate behavior to change since it was not a factor in the rate of misconduct initially.

What the results demonstrated was that despite the potential or perceived differences in behavioral standards the interventions in both units succeeded. This was likely true because each started with the same deficiencies. At no point in the interview process did any of the administrators or supervisors suggest that the officers who worked the female unit had any greater level of skill or investment in the housing unit, activity, interaction, or rule enforcement than the officers working the male units. The challenges to the old supervision system were seen as systemic problems, not ones confined to one unit or another. As a result, because the housing units started with the same general operational deficiencies, regardless of a potential inequity in behavioral standards, they demonstrated similar successes.

Additionally, the results were significant given the diversity of the female population as compared to the male population. Each of the male units contained one type of inmate classification, medium custody, while the female inmates were subject to a less segregated housing classification system. Prior to 2006 all of the female inmates, regardless of their custody assignment (minimum, medium, or maximum) were assigned to the same living environment. Even after the opening of a new housing wing in 2006, the female inmates were more subject to the comingling of custody assignments than were the male inmates. The corrections literature on inmate classification suggested that comingling custody groups risks introducing predatory inmates to those who were more vulnerable, increasing the risk of victimization (Austin, 1993; Brennan, 1993). The advantage of a place management intervention, as Sherman (1995) suggested, was that effective management either allowed motivated offenders and suitable targets to co-exist in the same place without incident or kept potential offenders out of locations. Given the fact that female officers did not have the same

ability to remove inmates from housing units as did those officers working the male units, the results would appear to suggest that place management in a jail setting allowed motivated offenders and targets to co-exist with fewer incidents, regardless of the type of unit (male or female).

The Perceived Influence of Gender

One thing that was consistently reported in corrections research was that officers, whether they are male or female, believed that female inmates needed to be supervised differently than male inmates (Britton, 2003; Pollock, 1986). Some officers had stated that females inmates were different than males because they were more emotional, which was often marked by excitability, impulsivity, unreasonableness, and the need for individual attention (Pollock, 1986); while other officers suggested female inmates were more manipulative, less obedient, and less likely to accept a negative answer than their male counterparts (Britton, 2003).

The responses provided by the officers and administrators in Northampton County seem to support this research, though such support could only be denoted from officer perceptions of different implementations. Since male officers were only assigned to male units and vice-versa, male and female officers could not actually observe how the others were implementing the intervention. Most noted that females had to be supervised differently because their needs were different than those of male inmates. One administrator commented that whether emotional or physical, the needs of female inmates had more "layers" than compared to those of male inmates. Only one of the officers suggested that female inmates were different because they were more emotional. In response, he noted that officers who

supervise female inmate had to be more understanding and establish a greater level of communication. Interestingly, none of the supervisors who were interviewed agreed with the assessment that male and female inmates needed to be supervised differently. One noted that the daily routines of a housing unit were the same regardless of who lives in it.

The opinion that women and men need to be supervised differently has one critical flaw: the term supervision does not have a universal definition. There is no "right way" to supervise an inmate, nor is there even a common way to supervise one. In fact, the officers in Northampton County reported never having received training on how to supervise a housing unit before the implementation training was provided. One might think that Northampton County was unique, but it was not. The suggestion by one of the officers that his training was nothing more than "CYA and defensive tactics" is a common theme represented in training academies throughout the profession.

This flaw was highlighted by the seemingly inconsistent answers the officers and administrators gave to similar questions. When asked if male and female inmates needed to be supervised differently the majority responded that they did. However, when asked if the place management system they were trained on and implemented would be successful in controlling the behavior of both male and female inmates, the officers, supervisors, and administrators overwhelmingly responded that they thought it would. These inconsistent answers were possible because there was no common definition for the term supervision. When left to assume what the term supervision meant the majority of respondents thought different systems were necessary; but when the style of supervision was explicitly defined for them in the phrasing of the question, they believed that one system would work for both

genders. It could also be possible that the officers did not think the concept of supervision was part of the management system that was installed. They could have seen the operational changes as being more directed at defining their new role and increasing their level of responsibility rather than toward changing the style of supervision.

The belief that the place management system could work for either gender was not surprising because the deficiencies that were addressed by the designs of the interventions were gender-neutral. There was no suggestion on the part of the administration that the manner in which the females were supervised prior to the implementation of the interventions was any better or worse than that by which the males were supervised. The places, in this case housing units, were poorly managed and poorly supervised, which led to an abundance of criminal opportunity. Although the characterization of male and female behavior was different, the places being addressed by the interventions were thought to be equally dysfunctional and for the same reasons. As a result, regardless of gender, improvements to the environments resulted in improvements in behavior.

But even if one were to suggest that the answers provided to the initial questions regarding supervision and gender demonstrated that different supervision styles were necessary, another flaw in logic was astutely raised by one of the officers. When asked about gender differences he noted that the line of questioning was asking him to compare apples to oranges. He said that differences in inmates exist absent of gender. As an example, he noted that mental health inmates had different needs than general population inmates, and were often separated and segregated from other inmates as a result. This situation was no different than the one he was asked to answer regarding gender. He commented that it was the nature

of the inmate that generated differences in supervision strategies, not gender. The wisdom to be taken from his comments was that all too often inmates were generically categorized as male and female, when in reality the categorization was much more complicated.

CHAPTER 8: LIMITATIONS AND IMPLICATIONS

The mixed-method research design created for this study was a strong design that had several noticeable benefits. First, the qualitative approach served to supplement and support the quantitative data and allowed for the study of a subject that could present challenges to a simple quantitative design. Research had consistently demonstrated under-reporting to be a problem; with some estimates suggesting that only between 2% and 30% of all misconduct was reported to authorities (Bottoms, 1999; Ellis et al., 1974; Gadon et al., 2006; Wolff et al., 2007). The use of quantitative and qualitative methods created what Creswell and Clarke (2007) called a triangulation design, which allowed for a more thorough and valid evaluation of the relevant data and avoided making false assumptions about changes in inmate behavior based on review of a singular type of data.

The design also allowed for a careful analysis of the possible causal links between the implementation of the interventions and any measureable results. Although the quantitative results demonstrated a reduction in the incidents of major misconduct, they provided little evidence to identify a causal link between the intervention and the changes in behavior. In addition, one of the goals of this research was to evaluate the applicability of the elements identified in Madensen's study of bars. The qualitative evidence served to link the individual elements and determine if those elements required modification or expansion.

Limitations

Having mentioned the benefits of the design, however, there were also limitations that need to be addressed. First, it is possible that the intentional selection of the officers who participated in the study biased the results, with the outcomes reflecting the importance of the

characteristics of the officer over the design of the interventions. Second, it is possible that the integrity of the implementation was compromised. The freedom to exercise discretion with virtually no oversight and the belief that inmate misconduct was a measuring stick by which their performance as officers was being judged could have resulted in the inconsistent implementation of the interventions.

Third, one of the challenges presented by the analysis of the quantitative data was that it was not possible to identify or distinguish between the seriousness of individual misconducts. It is plausible that aggressive, predatory behavior remained constant while minor or nuisance behavior dramatically decreased, accounting for the possible measured change in misconduct. Fourth, it is possible that researcher bias influenced the outcomes. The researcher was an employee of the jail for a number of years and had a role in the development of the training curricula for each of the interventions. And finally, the failure to include inmate interviews in the qualitative process meant that this research relied solely on official reports of misconduct, either from the written record or from statements made by jail personnel. Inmate observations could have provided independent measures of behavior, which could be particularly important in a custodial environment.

Selection Bias

Because the officers who participated in the implementation of the interventions were not randomly assigned to the study group, selection bias was a concern (Krathwohl, 1998). The outcomes that were observed could have been a result of the nature and character of the participants rather than a result of the interventions. In some instances, the officers were hand selected for participation in the study and they could have possessed the skills necessary to

influence change regardless of the training they received or the operational changes that were made.

In an attempt to determine whether or not the officers who participated in the study had the skills necessary to manage a housing unit, or had any prior knowledge of the place management concepts in advance of the training, each was asked to summarize the nature of their correctional training. None of those who were interviewed reported having any training on how to supervise a housing unit prior to the interventions. In addition, when questioned about the training they received in connection to the place management interventions none admitted having prior knowledge of these concepts. In fact, several of the officers commented that the place management training was dramatically different from how they were initially trained.

Integrity of the Interventions

One of the challenges associated with implementing this type of organizational change was maintaining the integrity of the implementations. The corrections officers in the study worked most of their shifts in isolation from one another and in isolation from direct supervision, which made it difficult to ensure that the intended changes were made as they were designed. It was possible that one, some, or many of the officers disregarded the implementation training and the directives they received and chose to run the housing units in any manner they deemed appropriate. To ensure uniform implementation, the officers, supervisors, and administrators were asked to evaluate officer consistency and implementation integrity.

Prior to the interventions, the administrators noted that the shifts had taken on their own personalities and one of the goals was to produce a more consistent shift-to-shift approach to inmate supervision. If the distinctive shift personalities remained strong, the lack of consistency could cause a challenge to the integrity of the interventions. From observations made by officers, supervisors, and administrators, the evidence suggested that this concern was negligible. Some officers noted that consistency was achieved because the place management approach created a greater level of closeness between the officers, some suggested it allowed for the officers to "be on the same page", and have a "common and defined purpose", and some said it was because the place management intervention created a greater level of teamwork.

In an attempt to enhance consistency, the administration established focus groups, which brought together officers from all three shifts to talk about the conditions of each housing unit and to voice concerns about operational issues. This was one way in which the administration could develop a feel for whether or not the housing units were being run consistently from shift-to-shift and whether or not the intervention designs were being carried out as intended. In assessing the implementation process during the last round of interviews, the members of the administrative team noted that the focus groups were one of the most important elements to creating consistency in the operation of the units and the implementation of the interventions.

The Identification of Specific Behaviors

One of the limitations of the data was that it was not practical to categorize behavior to any level of specificity. The specific infraction(s) associated with the misconduct was available; however, the mean number of misconduct reports was so low for each of the study units that attempting to distinguish among assaultive, nuisance, disrespectful, or theft-related behavior was not practical. As an example, the mean number of major misconduct reports written against inmates living on one of the treatment units, E-Tier, was 4.27. Attempting to categorize behavior would have reduced the mean number in some of those categories to levels that would have made the ARIMA analyses impractical. If the entire facility would have been the subject of the place management intervention it would have been possible to create behavior-specific categories, given the increase in the sample size.

The benefit to identifying and analyzing specific behaviors is that it would be possible to determine if changes in the number of misconducts was a reflection of changes in specific types of behavior or whether or not it resulted in changes across behavior types. That advantage was offset, to some degree, by the nature and intent of the intervention. The benefit of a place management design was that it is more place-specific than offense-specific (Clarke & Felson, 1993), which suggests that identifying specific behavior types does not necessarily change the design or intended result. Because the majority of inmate misconduct, regardless of what it was, occurred in housing units the general level of disorder of the environment seemed more important than that of any specific behavior.

Researcher Bias

The interventions implemented in this study were designed with the assistance of the researcher. In 2004 the researcher was an employee of the jail and in 2009 he served as a consultant. The primary concern was that the earlier employment and later collaboration between the agency and researcher produced an investment in the outcome on the part of the researcher that might introduce bias into the interpretation of the results (Herr & Anderson, 2005). On the other hand, the unique nature of the jail environment made familiarity with the conditions of confinement, the nature and context of incarcerations, and the challenges of the individual agency essential elements in the design of an effective intervention. In adapting the concepts of place management to a setting in which it had never been applied, an understanding of that environment was an important aspect of the design.

It is also possible that the researcher's familiarity with the employees of the jail influenced the answers they provided. Fortunately, the researcher knew very few of the corrections officers who participated in the study as almost all were hired after he left the organization. The one factor that may suggest this challenge has limited merit was the similarity in many of the answers provided by the participants. In a number of instances the responses given by many of the respondents, familiar and unfamiliar to the researcher, were similar. This can lead one to infer that the relationship between the researcher and participants did not influence the answers provided.

Inmate Participation in the Study

One of the more important limitations was the lack of inmate participation in the qualitative part of this study. The observations and opinions of inmates from each of the

housing units affected by the interventions could have provided valuable insight with respect to a number of issues. It might have been possible to definitively answer whether the reduction in the number of written misconduct reports was a result of changes in inmate behavior, changes in the reporting practices, or changes in the behavior of the officers. It could also have served to identify whether or not the level of officer involvement increased, as was commonly cited by each of the respondent groups.

Inmate participation in this research might have also helped in determining if the changes in the management of the unit had a greater effect on certain types of behavior. Even though the limited number of misconduct reports did not allow for behavior to be categorized into groups, such as violent or predatory behavior, it might have been possible for the inmates to more easily comment on changes in these types of behaviors. Finally, including inmate interviews might have shed the most light on the issue of the legitimacy of authority. Although the perceptions of officers, supervisors, and administrators could be used to draw inferences about changes to the legitimacy of authority, the most definitive measure of change would have come from the inmates. The current conclusions were drawn only from data supplied by those who exercised authority not by those who were subject to it.

The decision to exclude inmate interviews was made largely as a result of time constraints. Multiple focus groups from each of the housing units would have been needed for proper assessment of the data. The investment in time given the complexity of inmate focus groups was too substantial to incur. It was also not possible to interview the same inmates over the length of the study given the short length of stay in the jail. The average

length of stay for an inmate averaged around 80 days, which meant the average inmate would only have been able to participate in one focus group.

Implications

Despite the limitations noted above, the findings presented in this study do have importance with respect to the theoretical understanding of place management as well as to practical improvement in the operation of American jails and, potentially, prisons. Studies designed to assess the state of knowledge about situational prevention methods continually reported that place management was one of the prevention methods of which little was known (Clarke & Bichler-Robertson, 1998; Guerette, 2009; Welsh & Farrington, 2009). With that in mind, if little is known about the concept of place management, even less is known about the operation of jails across America. Despite the fact that there are many more jails in the United States than prisons, very few studies evaluated the operational practices of jails or studied the characteristics of inmate behavior. With one exception (La Vigne, 1994), all of the research cited in this study comes from prison-based research.

Theoretical Implications

From a theoretical perspective, the findings have a number of important implications. Primarily, the study served to add to the body of research that exists with respect to place management. Recognizing that there has been a limited amount of research on the subject, what has been done has been confined to community-based settings whose purposes and functions are more limited than those of a jail. The nature of this environment was unlike any that had been previously studied with respect to place management, and the results served to

establish the importance of place management for purposes of regulating or influencing levels of criminal behavior regardless of setting in which the behavior occurred.

This study also supported the suggestion that place management was a skill that could be taught (Eck, 1995b). The officers who participated in the interventions in this study had no prior knowledge of the concepts and, in some instances, may not have been receptive to the changes; however, the interventions were successful and the officers developed skills and abilities that they had not previously exhibited. More importantly, this was done with minimal training. The officers were taught the concepts in 16-hour time blocks and were able to implement what they learned.

In addition, the study results also served to enhance what was known about situational theories in general. Rosenbaum, Lurigio, and Davis (1998) suggested that situational interventions work best in settings that have higher-than-normal levels of criminal opportunity, and the results lend support to that suggestion by demonstrating positive results in one of the most opportunity-rich environments that exists. Wortley (2002) was so confident in the success that situational methods could have in correctional settings that he commented that if they could not be proven effective in that environment then they could not be proven effective anywhere.

With respect to what was known about the importance of place management, the concept had received some criticism because there were few studies completed that specifically tested the effectiveness of place managers (Clarke & Bichler-Robertson, 1998), and some of those that did suffered from weak methodological design (Welsh & Farrington, 2009). Even the research conducted by Madensen (2007), which was intended to identify the

essential elements of *effective place management*, was deductive in nature. It did not directly test the relevance of the four elements; rather it attempted to identify them from the data that was collected.

Madensen (2007) noted that the four operational elements (organization of the physical space, regulation of conduct, control of access, and acquisition of resources) were broadly identified so they could be tested in a number of environments; but that had yet to be done. This study was the first to directly test the suggestion that the elements identified as important in the regulation of behavior in a community-based setting could be equally as important when applied to a custodial setting, providing support for Madensen's research. In addition, this study tried to establish a more direct causal link between the individual elements and the influence each had on regulating behavior. From the interviews that were analyzed, the staff members who participated in the study clearly identified each of the operational elements as being critical to the control of behavior.

The Importance of Social Legitimacy

Perhaps the most important contribution made by this research with respect to the evolution of *effective place management* was the recognition that there was a fifth element that was important in the control of inmate behavior in this environment. The element, described herein as *social legitimacy*, underscored the value a combined situational/social approach had on the regulation of behavior. Figure 5 displays the model as identified by this research.

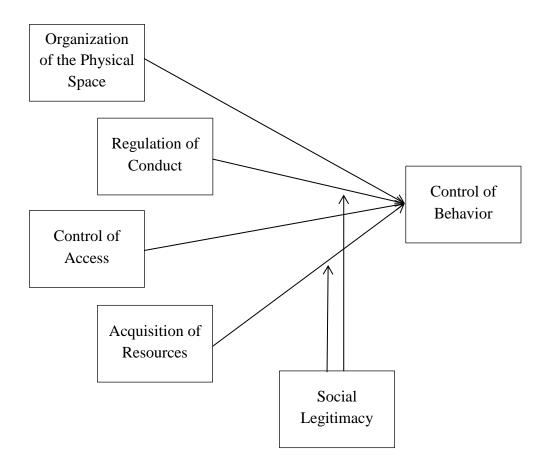


Figure 5 An Expanded Place Management Model

More so than *organization of the physical space* and *control of access* the two elements of Madensen's original model that were most influenced by the idea of social legitimacy were *regulation of conduct* and *acquisition of resources*. It appeared from this research that when the elements *regulation of conduct* and *acquisition of resources* were operationalized the effect was enhanced by the presence or development of social legitimacy. This concept of legitimacy was most often reported to be a product of the quality of the social interactions between the officers and inmates, which is why it has been termed *social legitimacy*.

In this model social legitimacy was identified as a moderating variable because it seemed to strengthen the influence two of the original four elements had on the regulation of behavior. Social legitimacy was not identified as a mediating variable, the mechanism by which behavior was regulated, because there was not enough evidence to suggest that behavior could not be controlled without it. Prior research had suggested that situational interventions were effective in institutional settings (Bottoms et al., 1995; La Vigne, 1994; Wortley & Summers, 2005) without an understanding of social legitimacy or without it being an essential component of the success of the interventions. In the research conducted by Sparks, Bottoms, and Hay (1996) the control of some forms of behavior existed even though the regime itself was viewed as illegitimate. They noted that although some officers developed strong social relationships with the inmates it was not essential for all of the officers to develop these relationships in order for behavior to be controlled.

The data in this study suggested that the increased level of interaction between the officers and inmates influenced the perception of fairness and consistency. Sparks and Bottoms (2008) suggested that the end result of a more consistent and fair approach by the officers was it allowed them to develop what was called personal credibility. The comments made by the respondents suggested that they thought the concepts related to social legitimacy did lead to the development of personal credibility, which, in turn, enhanced the inmates' willingness to comply with organizational directives. The officers were seen as a more legitimate resource by the inmates, which increased the likelihood than inmates would comply with the requests made by the officers. The comments made by some of the respondents suggested that the officers who developed greater levels of personal credibility

found the control of behavior easier than those who had less. But the comments did not suggest that those who had lower levels of personal credibility could not control behavior.

It was also identified as moderating variable because the development or importance of social legitimacy could be a product of the podular-direct design of the housing unit. Each of the treatment units was designed so that an officer was present on the living unit 24 hours a day, 7 days a week. This continual presence may require or facilitate the development of social legitimacy. It is possible that in housing units where an officer is not continually present social legitimacy is not essential for the control of behavior.

What this research added to prior findings on the subject of legitimacy was that it was not simply interaction between officers and inmates that was critical to the development of legitimacy but it was the quality of the interaction that was important. The officers and inmates had the same amount of interaction before and after the interventions because all of the treatment housing units had officers present on the unit 24-hours a day. It was the change in the nature of the relationship that seemed to produce the development of social legitimacy.

Why social legitimacy was determined to be an important component of this study and not in Madensen's original work was unclear, but it could be a result of the custodial nature of the environment. Sparks, Bottoms, and Hay (1996) commented that legitimacy might be important in custodial settings because the nature of imprisonment included dependency. Community-based settings allow for the expression of personal freedom, where if someone was unhappy with the conditions of the environment or the service they received they could simply leave. That is not the case with inmates. Every aspect of life is controlled by the facility and they are afforded very little expression of individual freedom. The strain

associated with the absolute control by another person could be a reason why legitimacy was seen to be important in this setting and not community-based ones.

Gender-based Operational Practices

Another important aspect of this study was the influence the results had with respect to the development of gender-specific correctional practices. Some researchers have used misconduct-centered studies to suggest that female and male inmates needed to be supervised differently (Britton, 2003; Pollock, 1986); however, this opinion was not offered though the examination of different supervisions systems of styles. One of the biggest hurdles to the discussion of gender-based supervision is that the term supervision has not been defined, nor has a model been defined or suggested. There is not one method of supervision that is taught across the United States, and in many instances, like Northampton County, officers are never taught how to supervise inmates in the first place.

This study attempted to address that shortcoming by providing a manner in which supervision could be operationalized, suggesting that it had identifiable elements that could be taught and implemented. The concepts of *effective place management* are not gender-dependent but are gender-neutral. What that means is that they are designed to address an environment that is rich in criminal opportunity. The study demonstrated that it did not matter whether the environment was occupied by male or female inmates, the fact remained that previously each group was supervised poorly and the poor management contributed to the loss of control. The benefit of a place management design is that it does not have to be behavior-specific. Not really knowing whether the nature of inmate behavior is different based upon gender, it would seem logical to implement a supervision system that is not based

on the characteristics of the behavior but rather the characteristics of the environment. That is not to say that the needs of female inmates are not different from their male counterparts and should not be addressed differently. What it does suggest is that the supervision of behavior can be accomplished in a gender-neutral manner.

Organizational Implications

This research has implications with respect to the organization aspect of the profession as well. Jails are settings that are seldom studied and there is a limited understanding of disruptive inmate behavior, either the causes of behavior or the methods that could be used to effectively control it. The major theoretical explanations of inmate behavior were developed as a result of studies conducted solely in state or federal prisons. This practice created somewhat of a generic or stereotypical inmate profile that essentially assumed that all inmates behaved similarly despite the differences in institutional function. Jails and prisons house different types of inmates whose profiles are very different and even though they are similar in their incarcerative purpose, the operational and structural foundations of jails and prisons are different. These differences suggest that the study of inmate behavior should be more specific than current generic profiles allow.

Developing a better understanding of the jail environment and how best to regulate inmate behavior has other important organizational implications as well. The nature of the jail environment means that pre-trial, sentenced, civil, and criminal offenders will, at some point, be comingled with one another. Preventing the victimization of offenders, especially perhaps those who have not been proven guilty of any wrongdoing, or whose conduct does not rise to the level of criminal behavior, is an important part of the legitimacy of the system.

The core task of any jail is to create a safe living environment, and, if Wortley (2002) is right that it is easier to create safer environments than safer individuals, then it is incumbent upon the profession to improve the nature of the environment.

Although seldom studied, it is possible to control inmate behavior. Accepting disruptive behavior because it comes from an inmate is not an appropriate exercise of authority. Corrections professionals must learn that it is possible to control behavior and they must place value in the importance of the task. In the field of corrections, disruptive behavior is met with increased security measures, usually meaning increased amounts of lock-down, segregation, staff supervision, or use of security devices and resources. These approaches are costly and cannot be maintained for long periods of time since they simply serve to delay and perhaps exacerbate the continuation of problem behavior. The development of a place management approach allows jail administrators to consider a more cost efficient and enduring approach to behavior management, reducing the strain on staff and administrative budget and, hopefully yielding safer and more orderly facilities.

This research also has implications with respect to what has been written about the concept of direct supervision. Introduced in the early 1970's, the concept resulted from a directive issued to the Federal Bureau of Prisons to build a more constitutionally compliant form of pre-trial detention than previously existed (Tartaro, 2006; Zupan, 1991). The idea of housing inmates in podular housing units where officers were present at all times was called the most striking correctional reform of the 20th Century (Wener, 2006). The research that followed produced results that demonstrated reductions in inmate violence and disorder and

improvements in the conditions of confinement for both inmates and staff (Farbstein, Liebert, & Sigurdson, 1996; Farbstein & Wener, 1982, 1989; Senese, 1997; Wener, 2006).

The successes of the direct supervision concept were attributed to two different factors: (1) a normalized living environment and (2) a proactive style of inmate supervision where officers and inmates were in continual contact (Farbstein & Wener, 1982; Sigurdson, 1987; Wener, Frazier, & Farbstein, 1985; Wener & Olsen, 1980). Although these two elements were commonly accepted in the corrections profession as the reasons for the positive changes in inmate behavior, there was little effort directed at testing the concepts separately from one another. Once the initial direct supervision audits detailed reductions in violence and unwanted behavior the two elements seemed to form an inseparable relationship.

This study provided what could be considered one of the first attempts to test the proactive style of inmate supervision independent of the influence of architectural design. When the podular-direct housing units that were the subject of this study were first occupied the proactive style of supervision thought to be a necessary component of the direct supervision philosophy was not implemented. The place management interventions that were the subject of this study were introduced at a much later stage, which allowed for the effects of the changes in the style of supervision to be measured separately from the architectural design of the housing units. The results of the study suggested that the proactive style of supervision effectively reduced the amount of inmate misconduct that occurred on podular-direct housing units, lending support to the original suggestion that it was one of the critical elements in the development of the original philosophy.

Conclusion

This research was one of the few studies that applied situational crime prevention concepts to a correctional setting. Although situational theories seem rather suitable for the environment, they have been tested sparingly; with those that have concentrating on the advantages offered by a rational choice approach. Place management, as theorized by this study, offered a better opportunity to obtain the desired results, because the problems the jail was encountering were more place-specific than behavior-specific. Thanks to the dedicated work of a large number of corrections officers, supervisors, and administrators, this study yielded a number of important findings.

The study hypothesized that a place management approach could decrease the amount of inmate misconduct and produce what was perceived to be more compliant and acceptable behavior. The results suggested that those hypotheses were correct. The number of written, major misconduct reports decreased immediately after the implementation of the interventions, and the perception that inmate behavior had improved was expressed by corrections officers, supervisors, and administrators alike. In addition, the study demonstrated that a wide range of behaviors had improved, which was important given the multitude of behaviors that were expressed within. In improving the overall behavior of the inmates who lived in the housing units the study demonstrated the value of a more place-specific approach to behavior control.

The study also demonstrated that the place management approach was successful at maintaining improved behavior over time. The longitudinal design allowed for the determination that change was not short-lived and that once changes were made to the

organizational structure of the institution they were successfully maintained. *Effective place management* was demonstrated to be a skill that could be taught and once the staff was made aware of their ability to control behavior and it was made a primary function of their job description it was easily transferred into the daily operation of the organization.

Results from this custodial setting suggested that the original elements identified by Madensen (2007) may not be comprehensive enough for the correctional environment. Although there was evidence to support the importance of all of her elements, the evidence also suggested that another element, referred to in this research as social legitimacy, was equally as important. The addition of social legitimacy to the original model seems to produce what some have been advocating, a combined situation/social model to the control of inmate behavior (Bottoms et al., 1995; Sparks & Bottoms, 2008).

Another important finding with respect to behavior was that the place management approach was effective at managing the behavior of both male and female inmates. The study presented hypotheses that suggested this was possible because the focus of the interventions was on the nature of the environment rather than the characteristics of the offenders. The housing units that were occupied by male and female inmates were assessed as having the same general operational deficiencies, which ultimately allowed for the development of criminal opportunity. Improvements in the nature of the environment, one could logically assume, would therefore lead to improvements in the behavior of the inmates regardless of their gender.

Not surprisingly, however, the study also demonstrated that officers believed male and female inmates need to be supervised differently. It is possible that this was the case

because when one uses the term supervision it does not have a universal definition, which allows the respondents to determine what is meant by the term. Once the term supervision was defined, in the context of the *effective place management* elements, there was agreement among groups that the supervision strategy would be equally effective with male and female inmates. Interestingly, none of the officers who were assigned to one of the treatment units worked another of the treatment units. So the suggestion that male and female inmates needed to be supervised differently may come more from professional stereotypes rather than personal experience.

What was also important about this study was that the qualitative analyses allowed for a more direct causal link to be made between the elements of *effective place management* and changes in behavior. Although not previously tested, each of the place management elements was identified by all groups of respondents as being important to the control of inmate behavior. Although they could not quantify the relative importance of each of the elements, all three groups thought that each of the elements was an essential part of the success of the interventions.

The final research question and related hypothesis dealt with the perception of authority held by officers. The qualitative interviews revealed that all of the groups thought the place management intervention increased the officers' perceived level of authority. This finding was not surprising considering what was previously noted about the importance of social legitimacy.

The strength of the results is not conclusive, however. This was only the first step in providing evidence to support the value of a place management approach with a social

component. The interventions need to be duplicated in other settings, not only geographically diverse, but different architectural and organizational settings as well. Jails as a group are quite diverse; they take on a number of different forms and are operated under a number of different philosophies. The variety of facility types offers the opportunity to study the concept and potential benefits of place management in a number of different settings. Each time situational theories are tested in different community-based settings recognition of the value of the interventions may be expanded and the same can hold true in various correctional settings. There are a number of different custodial settings to which the concepts can be applied. In each instance the value of a place management design will be enhanced by the process of design and implementation, and by the results that are produced.

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