2022

Paying the Price of Punitiveness: Examining the Effects of Extended Restrictive Housing Work on Prison Personnel

Maria Vivian Hughes

FLORIDA STATE UNIVERSITY

COLLEGE OF CRIMINOLOGY AND CRIMINAL JUSTICE

PAYING THE PRICE OF PUNITIVENESS: EXAMINING THE EFFECTS OF EXTENDED RESTRICTIVE HOUSING WORK ON PRISON PERSONNEL

By

MARIA VIVIAN HUGHES

A Dissertation submitted to the
College of Criminology and Criminal Justice
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

2022

Maria Vivian Hughes defended this dissertation on March 24, 2022.
The members of the supervisory committee were:

Daniel P. Mears
Professor Directing Dissertation

Lenore M. McWey
University Representative

Jillian J. Turanovic
Committee Member

Joseph A. Schwartz
Committee Member

The Graduate School has verified and approved the above-named committee members, and certifies that the dissertation has been approved in accordance with university requirements.

I dedicate this dissertation to my mother, Maria del Rosario Aranda, who sacrificed a great deal so that I could have opportunities that she never had.

ACKNOWLEDGMENTS

I would like to express my appreciation to Dr. Daniel P. Mears for his mentorship throughout the dissertation process and during my time in graduate school. I am especially grateful for the numerous hours that he spent advising and teaching me how to be a better researcher and scholar and for setting me on a path that will continue to lead to a successful academic career. I truly could not have asked for a better mentor.

I would also like to acknowledge the other members of the dissertation committee. I am grateful to Dr. Jillian Turanovic for encouraging me to stay the course so that I may continue to do what I love—research in an academic setting, Dr. Joseph Schwartz for engaging in thoughtful discussion with me that led to new ideas and improved existing ones, and Dr. Lenore McWey for her thoughtful suggestions for improving this dissertation, as well as future studies.

I am also appreciative to the rest of the faculty in the College of Criminology and Criminal Justice at Florida State University, including Drs. Thomas Blomberg, Carter Hay, George Pesta, Sonja Siennick, and Jennifer Brown. I attribute my academic success to the rigorous training and support that I received from the College. I will forever cherish the memories from my time at FSU.

Most importantly, I would like to acknowledge my husband, Aaron, who has never doubted that I could achieve anything that I set my mind to. There are no words that could ever capture my gratitude for his constant support.

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ABSTRACT

Beginning in the 1970s, an ideological, political, and legal shift toward more punitive policies to address crime occurred. The punitive turn can also be seen inside of prisons, and one example is the expanded use of extended restrictive housing (ERH). By design, ERH is used to house the most difficult-to-manage individuals in the correctional system. Those in ERH spend up to 24 hours a day confined to their cells, for months or years. ERH has been criticized for its potential adverse effects on incarcerated persons and, to date, the bulk of research on ERH has focused on its effects on those incarcerated, with little attention given the staff who work in it.

This gap in research is notable in part because the work conditions in ERH differ markedly from those in general population prison facilities. Personnel work with individuals who may be more violent and face management challenges unique to a setting in which incarcerated individuals almost never leave their cells. The result may be impacts on personnel's physical and mental health and how they view and manage incarcerated persons.

To address this research gap and contribute more broadly to scholarship on the impacts of the punitive turn on contemporary correctional systems, this dissertation examined the effects of ERH on prison personnel. The first study examined the effects of ERH work-related stressors on stress among personnel. The second examined emotional numbing as a possible response to work in ERH. And the third examined whether officers' empathy, punitiveness, and views about individual agency shape their perceptions about the impacts of ERH on incarcerated individuals.

The dissertation analyses draw on survey, focus group, and interview data collected from Florida Department of Corrections personnel as part of a project focused on restrictive housing. These data were uniquely suited to the dissertation's focus because they included responses to questions about work experiences in ERH and personnel perceptions of incarcerated persons.

Analyses of the data revealed several key findings. ERH work, for example, appears to entail exposure to more and unique stressors and to elevate stress and increase emotional numbing. In addition, lower levels of empathy and a greater belief in individual agency were associated with a lower likelihood of viewing ERH as causing mental health problems. The findings illuminate the need for more research on the use and effects of ERH on incarcerated persons, personnel, and prison systems, and, more broadly, the impacts of the punitive turn.

CHAPTER 1

INTRODUCTION

1.1 Statement of the Problem

The punitive turn was the result of new policies increasingly focused on punishment to control crime (Feely & Simon 1992; Garland 2001; Cullen 2005; Phelps 2017). These policies have had widespread impacts on society, including concerns about the negative impacts on communities (Clear 2008; Sampson & Loeffler 2010; Garland 2012; Savelsberg 2018; Pratt 2019; Condry & Minson 2020). The emphasis on punishment has also extended into correctional systems through the reliance on punishment and control-oriented strategies to manage incarcerated persons (Simon 2000; Mears & Reisig 2006; Crewe 2011; Kreager & Kruttschnitt 2018; Beckett & Beach 2021; Sadoka & Simes 2021).

A focus on correctional systems thus offers an opportunity to illuminate the broader impacts of the punitive turn and to shed light on the prison environment and its impacts. One strategic point of departure for doing so is to focus on one of the most punitive correctional strategies in contemporary American prisons—extended restrictive housing (ERH) (Ward & Werlich 2003; Pizarro & Stenius 2004; Shalev 2011; Kreager & Kruttschnitt 2018).

ERH entails the prolonged segregation of incarcerated persons from others. Individuals in ERH are placed into a cell, either alone or with another person, for up to 24 hours a day (Mears et al. 2019; Pyrooz & Mitchell 2020). They are only allowed to come out, escorted by at least two officers, for recreation and medical appointments. Privileges, such as phone calls and visitation, are also restricted. ERH is reserved for incarcerated persons who cannot be safely managed in any other area of the prison, either because they are too violent or pose too great of a threat to the security of the prison system (Mears & Reisig 2006; Labrecque & Mears 2019; Aranda-Hughes et al. 2021). Prison officials, thus, recommend that these individuals be placed into a highly controlled environment, such as ERH, where their movements may be closely monitored (Butler et al. 2012).

Since its inception, ERH has been a highly controversial management tool. Much of the focus has been on the potential effects that the housing may have on those placed in it (e.g.,

Haney 2003; Cloyes et al. 2006; Arrigo et al. 2008; Ahalt et al. 2016; Butler et al. 2017; Labreque & Smith 2019). Individuals placed into ERH are kept locked in their cells for months or years at a time (Lovell et al. 2020). Critics argue that ERH may have adverse effects on the mental health of incarcerated persons, including increased anxiety and depression, hallucinations, paranoia, and sleep disturbance (Shalev 2011; Reiter 2012; Haney 2018). The scholarship on restrictive housing has predominantly focused on the potential negative impacts on incarcerated persons (Cloyes et al. 2006; Lovell et al. 2007; Mears & Bales 2009; Cochran et al. 2018), with limited research on the potential impacts to other groups within the prison system.

One group, however, that may be adversely affected by ERH are the personnel who work, or have worked, in this housing (Mears & Watson 2006; Mears et al. 2021). Even so, there has been little attention focused on understanding their experiences or views. In particular, several notable gaps in the literature stand out.

First, there has been little research that has examined the relationship between work in extremely harsh prison environments—like that of ERH—and personnel stress. Regardless of the area of prison they are assigned, correctional work exposes personnel to violence and threat of harm (Steiner & Wooldredge 2015; James & Todak 2018) and they are tasked with maintaining the security of the prison system, while sometimes dealing with potentially dangerous individuals (Finney et al. 2013).

Work in ERH may be especially challenging. Extant personnel accounts have detailed the extreme conditions of the housing, relative to general population, that may result in greater stress for personnel (Mears & Watson 2006; Cloud 2015) and those who work in ERH may be at increased risk of work-related chronic stress. Research finds that prolonged exposure to chronic stress is likely to result in adverse effects (Caspi et al. 1987; McGonagle & Kessler 1990; Lupien et al. 2018). For example, prior work has found that prison personnel experience a host of negative outcomes due to work-related stress, including mental health problems, substance abuse, and poor job performance (e.g., Finn 1998; Lerman 2017). Work-related stress may also affect their interpersonal relationships (Slate & Vogel 1997; Triplett & Mullings 1999; Lambert & Hogan 2007; Norman & Ricciardelli 2020). ERH may be exceptionally challenging and, relative to general population housing (GPH), may result in greater stress for personnel.

Second, scholars have not examined how personnel respond to ERH work. ERH is a uniquely harsh environment. Personnel are subjected to some of the most extreme behaviors,

including witnessing self-harm and suicide, having bodily fluids thrown at them, and experiencing daily verbal abuse (Sullivan 2006). Despite these work conditions, correctional personnel must be willing to return to work, day after day, and interact with incarcerated persons in ERH, if they wish to continue their corrections career.

One way in which personnel may respond to work in ERH is through emotional numbing. This is the inability to fully engage in one's feelings or the feelings of other (Presseau et al. 2017) and is used as a psychological defense mechanism to cope with distressing situations. Although emotional numbing may help personnel survive their daily work routines, research demonstrates that its prolonged use may have deleterious effects to emotional well-being. Some work has found that prolonged emotional numbing may result in suicidal ideation and attempts (Hayes et al. 1996; Najmi et al. 2007). Examining its impacts on personnel may provide a more nuanced understanding about the effects of ERH and the punitive turn.

Third, research has not examined whether officer traits and personal beliefs shape their perceptions about the impacts of ERH on incarcerated persons. ERH has been criticized for its harsh environment and its potential adverse effects to the mental health of individuals placed into it (see, e.g., Haney 2018). The literature on its effects to mental health has been inconsistent, with some studies finding that the housing is harmful to mental health and other finding small to null effects (see, e.g., Morgan et al. 2015). Still, due to its extreme nature, ERH has received international condemnation and has been referred to as an inhumane practice (Reiter 2016; Haney 2020). The debate about its effects on mental health extend into correctional systems. Some correctional officials have criticized it for its potential adverse effects and have called for a reduction of its use (Raemisch 2017), while others argue that it is needed to maintain safety and order in the prison. Personnel who continue to support its use may believe that ERH is not harmful to the mental health of incarcerated person. In turn, the belief that the housing is not harmful may be one reason for its continued use, despite the calls from critics to eliminate it as a management strategy.

Little is known about the factors that shape officer perceptions of ERH and its potential impacts on the mental health of incarcerated individuals. Some scholars posit that individual traits and beliefs shape support for certain criminal justice policies. For example, studies have found positive associations between punitiveness and support for capital punishment (Applegate et al. 2000; Foglia & Connell 2019) and a negative relationship between empathy and

punitiveness (Unnever et al. 2005). Perceptions about the extent to which individual agency dictates life outcomes may also shape perceptions about criminal justice policies. That is, people who support the concept that individuals are responsible for their own behavior may be more likely to support punishment to correct behavior and more likely to believe that a behavior modifying practice, like ERH, is helpful, rather than harmful. Thus, officers who are more empathetic and less punitive may be more likely to subscribe to the belief that ERH is harmful to the mental health of individuals, whereas those who hold an agentic perspective and are more punitive may be more likely to believe that ERH is not harmful. To date, research has not examined the relationship between officer traits and beliefs, punitiveness, and perceptions about the effects of ERH on mental health of those incarcerated in it. Gaining insight into the factors that shape personnel perceptions may provide a greater understanding about the effects of working in ERH, as well as why ERH continues to be used.

1.1.1 Research Goal, Questions, and Strategies

The overarching goal of this dissertation is to inform theory and research on the effects of the punitive turn on contemporary correctional systems. In particular, it seeks to contribute to efforts to understand the impacts of ERH on individuals, more specifically, correctional personnel. To this end, the broad goals of the dissertation are to shed light on: (1) The impacts of the punitive turn, (2) impacts of restrictive housing, (3) impacts of work in ERH on personnel mental health and physical well-being, and (4) factors that contribute to the continued use of restrictive housing.

The specific research questions that the dissertation answers to achiev these goals are the following: (1) Do the work-related stressors of ERH result in greater stress for personnel compared to the work-related stressors of GPH? (2) Are the emotional numbing responses greater from ERH work relative to the emotional numbing responses to GPH work? (3) Do empathy, holding an agentic perspective, and punitiveness predict personnel perceptions about the effects of ERH on the mental health of incarcerated persons?

To answer these questions, I examine two sets of data collected as part of a broader project funded by the National Institute of Justice. First, the dissertation draws on data collected from a survey questionnaire administered to nearly 20,000 state correctional personnel across 50 major correctional institutions (n = 10,212). The survey included questions about personnel's

experiences with work in the prison system, work specifically in restrictive housing units, and the impacts of this work on their mental and physical health. The survey also included questions about their perceptions of incarcerated individuals, as well as their views about different strategies for managing these individuals.

Second, the dissertation draws on qualitative data from focus groups (n = 20) with senior and junior corrections officers, mental health and medical personnel, and classification officers, as well as interviews with corrections administrators and wardens. In total, 144 corrections personnel participated in the focus groups and interviews. The survey data were analyzed using descriptive, bivariate, and multivariate analyses. The data are used to identify associations between ERH work and stress, emotional numbing, and factors that may explain the continued use of the housing. Focus group data are examined for themes and insights about why restrictive housing may have greater impacts on personnel mental health and physical well-being, compared to work in other areas of the prison.

1.1.2 Structure of Dissertation

This dissertation is structured around three substantive chapters and then a conclusion. The remaining chapters are organized as followed:

Chapter 2 examines the stressors and stress from ERH work and compares these to the stressors and stress from GPH work.

Chapter 3 examines the emotional numbing effects from work in ERH, relative to the emotional numbing effects from work in GPH.

Chapter 4 draws on multiple literatures to develop a theoretical model, which I then test, to assess whether officer traits and personal beliefs shape perceptions about the effects of ERH on the mental health of incarcerated persons.

Chapter 5 summarizes the findings of the dissertation and concludes with a discussion of their implications for theory, research, and policy.

CHAPTER 2

STRESSED OUT IN LOCK DOWN: THE IMPACTS OF EXTENDED RESTRICTIVE HOUSING STRESSORS ON PERSONNEL STRESS

2.1 Introduction

The punitive turn—wherein punishment and surveillance moved to the forefront of the American criminal justice system—has had a wide range of consequences (Clear 2008; Sampson & Loeffler 2010; Garland 2012; Savelsberg 2018; Pratt 2019; Condry & Minson 2020). One of its most recognizable impacts has been mass incarceration. The punitive turn can also be seen, however, inside of prisons as well (Simon 2000; Mears & Reisig 2006; Crewe 2011; Kreager & Kruttschnitt 2018; Beckett & Beach 2021; Sadoka & Simes 2021). One notable example has been the pervasive use of extended restrictive housing (ERH) (Ward & Werlich 2003; Pizarro & Stenius 2004; Shalev 2009; Kreager and Kruttschnitt 2018). ERH is the prolonged segregation of an individual, placed into a cell for up to 24 hours a day, either alone or with another person, with severely restricted privileges. It is generally used for administrative purposes for those whom correctional officials consider to be too difficult to manage in any other area of the prison (Mears et al. 2019; Pyrooz & Mitchell 2020). ERH is distinct from short-term segregation, which is typically reserved for punishment for a few days or weeks (Mears et al. 2019).

Since its inception, ERH has been criticized for its potential adverse effects on incarcerated persons. In turn, there has been a vast—and burgeoning—literature on its potential effects. Yet, much of the attention has been limited to those incarcerated in ERH (e.g., Haney 2003; Cloyes et al. 2006; Arrigo et al. 2008; Ahalt et al. 2016; Butler et al. 2017; Labreque & Smith 2019), with little focus on the potential impacts on the people who work in the housing. Yet, there is an abundance of research to suggest that correctional work is a highly stressful occupation (Cullen 1985; Finn 1998; Griffin 2006; Misis et al. 2013; Steiner & Wooldredge 2015; Butler et al. 2019; Vickovic & Morrow 2020; Ricciardelli & Power 2020; Smith 2021) and studies have found that correctional officers experience high levels of stress and burnout (e.g., Finn 1998, Lerman 2017). Some scholarship has suggested that correctional staff experience PTSD at rates equal to, or higher than combat military members (James & Todak 2018;

Lavender & Todak 2021). These findings are not surprising given that personnel work long hours in potentially dangerous and chaotic environments (Slate & Vogel 1997; Triplett & Mullings 1999; Lambert & Hogan 2007; Norman & Ricciardelli 2020). ERH is designed to house the most difficult to manage people in the correctional system, and, thus, personnel who work in ERH may be at greater risk of experiencing work-related stress. Little is known, however, about the effects of ERH to these personnel, whether they experience stressors unique to ERH, and whether these stressors result in greater stress among personnel.

One potential way to understand the ERH work-related stressors is to draw on the broader literature on prison work-related stress. Recently, scholars have gained valuable insights about stress among correctional workers by applying McCreary and Thompson's (2006) concepts of operational and organizational stressors. Operational stressors can be viewed as byproducts of the job, such as the risk of injury and witnessing traumatic events (McCreary et al. 2017; Riciardelli & Power 2020), whereas organizational stressors are related to the organization itself and arise from factors such as staff shortages, frequent policy changes, and investigations (McCreary & Thompson 2006; Armstrong et al. 2015).

Correctional work operational and organizational stressors can affect all prison personnel. However, personnel who work in ERH may be at greater risk of experiencing these stressors because of its unique and harsh environment. Personnel in this housing work with individuals who may be extremely violent, as well as to those who may have a high propensity to engage in self-harm and suicide. Furthermore, due to the concerns about its potentially adverse effects on incarcerated persons, ERH and personnel who work in this housing are more likely to be exposed to or involved in more oversight, investigations, and lawsuits. Given these factors, personnel who work in ERH may be likely to experience more stress than personnel who work in other areas of the prison. Despite the documented challenges that the housing produces, we know very little about its impacts to personnel. There is, then, a need for research that examines how ERH affects personnel (Mears 2016; Foster 2016).

The goal of this study is to contribute to scholarship on the punitive turn and its impacts on correctional systems. It aims, in particular, to examine the effects of contemporary correctional management practices—specifically, the impacts of ERH on the experience of operational and organizational stressors and, in turn, their effect on the mental health and physical well-being of personnel. In this study, ERH is defined as the segregation of

incarcerated persons, in a cell alone or with one other person, for six months or longer, and for management purposes. To this end, the study will, first, use survey data from Florida Department of Corrections (FDC) personnel to analyze whether work-related stress is greater in restrictive housing. Second, it will compare multiple operational stressors among personnel who have worked in ERH as compared to those experienced by personnel who have only worked in general population housing (GPH). Third, the study will examine qualitative data from focus groups and interviews conducted with FDC personnel to compare the experience of organizational stressors among the two groups of personnel. Finally, the paper further examines the qualitative data to investigate the effects of operational and organizational stressors on ERH personnel well-being.

2.2 Background

2.2.1 The Punitive Turn and the Rise of Extended Restrictive Housing

The punitive turn is marked by the shift from the rehabilitative ideal to a focus on punishment and surveillance (Vuolo & Kruttschnitt 2008; Sherry 2020). It is not only reflected in tougher crime legislation and mass incarceration, but also extends to the management methods used to control individuals within correctional systems (Sakoda & Simes 2021). One notable example is ERH. The use of ERH is not new, but its expanded use and for longer periods of time is found in contemporary correctional systems (Lovell et al. 2020).

Individuals in ERH are classified as those who cannot be managed safely within the correctional system's general population housing (GPH) (Riveland 1999; Briggs et al. 2003; Mears & Castro 2006; Labrecque & Mears 2019). They are typically locked in their cells, alone or with another person, for much of the day, and may be held in this type of confinement for months or years (Mears et al. 2019). Different correctional systems refer to ERH using different names, including, supermax, administrative confinement, special housing unit, or AdSeg, which is short for administrative segregation (Riveland 1999; Briggs et al. 2003; Lovell et al. 2020).

The Florida Department of Corrections (FDC), the correctional system that is the focus of this study, refers to the housing as "close management" (CM), which is consistent with what is typically described in the literature as ERH (see, Garcia 2016). The FDC further differentiates

between CM with one and two individuals in a cell by referring to a single-bed cell as CM1 and a double-bed cell as CM2 or CM3. Regardless of the assigned name, each of these housing units, which may either be a stand-alone prison or a wing within a larger prison, all entail the segregation of individuals from GPH, with restricted privileges, for the purpose of management, and it represents the harshest form of social control within the correctional system (King 1999; Toch 2003; Ward & Werlich 2003; Pizarro & Stenius 2004; Reiter 2012; Ahalt 2017; Rubin & Reiter 2018). The housing differs from segregation used for punishment, protection, and for shorter stays. This study uses the term ERH to focus on the housing units that segregate incarcerated persons, either alone or with another person, for six months or longer.

The rise in ERH has attracted sharp criticism by policy makers, scholars, and some correctional officials for its potential harms to those placed in it (Rhodes 2004; Shalev 2011; Reiter 2016). Much of the criticism has centered on its potential adverse effects on the mental health of people placed into the housing. Opponents argue that humans are social beings and to be locked in a cell for months or years at a time can be harmful to their mental health and well-being (Rhodes 2004; Ahalt et al. 2016; Haney 2018). To date, a large, and growing, body of literature has examined its effects across a wide array of outcomes, and has identified harmful impacts on mental health, in-prison misconduct, and post-release recidivism (Cloyes et al. 2006; Mears & Bales 2009; Morris 2016; Clark 2018; Lucas & Jones 2019; Labrecque et al. 2020).

ERH may also affect personnel who work within these units. Studies have found that correctional workers experience considerable work-related stress (Finn 1998; Lerman 2007; Misis et al. 2013; Lambert et al. 2017; James & Todak 2018; May et al. 2020). Personnel often work long hours and are responsible for caring for individuals whom society has deemed unable to live in a prosocial way among other members of society. Those who work in ERH may be uniquely impacted. These personnel are responsible for caring for the purported "worst of the worst" individuals in the prison system (Aranda-Hughes et al. 2021). ERH, then, should be expected to result in greater stress for personnel who work in these units.

2.2.2 The Potential Effects of Work in Extended Restrictive Housing

Few studies have examined the experiences of personnel who work in ERH and its potential effects on them. There are, though, reasons to anticipate that ERH work may affect

personnel views. They manage individuals in the housing spend much of their days in ERH units and are given substantial discretion over how they manage these individuals (Crewe 2011; Lambert et al. 2018; Steiner & Wooldredge 2018). Staff work experiences can shape their views about incarcerated individuals and how they should be treated (Lambert et al. 2009; Crewe et al. 2011; Molleman & Leeuw 2012; Crichton & Ricciardelli 2016). Not least, the impacts of the work may affect their relationships with family members, friends, and other members of the community (Farkas 1999; Triplett et al. 1999; Obidoa et al. 2011; Armstrong et al. 2015; Lambert et al. 2015; Kinman et al. 2017; Vickovic 2020). Over the last few decades scholars have increasingly called for more research that examines correctional personnel work experiences and the impacts of these experiences (Kauffman 1988; Liebling, 2000; Vuolo & Kruttschnitt 2008; Crewe 2011). Personnel who work in ERH may be subject to greater stressors, thus the impact of working in this environment may uniquely affect them and result in long-term damage to their overall well-being.

Scholars have established that those who work in correctional settings are at high risk experiencing work-related stress (Cullen 1985; Triplett et al. 1996; Finn 1998; Crawley 2013; Steiner & Wooldredge 2015; Lerman 2017; Ricciardelli & Power 2020). Exposure to chronic stress may have a host of negative effects on individuals, both to psychological and physical health. Research finds that work-related stress among correctional personnel may result in burnout, depression, digest issues, high blood pressure, sleep disturbance, post-traumatic stress disorder (PTSD), and suicide (Stack & Tsoudis 1997; Finn 1998; Lambert et al. 2010; Sui et al. 2014; Lerman 2017; Ricciardelli & Power 2018). Stress also has a significant effect on medical and mental health professionals, not just officers (Senter et al. 2010).

Much of the scholarship on the effects of prison work has focused on the overall prison environment and has not specifically examined the impacts of work in ERH. As discussed above, ERH has been criticized for its extreme nature (Rhodes 2004; Reiter 2016; Haney 2018). It is viewed as a "prison within a prison" because it is classified as a maximum-security setting, designed to imprison the most difficult to manage incarcerated individuals in the prison system. Thus, working conditions for personnel in this environment should also be expected to be difficult. Prior work has found that the security level of a prison is positively associated with work-related stress (Cullen et al. 1985; Steiner & Wooldredge 2015). Accordingly, one can anticipate that work in a maximum-security environment, like that of ERH, would result greater

stress because of the types of individuals who are housed within it (Mears & Watson 2006; Mears et al. 2021). For example, one study found that, compared to work in GPH, work in segregated housing resulted in greater stress and that stress arose from multiple sources, including greater work responsibilities and abuse from those incarcerated in the housing (Mears & Watson 2006). More recent work has found that officers who worked in segregation units were verbally threatened by inmates more so than officers in other areas of the prison (Steiner & Wooldredge 2017, p. 336). These studies suggest that those who work in ERH may be subject to unique stressors, such as frequent victimization, that may result in greater work-related stress.

Some extant personnel accounts suggest that there are unique challenges associated with ERH work (Sullivan 2006; Mears et al. 2021). For example, in testimony to the Commission on Safety and Abuse in America's Prisons (2005), one State of Oregon correctional officer described solitary confinement housing units as difficult on staff mental health. The officer described having feces thrown at him and having to endure many of the same environmental stressors as the individuals housed in restrictive housing, such as spending long hours in a windowless building, listening to individuals kicking their cells doors, and witnessing violence. A media interview with a correctional officer from another state echoed the reports from the Oregon officer's testimony. During the interview, the officer reported feelings of being "stuck" in a windowless concrete building and experiencing consecutive months without seeing the sun due to the long workdays. He also described experiencing frequent verbal abuse by those in the housing. The officer added that many of the personnel lack an adequate support system and resort to drinking or abusing their pets as a way of alleviating tension and stress (Sullivan 2006).

2.2.3 Prison Work and Operational and Organizational Stressors

One way to understand the effects of ERH on personnel stress is through McCreary and Thompson's (2006) concepts of operational and organizational stressors. The researchers conducted a series of studies that examined police officer work-related stress and found that the officers separated their stressors into two general categories: operational and organizational. Operational stressors come from factors associated with the job and can be conceptualized as the by-products of the job. Operational stressors include factors such as shift work responsibilities, overtime demands, risk of being injured on the job, exposure to violent and traumatic incidents,

lack of understanding about the work from family and friends, and the inability to separate work from outside of the work environment. Organizational stressors are related to the organization itself and arise from factors such as staff shortages, frequent policy changes, and internal investigations and they may contribute to the operational stressors.

Much of the scholarship that has examined operational and organizational stressors has focused on police work-related stress and has found support for the concepts (Shane 2010; Chan & Andersen 2020; Queiros et al. 2020). More recently, a small number of studies have applied these concepts to understand prison work-related stress and have also found support: work-related stress for correctional personnel can be attributed to operational and organizational factors (Summerlin et al. 2010; Finney 2013; Jin et al. 2018; Ricciardelli & Power 2020; Norman & Ricciardelli 2021). Moreover, there is evidence to suggest that correctional personnel may experience greater organizational stress than police officers (Summerlin et al. 2010). Summerlin and colleagues (2010) used survey data to examine organizational and operational stressors among FDC officers and compared it to Florida police officers who completed the same survey. They found that correctional officers reported greater levels of stress from organization stressors than did police officers, with staff shortages resulting in the greatest level of stress for correctional officers.

Other research has also found that operational and organizational stressors are salient in prison work and that these stressors have adverse effects on correctional officers' mental health and job performance (Jin et al. 2018). In a recent study, for example, Norman and Ricciardelli (2021) examined the occupational stressors of probation and parole correctional officers in Canada and found that operational and organizational factors can cause stress. Specifically, exposure to traumatic events, administrative tasks, shortage of staff, and tensions in the workplace were identified as key stressors. These stressors, in turn, were found to negatively affect their mental health and their job performance. At present, studies have not examined whether personnel who work in ERH are at greater risk of experiencing work-related stressors and whether stress from these stressors affect personnel's mental and physical health.

2.3 Current Study

Against this backdrop, the following hypotheses guide the study's analyses.

H1a: The operational stressors of prison work will be greater for personnel who work in ERH. Operational stressors may uniquely impact personnel who work in ERH. Inmate care, which is included in daily shift work, is more difficult in ERH because, by design, the housing is intended to house individuals who are identified as the most difficult to manage in the entire correctional system (Riveland 1999; Briggs et al. 2003; Mears & Castro 2006; Labrecque & Mears 2019). These individuals are also classified as potentially dangerous; thus, personnel may be at higher risk of being victims of severe violence (Cloud 2015). In addition, because ERH is highly controversial, personnel may feel judged for working in the housing. They may feel as though their family and friends do not understand their work, which may be another stressor that personnel experience.

H1b: The organizational stressors of prison work will be greater for personnel who work in ERH. In a similar vein, organizational stressors may be greater for personnel who work in ERH. For example, staff shortages may be more problematic in ERH. More staff are required to manage the difficult individuals who are housed in restrictive housing (Garcia 2016). Personnel who work in these units also require specialized training. Thus, when there are not enough personnel to cover shift, the other personnel assigned to the unit will be required to work more overtime hours.

H2: Greater operational stressors will result in greater work-related stress. Operational stressors will be greater in ERH, relative to GPH, which will result in greater work-related stress. ERH is designed to house the most difficult to manage inmates in the entire prison system (Mears & Reisig 2006). Research has found that inmates in these housing units are often dangerous or suffer from mental health problems that officers are not trained to deal with (Clark 2018). In addition, because they are locked in their cells for up to 24 hours a day, the job demands are more intense for these officers because they must deliver all items to inmate cells, escort them throughout the prison compound, and complete cell checks multiple times throughout the day. Thus, the stressors from work in ERH will result in greater work-related stress.

H3: ERH work will involve greater exposure to operational and organizational stressors and, in turn, adversely affect the mental and physical well-being of personnel. Prior work has found that chronic stress is likely to lead to poor mental and physical health (Van Der Kolk 2015). For example, individuals who experience chronic stress are more likely to suffer from depression, anxiety, sleep problems, digestive issues, high blood pressure, and heart problems. Prison work is, arguably, one of the most stressful professions. Much of the stress is likely to come from organizational and operational factors (Walters 2020; Norman & Ricciardelli 2021). As discussed above, these stressors may be greater for personnel who work in restrictive housing, and, in turn, can be expected to adversely affect personnel mental health and physical well-being.

2.4 Data and Methods

Drawing on quantitative data form survey responses and qualitative data from focus groups and interviews, a mixed-methods approach is employed to test the hypotheses. Below, I describe the data in detail.

2.4.1 Florida Department of Corrections Personnel Survey

The quantitative analyses draw on survey data collected from state correctional personnel (n = 10,211). This survey was administered to 19,166 FDC state corrections personnel from November 2019 through January 2020 through Qualtrics. The survey was part of a larger study funded by the National Institute of Justice (NIJ) focused on the impacts of restrictive housing on inmates, personnel, and the prison system. The survey questions were developed by drawing on prior literature, as well as from insights from interviews and focus groups conducted with correctional administrators and personnel (discussed further below). The survey consisted of a range of items that focused on correctional personnel's work experiences, their perceptions about various inmate management strategies, and the psychological, physical, and social impacts of corrections work. More importantly, the survey data included questions specifically about extended restrictive housing. Prior to distribution of the survey, the University's Human Subjects Protection Institutional Review Board approved the study.

An electronic version of the survey was created using Qualtrics (2019). The survey was

distributed by email to a point of contact within each participating site, who was advised that the survey sent to them was specifically coded for their prison and not to forward it to other prisons. The point of contact then distributed the survey to all supervising personnel, along with information about the survey and instructions on how to distribute it to personnel so that it could be completed on a work computer during work hours. Prior to beginning the survey, participants were provided with formal consent text that included information about the study and who to contact if they had any questions. At the end of the formal consent text, they had the option to either participate in the study or not to participate. Those who chose not to participate were automatically directed to a web page that exited out of the survey. Those who agreed to participate were directed to the first survey question. Personnel were not paid or otherwise compensated for their participation.

In total, of the 19,166 personnel who were eligible to participate in the survey, 10,212 personnel consented to and completed the survey, resulting in a 53.3 percent participation rate. However, due to potential irregularities in survey administration at one facility, the data from that facility were dropped (n = 555), resulting in a final sample of 9,656 (table 2.1).

2.4.2 Dependent Variables

ERH work operational stressors. To capture the operational stressors of work in ERH, six measures were included in the analyses. At the beginning of the survey, personnel were asked to identify all areas of the prison they had experience working in. Respondents could choose more than one option. For example, if a respondent had work experience in GPH and ERH, they could choose both options. Those who reported having experience working in ERH were asked the following questions. "When working in close management 1 units, how much stress is caused by each of the following?" (1) "How much stress is caused by shift work (e.g., daily tasks, inmate care)?"; (2) "How much stress is caused by overtime demands?"; (3) "How much stress is caused by risk of injury?"; (4) "How much stress is caused by witnessing traumatic events?"; (5) "How much stress is caused by lack of understanding from family and friends about your work?"; (6) "How much stress is caused by feeling like you are always on the job?" Respondents could choose to respond: 1 = No stress, 2 = Some stress, 3 = Moderate stress, 4 = A lot of stress (range = 1 - 4).

Table 2.1. Personnel Characteristics from the Corrections Personnel Survey (n = 9,527)

	Mean / %	S.D.	Range
Male	59.3	—	0-1
Race/ethnicity			
White, non-Hispanic	60.9	—	0-1
Black, non-Hispanic	20.7	—	0-1
Hispanic	12.6	—	0-1
Other	5.7	—	0-1
Age	38.5	11.9	18-78
Education			
High school or equivalent	66.5	—	0-1
Some college	50.9	—	0-1
Bachelor's degree	11.0	—	0-1
Master's, J.D., or doctoral degree	4.6	—	0-1
Corrections experience (in years)	9.6	6.8	1-21
Occupational position			
Senior officers	14.1	—	0-1
Sergeant or correctional officer	74.1	—	0-1
Medical, MH, program staff	6.2	—	0-1
Other	5.6	—	0-1
Work in GPH[a]	93.7	—	0-1
Work in ERH[b]	47.4	—	0-1
Facility dummies	—	—	0-1

a. General population housing (GPH).
b. Extended restrictive housing (ERH).

GPH work operational stressors. To capture GPH work stressors, six measures that asked about stress caused by various operational stressors in GPH were also included in the analyses. Personnel who reported that they had experience working in GPH were asked nearly identical questions as those who were asked about operational stressors of ERH work, except that the stem question was: "When working in general population units, how much stress is caused by each of the following," followed by six identical measures to those asked about stress of ERH work. Respondents could also choose between the same answers as those included in the ERH work stress questions. All six GPH stressors responses had a range of 1 through 4.

Stress from ERH work. To capture perceived stress of ERH work, one measure was included in the analyses. All respondents were asked, "based on your experience—or what you have heard—how stressful is work in each of these following types of units?" One of the items below the question stem was "close management 1" (which represents ERH in this study).[1] Respondents could choose from the following options: 1 = Never, 2 = Seldom, 3 = Some of the time, 4 = Most of the time, with higher numbers indicating more perceived stress (range = 1-4).

Stress from GPH work. To capture stress of GPH work, one measure was included in the analyses. As above, regardless of where in the prison personnel had experience working, they were asked, "based on your experience—or what you have heard—how stressful is work in each of these different types of units?" Another item under the question stem was "General population." Identical to the question about perceived ERH work stress, respondents could choose from one of the four choices (range = 1-4).

2.4.3 Independent Variables

ERH work. ERH work is the first independent variable. At the beginning of the survey, personnel were asked to indicate which areas of the prison they had experience working in. Respondents could choose more than one option. Those who reported that they had experience working in ERH were automatically directed to questions about their work experiences in ERH. Nearly half (47.58%) of respondents reported that they had ERH work experience.

GPH work. GPH work is the second independent variable. Respondents who reported that they had experience working in GPH, like those who reported work experience in ERH, were automatically directed to questions about their work experiences in GPH. Most respondents (93.76%) reported that they had GPH work experience.

Operational stressors of ERH index. The measures for operational stressors from ERH work described in the dependent variables section were used to develop an additive index to use in subsequent analyses. To create the index, each measure was first recoded to have a base value of zero. The recoded variables ranged of 0 to 3, 0 = Never, 1 = Seldom, 2 = Some of the time, 3

[1] "Close management 2 and 3" was also an item below the question stem. The responses to that item were nearly identical and did not make a substantive difference in any of the analyses when it was included. In addition, close management 1 is in the same unit as close management 2 and 3, with the same personnel working in both types of ERH. Therefore, I only include the "close management 1" question to represent stress in ERH work.

= Most of the time. All the measures were then added and standardized to create the index (alpha = 0.908). The ERH index has a range of 0 to 18, with higher values indicating higher stress from the various stressors of ERH work.

Operational stressors of GPH index. Similar to the ERH operational stressors index that was crated and described above, an index was created for the stressors of GPH work. Using the GPH operational stressors measures, identical steps were taken to create the GPH operational stressors index (alpha = 0.902). The range for the GPH index is also 0 to 18, with higher values indicating higher stress from the stressors.

2.4.4 Control Variables

In addition to the main independent variables, multiple control variables were included to control for various demographic factors that may influence the independent and dependent variables. The control variables are described below.

Sex. The first control variable is sex. Respondents were asked to identify their sex and had the option to choose from two options: 1 = male; 2 = female, with 59.46% reporting as male and 40.54% reporting as women. The proportions are similar for the FDC personnel population.

Race and ethnicity. The second control variable is race and ethnicity. Respondents were asked to report their race and their ethnicity and had the option of choosing between, "White," "Black or African American," "American Indian or Alaska Native," or "other." Respondents had the option to choose one response. To capture ethnicity, respondents were also asked whether they identified as "Hispanic, Latino, or of Spanish descent." The measures were combined, and dummy coded into the following categories: "White, non-Hispanic" (61.14%); "Black, non-Hispanic" (20.58%); "Hispanic" (12.58%); "other" (5.70%).

Education. Education is the third control variable. Respondents were asked to report their highest level of education. Respondents were provided with five options: "high school or equivalent," "some college," "bachelor's degree," "master's or J.D.," and "doctoral degree." The variables were collapsed into four dummy variables: "high school or equivalent" (32.22%); "some college" (50.69%); "bachelor's degree" (11.40%); "advanced degree" (4.68%).

Corrections experience. Corrections experience is the fourth control variable. Participants were asked: "How long have you worked in the field of corrections?" and were

provided with a dropdown list in which they could chose the number of years that they had worked in corrections. The options ranged from 1 = "less than 1 year" to 21 = "more than 20 years." The mean years of experience for the sample was 9.69 (S.D. = 6.86) years.

Respondents were also asked their age and were provided the option to manually enter their age. However, when examined with the other variables, age was found to be highly correlated with corrections experience, therefore, it was left out of the analyses. The mean age among correctional personnel in the sample was 38.60 (S.D. = 11.94) with the youngest personnel aged 18 and the oldest was age 78 at the time of the survey.

Occupational position. The fifth control variable is occupational position. Participants were able to choose from one of eight different occupational positions. However, the categories were collapsed to protect the identity of those who make up such few within their occupation that they could be easily identified (e.g., medical and mental health staff). The collapsed variables were recoded into the following dummy variables: senior officers, which includes security officers ranked lieutenant and above and classification officers (15.22%); sergeant or correctional officers (73.13%); medical and mental health staff and program staff (6.15%); and other (5.5%). Wardens and assistant wardens were not included in the analyses because they were not asked about the stressors from work in ERH or GPH.

Facility. The facility in which the personnel worked at the time that they completed the survey is the sixth control variable. The facility variable was included to account for potential cluster effects.

2.4.5 Focus Group and Interview Data

The qualitative data come from interviews and focus groups with corrections administrators and personnel from ten state prisons across a large southern state, as well as researcher observations made at the prisons. The data were collected for the larger NIJ-funded study and was collected between November 2017 and February 2020. At the start of the study, ERH in the state was concentrated to five facilities and incarcerated persons from throughout the state could be transferred to these facilities. The focus of the study was on restrictive housing. Therefore, all five facilities, including a women's facility, were toured, and included in the focus groups and interviews. ERH personnel spend much of their workdays in ERH directly managing

individuals placed in the housing. Thus, they can provide first-hand accounts about what it is like to work with these individuals and the effects of work in this environment.

Also included in the data collection were four facilities that housed individuals in GPH and did not have ERH on site. These prisons provided insight into personnel experiences with incarcerated persons sent to and received from ERH and were chosen based on the number of individuals that each facility sent to and received from ERH facilities. Official records and recommendations from administrators were used to identify these prisons. In addition to the prisons with either ERH or GPH, one facility that served as a transitional step-down was included. The step-down facility housed individuals who had been recently released from ERH and provides programming to assist individuals in their transition to the GPH and into the broader community after release from prison. The facility was included because personnel who work within the facility can speak about their direct experiences of managing those who have just been released from ERH.

Upon arrival to each study site, the researchers toured the facilities, focusing on areas that were the were central to the broader NIJ study, including housing units, recreation and visiting areas, and medical and mental health buildings. The purpose of the tours was to gain context about the prison experience for both incarcerated individuals and personnel. After the tours, two focus groups occurred at each facility (n = 20). One focus group included senior correctional officers (lieutenant and above), medical and mental health personnel, classification officers, and programming personnel. The second focus group included junior ranking correctional officers (sergeant and below). The groups were separated so that junior ranking staff could feel free to describe their experiences without influence from senior staff, reservation, or fear of repercussion. Each focus group lasted between one and two hours in length and included 5-10 respondents (n = 133). Interviews with wardens and high-ranking state administrators were also conducted (n = 11), which lasted approximately 45 minutes in length. In total 144 respondents participated in the focus groups and interviews.

At minimum, three researchers attended each focus group and interview, one researcher facilitated the focus groups or interviews, while the other two took notes. The focus groups and interviews were conducted inside of the prison (with the exception of interviews with two state administrators, which were conducted inside of the state corrections central office). For security reasons, recording devices were not allowed inside of the prisons and not used to record any

responses. Instead, responses were hand-written. Immediately after each visit the researchers debriefed to review the notes. Within 24 hours, the hand-written notes were transcribed and synthesized. Each researcher who attended the site visits then reviewed the notes to ensure accuracy and identify potential discrepancies.

For the current study, I examined the qualitative data for themes that related to stress—specifically, I examined themes about operational and organizational stressor. Measures to capture organizational stressors were not included in the survey data. Thus, only the qualitative data were analyzed for themes about organizational stressors,

2.4.6 Methods

In what follows, I first analyzed the survey data to test H1a and H2, using descriptive, paired sample t-tests, and logistic regression analyses. All statistical analyses were conducted using the Stata version 17 (2021). The survey data do not permit statistical tests of H1b (ERH organizational stressors are greater than GPH stressors) or H3 (greater stress adversely affects mental and physical well-being). These are examined using the focus group and interview qualitative data.

As an additional test of H1a and H1b, I examined the qualitative data for insights about the operational and organizational factors in each type of housing and whether they can explain their influence on overall stress. Specifically, themes about operational and organizational stressors that affect ERH work were compared to operational and organizational stressors that affect GPH work. Thematic analysis was used to examine the qualitative data. This method was used to identify, organize, and describe patterns in the data (Braun & Clarke 2006; Nowell et al. 2017) that illuminate the presence and nature of stressors associated with each type of housing.

Next, I compared the effects of operational and organizational stressors from each type of housing on emotional and physical health. To do so, I analyzed the qualitative data and, again, employed thematic analysis to examine the effects of operational and organizational stressors on mental and physical health. That is, I identified themes within the data related to the impacts of stress on personnel due to the various stressors from correctional work in ERH and GPH.

2.5 Findings

2.5.1 Quantitative Analysis

First, I conducted bivariate analyses to examine how personnel who had experience in each type of housing responded to the questions about operational stressors. As shown on table 2.2, two groups were included, (1) personnel who reported that they had worked in ERH and (2) all personnel. The means from the analysis show that, on average, personnel responded with higher values to the ERH stressors compared to the GPH stressors. Next, I introduce a formal test of significance to determine whether the differences between housing types are significantly different from one another.

To test H1a, I conducted a series of paired sample t-tests for each of the six operational stressors. For the t-tests, the ERH group (n = 4,093) were included in the analyses because only personnel who reported that they had experience working in ERH received the questions about their experiences in ERH. In contrast, only personnel who worked in GPH received questions about GPH.

As shown in table 2.3, I first compared the stressors index from ERH to the stressors index from GPH. As shown in table 3, the results indicate that, when examined together, the six stressors were greater for ERH work (M = 11.26, S. D. = 5.03) compared to the six stressors from GPH work (M = 10.14, $S.E.$ = 4.79), $t(4,092) = -25.90$, $p < .001$. The effect size, however, was modest (Cohen's d = 0.23). An effect smaller than 0.50 is considered modest (Cohen 1992).

Next, I examined the individual stressors, separately, from ERH and compared them against each GPH stressor. The results of the t-tests showed that participants reported that the ERH stressors were greater relative to the GPH stressors. For example, there was a significant difference between stress from ERH shift work and that of GPH shift work, $t(4,092) = -28.28$, $p < .001$. That is, the stressors from work in ERH due to shift work (M = 2.82, $S. D.$ = .97) are statistically greater than stressors from shift work in GPH (M = 2.48.14, $S. D.$ = .93). However, the effect size for these differences was also modest (Cohen's d = 0.36). As shown in table 3, similar results arose for the t-tests that examined overtime demands, risk of injury, witnessing traumatic events, lack of understanding from family and friends, and the feeling of always being on the job, though the effect sizes were more modest.

Table 2.2. Stressors and Stress among Personnel Working in Extended Restrictive Housing (ERH) and General Population Housing (GPH)

	Mean / %	S.D.	Range	N
Operational stressors, ERH index*	11.26	5.03	0-18	4,512
Shift work	2.81	0.97	1-4	4,512
Overtime demands	3.17	0.97	1-4	4,512
Risk of injury	2.89	0.98	1-4	4,512
Witnessing traumatic events	2.81	1.02	1-4	4,512
Lack of understanding family/friends	2.73	1.06	1-4	4,512
Feeling like always on the job	2.88	1.05	1-4	4,512
Operational stressors, GPH index*	10.34	4.94	0-18	9,028
Shift work	2.53	0.93	1-4	9,028
Overtime demands	3.13	0.99	1-4	9,028
Risk of injury	2.66	0.98	1-4	9,028
Witnessing traumatic events	2.64	1.00	1-4	9,028
Lack of understanding family/friends	2.57	1.06	1-4	9,028
Feeling like always on the job	2.81	1.06	1-4	9,028
Perceived stress of work in GPH	2.99	0.83	1-4	9,527
Perceived stress of work in ERH	3.17	0.94	1-4	9,527

* This variable serves as an independent variable in some models.

Table 2.3. Personnel-Reported Operational Stressors from Work in GPH vs. ERH[a]

		. . . in GPH	. . in ERH	Cohen's d	*t*-value	p-value
Operational stressors[b]						
Index of stressors	M SD	10.14 (4.79)	11.26 (5.03)	0.23	-25.90	.001
Shift work	M SD	2.48 (0.90)	2.82 (0.97)	0.36	-27.86	.001
Overtime demands	M SD	3.12 (0.98)	3.18 (0.97)	0.06	-5.85	.001
Risk of injury	M SD	2.63 (0.96)	2.89 (0.98)	0.27	-21.37	.001
Witnessing traumatic event	M SD	2.60 (0.99)	2.82 (1.02)	0.22	-19.55	.001
Lack of understanding family/friends	M SD	2.53 (1.04)	2.72 (1.06)	0.18	-17.35	.001
Feel always on job	M SD	2.77 (1.05)	2.89 (1.05)	0.11	-10.72	.001
	N	4,093	4,093			

a. This is the sub-sample of personnel who had worked in both GP housing and RH.
b. The stressors are specific to each type of housing work (e.g., reported stressors of shift work in GP housing vs. reported stressors of shift work in extended RH).

To test hypothesis 2 —which anticipated that the stressors from ERH work will be greater, resulting in greater stress—I first conducted a paired-sample t-test comparing ERH stress to GPH stress (not shown in tables). Recall that the stress measures capture perceived or experienced stress from work in either GPH or ERH. Therefore, the entire sample (n = 9,527) was included in the analyses. The results of the t-test show a statistically significant difference in means, $t(9{,}526) = 17.65$, $p < .001$. That is, the reported perceived or experienced stress from ERH work ($M = 3.17$, $S.D. = .94$) was greater than that of GPH work ($M = 2.99$, $S.D. = .83$).

Next, to test the effects of operational stressors on work-related stress for each type of each housing, I tested three ordered logistic regression models that regressed each index on the corresponding housings' work-related stress (e.g., ERH work related stress regressed on ERH stressors). I was not able to test the organizational stressors in a regression model because the survey data did not include measures that captured organizational stressors.

As shown in table 2.4, models 1 and 2 included the ERH group (worked in GPH *and* ERH; n = 4,093) to examine the effects of operational stressors and perceived stress among personnel who had experience working in both types of housing.

In model 1, I tested whether the stressors in ERH would be associated with greater work-related stress among only personnel who had worked in ERH and GPH. The results showed that higher levels on the stressors index of ERH predicted greater odds of ERH work-related stress (OR = 1.21, S.E. = .01, p < .001). Similar results were found for model 2, which tested whether the stressors index of GPH would predict GHP work-related stress among personnel who had worked in ERH and GPH (OR = 1.20, S.E. = .01, p < .001).

In model 3, I included only correctional officers who reported that they had experience working in GPH and not ERH (GPH group; n = 3,609) and tested the effect of the stressors index on work-related stress in GPH.[2] There was a statistically significant positive relationship between the index and stress in GPH among the GPH group. On average, greater values on the stressors index were associated with greater levels of stress (OR = 1.23, S.E. = .02, p < .001).

[2] Only officers were included in the GPH group because most other personnel (senior officers, mental and medical staff, programming staff, and classification officers) reported that they had worked in ERH. As a result, these groups were too small to include in the "GPH group" analyses.

Table 2.4. Ordered Logistic Regression of Prison Work Stressors on Personnel Perceived Stress

	ERH Group				GPH Group	
	Model 1. Perceived Stress from Work of ERH[a]		Model 2. Perceived Stress from Work of GPH[a]		Model 3. Perceived Stress of Work of GPH[b]	
	OR	(S.E.)	OR	(S.E.)	OR	(S.E.)
Op. stressors of ERH	1.21***	(0.01)				
Op. stressors of GPH			1.20***	(0.01)	1.23***	(0.02)
Male	1.17*	(0.09)	1.54***	(0.09)	1.13***	(0.08)
Black, non-Hispanic	0.75**	(0.07)	0.76*	(0.08)	0.92	(0.11)
Hispanic	0.87	(0.01)	0.82*	(0.07)	1.00	(0.12)
Other	0.89	(0.12)	1.08	(0.14)	1.09	(0.16)
Some college	1.16*	(0.09)	1.10	(0.06)	1.24**	(0.10)
Bachelor degree	1.18	(0.18)	0.88	(0.10)	1.27	(0.25)
Advanced degree	1.21	(0.28)	1.29	(0.16)	0.94	(0.22)
Years of experience	1.05***	(0.01)	1.02***	(0.01)	1.03***	(0.00)
Senior officers	0.78	(0.39)	0.41	(0.19)	—	—
Sgt/CO	0.76	(0.37)	0.63	(0.29)	—	—
Medical, MH, program staff	1.32	(0.75)	0.61	(0.35)	—	—
N	4,093		4,093		3,609	

* p < .05, ** p < .01, *** p < .001

a. Subset sample of personnel who reported work experience in GPH and ERH.

b. Correctional officers who reported work in GPH only.

2.5.2 Qualitative Analysis

To further gain insight about why personnel responded how they did to the survey questions about the stressors and stress in each type of housing, H1a and H2 are revisited, and H1b and H3 are examined, using the qualitative data.

Operational stressor 1 = Shift work. One type of operational stressor in ERH that may be more prevalent is shift work. Daily work responsibilities can be a source of stress regardless of the area of the prison worked. However, personnel who had experience working in both types of housing reported that the duties of ERH were much more intense compared to those in GPH. One aspect of ERH that makes the daily tasks more intensive is that the work is physically taxing. ERH officers spend most of their days on their feet. For example, in addition to other tasks, ERH officers must check all cells every 30 minutes, whereas GPH officers spend much of their days observing inmates from inside of the officers' station (located behind a thick glass barrier) and are required to make fewer rounds throughout the housing unit. Mental health and medical personnel also reported that they were required to conduct daily checks within ERH, whereas they are not required to do so in GPH. As one mental health staff member explained, "Mental health [personnel] are responsible for the mental health care of all of the inmates within the [entire prison] facility, but we spend more than half of our workdays in [ERH], which only holds a small fraction of the inmate population."

Another aspect of shift work that is reportedly more labor-intensive in ERH involves escorting incarcerated individuals throughout the prison. As an example, at minimum, two officers are required to move individuals in and out of their cells and escort them throughout the prison. ERH officers must physically escort individuals to recreation, showers, and appointments—a sharp contrast to GPH, where one officer can escort multiple shackle-free individuals throughout the prison grounds.

Greater amounts of paperwork and documentation are also associated work in ERH. All personnel, regardless of where they work within the prison, must complete paperwork as part of their assigned responsibilities. However, personnel reported that work in ERH requires them to complete more paperwork—sometimes so much so that personnel must remain at work well after the end of their shift to tend to the responsibility. One example of when extra paperwork may be needed is when cell extractions or use-of-force incidents occur. These events can be dangerous

to both the individual in the cell and to personnel. Thus, mental health and medical personnel must also be present during the event. After an extraction occurs, all personnel who were present must write a report to document the incident. Personnel reported that the report write-up is time consuming and cannot often be completed during their shift because they must continue to tend to all other shift responsibilities. They added that extractions and other types of use-of-force incidents can and do occur in GPH. However, they are less frequent.

Operational stressor 2 = Overtime demands. A second type of operational stressor in ERH that may be more prevalent is the demand to work overtime. Personnel reported that a regular work shift is 12 hours long. When they are required to work overtime, a workday can turn from a 12-hour day to a 16-hour day. Requirements to work overtime occur often and are typically mandated. Most personnel reported that overtime work occurs more often in ERH than in other areas of the prison. They explained that only personnel who are specially trained to work in ERH can work in the housing. Therefore, when shifts are needed to be filled by overtime, only personnel who have completed the specialized training can work these overtime hours. In addition, because ERH is gender-specific (only male personnel can manage incarcerated men and only females can manage incarcerated women), the pool of potential personnel to cover the shifts becomes smaller—particularly in the women's prison. Most participants reported that it is not uncommon for an officer in ERH to work up to 80 hours in one week, with a typically work week is approximately 50-60 hours.

Operational stressor 3 = Risk of injury. A third type of operational stressor in ERH that may be more prevalent is risk of injury. All personnel said the potential for injury is common in prison work. However, most personnel reported that the potential for serious injury is greater in ERH compared to GPH. All personnel reported or agreed that ERH is designed to manage the "worst of the worst" individuals in the prison system. They added that these individuals are those who pose a safety and security risk to the rest of the prison, many of whom staff described as, "extremely violent individuals who have nothing left to lose." One ERH officer stated, "You just never know what's going to happen when you go into work. You don't know if that's the day you or your coworker are going to be attacked." Most GPH and ERH personnel reported that individuals in ERH will "attack officers any at any chance they get." They added that some of individuals in ERH "spend their time thinking up ways to harm officers" because "inmates in [ERH] have nothing but time." Some personnel reported that,

some individuals will break off fragments of the cell fixtures, such as light fixtures or pieces of the metal bed, to create prison made knives, referred to as "shanks," to stab officers as soon as an opportunity arises. Prison made "shanks" can cause serious, and sometimes lethal, injury.

Operational stressor 4 = Traumatic events. A fourth type of operational stressor in ERH that may be more prevalent is exposure to traumatic events. Traumatic events are reportedly more frequent in ERH than in GPH. For example, most personnel reported that suicides and serious self-harm incidents more occur frequently in ERH than in GPH. Self-harm incidents include such things as, swallowing potentially lethal items (e.g., batteries) in the cell, "banging their heads against the wall until they bleed," self-mutilation, or suicide attempts. Many personnel explained that, in their view, these types of traumatic self-harm incidents are more frequent in ERH because a large portion of the individuals who are placed in the housing have been previously diagnosed with mental health and behavioral problems. Some personnel reported that some of these individuals self-harm out of frustration of being locked in a cell all day. One ERH officer stated, "Some inmates just can't deal with [ERH]." Personnel reported that, although traumatic incidents also occur in GPH, they occur more often in ERH. Mental health and medical personnel reported that, in addition to the daily checks, they spend much of their days responding to incidents, some traumatic, in ERH.

Operational stressor 5 = Lack of understanding from family and friends. A fifth type of operational stressor in ERH that may be more prevalent is a lack of understanding from family and friends. Personnel reported that it is difficult for people who do not work in corrections to understand what ERH is like. They added that family and friends have difficulty understanding what staff deal with daily. One ERH officer stated, "We live in this environment. It is difficult for people to understand what the prison setting is like. The movies sensationalize prison. Once you are here, the glam is gone." Personnel reported that they are witness to many disturbing incidents in ERH that they would never speak to family about because they would not want to burden their families with worry. Some GPH personnel also reported avoiding discussing work with their families to maintain a separation from work and their home life. Yet most personnel reported that they are less likely to speak about their ERH work experiences because of the extreme nature of the work.

In addition to preventing undo worry, personnel also said that they avoid speaking about their work experiences because they worry that they will be unfairly judged. They explained that

because the media inaccurately portrays ERH, prison staff are criticized for willingly working in such an environment. Some personnel said that because of the criticism that they often experience, they avoid telling people that they work in ERH out of fear of being stigmatized.

Operational stressor 6 = Always feeling like you are on the job. A sixth type of operational stressor in ERH that may be more prevalent is the feeling of being unable to separate work from personal life. Respondents reported that they often receive phone calls during their time off about the incidents that occur in ERH, resulting in feeling like they are always on the job. Personnel in ERH and GPH are issued company cell phones to use so that they may remain on call. However, they reported that they are more likely to receive calls associated with ERH. Personnel, particularly those who had worked in ERH, stated that being required to have a work-issued cell phone results in the feeling of being "tethered to work." The cell phones are issued in cases of emergencies or to call personnel to cover staff shortages and staff are expected to answer their phones, regardless of the time of day. One officer reported, "Just try not answering your phone when the Warden calls and see what happens when you get back to work." When asked to clarify what was meant by this statement, the officer explained that all personnel operate under the notion that when calls from superiors are not answered, there will be repercussions.

In addition to the themes about the operational stressors of ERH work, themes about *organizational stressors* associated with ERH also arose. The organizational stressor themes included departmental staff shortages, investigations and lawsuits, and frequent policy changes.

Organizational stressor 1 = Departmental staff shortages. One example of an organizational stressor that reportedly was more prevalent in ERH was staff shortages. Personnel at every study site reported that their prison was understaffed, with some more so than others. However, staff shortages were reportedly more problematic in ERH. ERH work is labor intensive and requires a greater staff-to-inmate ratio. Personnel reported that ERH is a busy and high-paced environment. Some personnel described it to be like a "fine-tuned machine," and explained that if just one small incident occurs, "it completely throws off the way that the unit is operated." When there are too few staff to complete the tasks, ERH cannot function properly, placing the security of the prison and the safety of others at risk. Personnel reported that, while adequate staffing is important in GPH, the operations of GPH are not as easily disrupted when staff shortages occur, as they are in ERH.

Organizational stressor 2 = Investigations and lawsuits. A second example of an organizational stressor that reportedly was more prevalent in ERH was a plethora of investigations and lawsuits. Due to the controversy and criticism surrounding ERH, personnel reported that ERH is often the prime subject of investigations and lawsuits. They emphasized that multiple ERH investigations and lawsuits typically occur contemporaneously. Personnel reported that, as a result, ERH work is more closely monitored. Referring to ERH, one classification officer stated, "I've never worked in an environment where staff are so closely monitored. They must do everything perfect. They cannot mess up at all—even when they have inmates spitting at them or throwing feces and urine at them. There are cameras and audio everywhere. Their every move is monitored."

Organizational stressor 3 = Frequent policy changes. A third example of an organizational stressor that reportedly was more prevalent in ERH was a persistent pattern of policy changes. Due to the investigations and lawsuits ERH is frequently subject to, policy changes within the FDC occur often. For example, most personnel reported that a policy change to an ERH protocol sometimes occurs multiple times a day, resulting in frustration for personnel. When frequent policy changes occur, personnel stated that they worry that they will be reprimanded or lose their job if a new policy that they were not aware of was not followed. They added that having to learn new policies frequently leads to confusion among staff, as well as those incarcerated, and an interruption in the prison operations.

The effects of ERH work-related stress. The third hypothesis was an extension of the second. If ERH work entails exposure to more operational and organizational stressors, it can be anticipated to result in more stress (H2) and, in turn, to adversely affect mental health, physical health, and personal relationships (H3). Analysis of the qualitative data appeared to support this hypothesis.

The most prevalent theme associated with the effects of stress on personnel, was that the effects of ERH work harmed personnel mental health. Most staff reported symptoms consistent with post-traumatic stress disorder. They described feelings of paranoia, emotional numbing, sudden reoccurring thoughts of traumatic incidents, and feeling socially withdrawn. Reports of adverse effects on mental health were consistent with what prior research has found of prison personnel more generally (James & Todak 2018). The analyses from this study, though, revealed that ERH work, specifically, may be correlated with greater stress than GPH, thus,

greater likelihood of experiencing symptoms.

They also reported other adverse mental health symptoms from ERH work-related stress. Some staff reported feelings of anxiety and depression. Many reported that they felt as though they had lost interest in activities that they used to enjoy, such as going to the movies, out to dinner, or simply spending time with family and friends. One officer reported, "I use to like going out and socializing. Now I am just a homebody and don't want to talk to people outside of work. I usually tell my wife and kids to go out without me." Many personnel reported that they no longer experienced feeling of happiness and joy.

In addition to the adverse effects to mental health, many personnel reported that their physical health had deteriorated since beginning their corrections career. The theme was particularly prevalent among ERH personnel. Many ERH personnel reported that they required medication for high blood pressure that they had not needed prior to working in the housing. They also reported issues with their digestive system. One mental health personnel reported, "Just about everyone who works in ERH eventually develops high blood pressure or issues with their stomach from the stress." Personnel also reported that their eating habits had worsened over time because they did not have time to eat proper meals because ERH work is labor intensive, and personnel rarely have the time to sit down or to take breaks. They added that they must often eat their food quickly so that they may return to their work responsibilities and that much of the food that they consume is processed or high-fat, fast food because there are few options for healthy food in the areas surrounding the prisons.

Participants also reported that they experienced sleep disturbance. They added that poor sleeping patterns result from various traumatic incidents, as well as from the daily behavior by those housed in ERH. For example, they reported that ERH is loud in part due to the constant screaming by incarcerated individuals that occurs. One officer described her inability to sleep well, stating, "The screaming [from inmates]. I hear the screaming in my sleep." To drown out the reoccurring thoughts and nightmares, some personnel reportedly use alcohol or drugs and quickly become dependent on these substances.

Most personnel reported that their relationships with their family or friends had worsened since they began their career in corrections. The stress from work in ERH reportedly contributes to greater strain on interpersonal connections, particularly among personnel who do not have a partner or spouse who also works in corrections. These personnel reported that they have

difficulty communicating their ERH work experiences with their partners because they do not believe that the partner would be able to understand. They reported that, as a result, their partners and other family members often felt shut out, leading to strained relationships.

2.6 Conclusion

The goal of this study was to contribute to scholarship on the punitive turn by examining its effects on contemporary correctional systems. In doing so, the study examined the effects of ERH on correctional operational and organizational stressors, as well as the impacts of these stressors on the well-being of personnel. I hypothesized that personnel who had experience working in ERH experienced operational and organizational stressor to a greater extent and, as a result, the stress from work in ERH would be greater. I also hypothesized that, because of the greater stress, the mental and physical well-being of these personnel would be adversely affected. The study employed a mixed-methods analyses approach by drawing on focus group and interview data and surveys with corrections personnel.

The results of the study provided some support to all of the hypotheses. First, the analyses of the survey data showed that, on average, personnel reported greater stress for each type of operational stressor. The qualitative data analyses provided further support and context for hypothesis 1a and that organizational factors in ERH are a source of stress for personnel. Personnel described how staff shortages, frequent change in policies, and lawsuits and investigations had a greater impact on those who worked in ERH than GPH.

The results also showed that the stressors for each housing may contribute to personnel work-related stress. One finding that I had not anticipated was that, based on the qualitative analyses, the operational stressors may be not only greater but also unique to ERH. The end result is that the work-related stress from ERH may have greater negative impacts on mental health, physical health, and personal relationships.

2.6.1 Limitations

There are some limitations of the study that should be noted. First, the data included in the study come from only one state—Florida. Thus, the results can only be generalized to the state in which the data collection occurred. Still, the FDC is the third largest correctional system in the country and employs nearly 20,000 correctional personnel. In turn, the results provide a strong foundational point from which to consider the broader effects of ERH.

Second, survey measures for organizational stressors were not available and only contained questions about operational stressors. Therefore, it was not possible to quantitatively test whether organizational stressors were greater for RH work. It was also not possible to quantitatively test the effect that organizational stressors have on stressor. However, the qualitative data analyses identified that operational stressors, in fact, were a source of stress.

Third, in the focus groups and interviews, personnel may have remembered more negative aspects of ERH work. The broader study from which the data was derived for this study focused on the impacts of ERH on incarcerated individuals, the prison system, and personnel. Questions about the positive and negative aspects of work in ERH and the GPH were asked, and personnel may have remembered and focused on their negative experiences in ERH. Prior work has found that people typically remember negative experiences more so than pleasant ones (Baumeister et al. 2001). Accordingly, personnel may have remembered and focused on the negative experiences they have had with ERH work—rather than the positive.

Fourth, the differences between the quantitative and qualitative findings may be due, in part, to one of two reasons. First, in the survey, participants may have understated the level of stress resulting from the stressors. Second, in the focus groups and interviews, personnel may have overstated the stress and the stressors of ERH. For example, personnel who had worked in ERH at the time that the qualitative data were collected may have perceived ERH stress to be greater than those who had worked in it in the months or years prior to the survey data collection. That said, the focus groups and interviews included personnel who worked in GPH, as well as those who had worked in both ERH and GPH and, while there was not unanimity in their responses, the vast proportion of personnel said that ERH is a more intensive type of experience.

2.6.2 Implications for Theory

The study provides several theoretical implications. First, it extends theory on the punitive turn by providing evidence to show that the punitive turn has had broader societal impacts, beyond those who are caught in the criminal justice system. ERH is just one example of the punitive turn within the criminal justice system that has extended into correctional systems. Since its inception, there has been much critique about the potential effects of ERH on incarcerated individuals (Haney 2017; Reiter 2016). However, the study found evidence to suggest that the punitive turn—through the use of ERH—has also had adverse impacts on correctional personnel mental and physical health, as well as on their relationships with their family and friends.

Second, future work should build on these findings to examine other correctional systems' ERH. The study employed McCreary and Thompson's (2006) concepts of operational and organizational stressors to examine stress within the prison environment, more specifically, to ERH. Much of the research that has used these concepts has examined police officer stress (Shane 2010; Chan & Andersen 2020; Queiros et al. 2020). Only recently have a few studies applied them to prison personnel, finding that corrections personnel can and do experience many of the same stressors as police (Summerlin et al. 2010; Finney 2013; Jin et al. 2018; Ricciardelli & Power 2020; Norman & Ricciardelli 2021). However, to my knowledge, this is the first study to apply the concepts to examine the operational and organizational stressors among ERH personnel and compare those to GPH personnel.

Third, there are broader theoretical implications of the study. For example, the study contributes to correctional theories by providing evidence that supports the notion that the prison environment is not only painful for those incarcerated, but also for correctional personnel. For example, in his ethnographic study of a high-security prison, Sykes (1958) found that prison life was not only difficult for incarcerated individuals, but also for officers. The current study, too, found that prison life may be painful for personnel and that these "pains" may be analogous to those experienced by incarcerated persons. However, ERH work was found to be more difficult for personnel than was GPH work.

2.6.3 Implications for Research

The study also has implications for research. First, the study shows that correctional personnel can lend a unique perspective for understanding ERH. Including personnel in the examination of ERH can provide a more comprehensive understanding of the housing's impacts. To date, much of the scholarship on ERH has focused on those incarcerated within the housing because they may be severely impacted by being locked in a cell for up to 24 hours a day for long periods of time. However, the experiences of the people who work in these units and spend time with these individuals have been largely neglected. Their experiences and the impacts of ERH may ultimately determine how they interact with incarcerated persons (Lambert et al. 2009; Crewe et al. 2011; Molleman & Leeuw 2012; Crichton & Ricciardelli 2016), and by extension how ERH may affect these individuals. For example, the study found that stress negatively impacts the mental health of ERH personnel. Some personnel described feeling easily irritated and frustrated. When they are at work managing the individuals in ERH, they may inadvertently take out their irritation and frustration on those locked in ERH and, in turn, impact how incarcerated persons experience ERH. Future work should continue to build on the findings of this study to examine perceptions of both personnel and incarcerated persons in ERH to determine the extent to which their behaviors affect one another's experiences.

Second, the study finds that ERH may have adverse effects on individuals who work in the housing. The adverse effects not only occur while personnel are at work but also spill over into their personal lives by affecting how they interact with their family and friends. Some personnel described strained family dynamics, including weakened communication and tension with their spouses and partners. Future work should build on this study and continue to explore other potential adverse effects of ERH on personnel, as well as on their families and friends.

Third, the study highlights the benefits of a mixed-methods approach. Specifically, using qualitative data coupled with quantitative data provides a more meaningful understanding about the types of stressors experienced by correctional personnel and how these stressors influence the mental and physical well-being of those who work in ERH. For example, through the qualitative data, personnel elaborated, beyond what the survey data provided, on the source of the operational stressors and how the organizational stressors differed and added to their overall stress. In short, the focus groups and interviews helped to unpack the results of survey data and

provided an explanation for why personnel answered in the ways in which they did.

2.6.4 Implications for Policy

There suggests a need to address the mental health and well-being of correctional personnel. Prior work finds that chronic stress has a wide range of adverse effects, both on mental and physical health (Van Der Kolk 2015). Poor health may impede personnel's ability to adequately carry out their assigned responsibilities, placing the overall prison's safety at risk. When personnel are tired and experiencing mental or physical illness, they may be more likely to be too preoccupied to complete their tasks safely and potentially injure themselves or others. There is also a greater likelihood of personnel calling into work sick or being unable to work for an extended period due to illness or injury, resulting in fewer personnel available to complete work tasks to maintain prison operations. The correctional system is unlike any other industry—it cannot not stop or close when it is understaffed. Instead, personnel must find ways to continue the operations with fewer personnel, potentially placing the overall security of the prison and safety of all individuals at risk.

More importantly, there is a need to address the well-being of personnel who work with individuals in extended restrictive housing. These personnel may be at higher risk of serious injury. They may also be more likely to witness violent and disturbing incidents, such as having bodily fluids thrown on them and witnessing self-mutilation and attempted and successful suicides. Exposure to these types of incidents may result in long-term stress and trauma. Providing frequent mental health services and organizational support may help to mitigate the potential long-term adverse effects to personnel.

CHAPTER 3

THE EMOTIONAL NUMBING RESPONSE TO WORK IN EXTENDED RESTRICTIVE HOUSING

3.1 Introduction

The punitive turn is typified by the emergence of tough-on-crime policies for managing crime across the United States. These policies have had ripple effects. In addition to the nearly 4.4 million people under community supervision, there are an additional 2 million Americans behind bars (Minton et al. 2021). To manage the population, correctional administrators shifted to a more objective classification system, not only to keep track of individuals, but also to set specific physical security parameters within and between prisons (Bench & Allen 2003; Berk et al. 2003). Most individuals may be classified as low, medium, or high security. Those who have been identified as too difficult to manage within any of these classifications may be placed into extended restrictive housing (ERH).

ERH involves the prolonged segregation of an individual, placed into a cell—alone or with another inmate—for up to 24 hours a day (Mears et al. 2019). It is distinct from segregation for protection or punishment and is instead designed to manage persons who cannot safely be contained in other areas of the prison. The individuals placed in the housing have limited privileges and are only allowed out of their cells for showers, medical and administrative appointments, and individualized recreation (Aranda-Hughes et al. 2021). ERH is not a new strategy for managing individuals but its expanded use, for longer periods of time, is one striking illustration of the punitive turn. As a result, ERH has drawn concerns from scholars and policy makers for its potential adverse impacts on individuals housed in it (Applebaum 2015; Ahalt et al. 2017; Haney 2018; Reiter et al. 2020; Franco et al. 2020).

To date, however, there has been little attention to the potential effects that it may have on other groups, such as those who work in ERH. There is an abundance of research that has found prison work, more generally, to be stressful (Long et al. 1986; Triplett et al. 1996; Lambert et al. 2005; Tewksbury & Higgins 2006; Schiff & Leip 2019; Evers et al. 2020; Dennard et al. 2021). Prison personnel manage highly diverse groups of incarcerated persons, including those

who may be potentially dangerous (Schaufeli & Peeters 2000; Armstrong & Griffin 2004). ERH work may present additional challenges. ERH was designed for the purported "worst of the worst" individuals in the correctional system (Butler et al. 2012; Aranda-Hughes 2021). Personnel who work in this housing are tasked with managing these individuals and may be exposed to some of the most extreme behaviors in the correctional system.

One way that personnel may respond to the unique work of ERH is to become emotionally numb. Emotional numbing is described as the inability to fully engage with one's personal feelings or the feelings of others (Prerreau et al. 2017). Due to the inability to feel or express positive emotions, the affect is often described as feeling emotionally "numb." It is a psychological defense mechanism, conscious or unconscious, that is used to cope with distressing emotions. Emotional numbing may present as a temporary response to a stressful or traumatic event, or it may be an ongoing condition. Prior work has found that prolonged emotional numbing may have harmful effects on emotional and physical well-being, including strained personal relationships, suicide ideation, and suicide attempt (Hayes et al. 1996; Najmi et al. 2007). Compared to work in the general population, the harsh environment of ERH may be especially challenging. Thus, these personnel may be at greater risk of responding to work in ERH with emotional numbing.

The goal of this study is to contribute to theory and research on the consequences of the punitive turn on contemporary correctional systems by shedding light on the effects of prison work among correctional personnel. More specifically, it examines the emotional numbing effects of work in ERH. It extends work on the responses to prison work and argues that work in this housing has a greater numbing effect than does work in general population housing (GPH). The study seeks, as well, to understand the longer-term consequences of restrictive housing work. For the study, a mixed-methods approach was employed. First, survey data from a sample of state correctional personnel compared the emotional numbing effects from work in restrictive housing to the emotional numbing effects from work in general population. Second, the study examined qualitative data from focus groups and interviews with personnel to identify ways in which restrictive housing work may contribute to emotional numbing more so than general population prison work. Finally, the qualitative data was further examined to identify the consequences of emotional numbing among those who have worked in restrictive housing.

3.2 Background

3.2.1 The Punitive Turn and the Expanded Use of Extended Restrictive Housing

The punitive turn has had broad societal impacts, including (for some individuals) restrictions on voting, access to housing, and the ability to acquire employment. The punitive turn can also be seen in the rise of mass incarceration. Incarcerated individuals are typically classified according to their perceived security and safety risk. Those who are identified as a threat to the prison system are placed into ERH for months or years (Butler et al. 2012; Brown et al. 2022). ERH is used to for the prolonged management of these individuals and is not intended to serve as punishment (Mears et al. 2019). Yet, the housing conditions (i.e., remaining in a small cell, alone or with another person, for up to 24 hours a day) and severely restricted privileges may be felt as punitive to those placed in it (Aranda-Hughes et al. 2021).

The use of restrictive housing is not a new phenomenon. Yet, its expanded use, for longer periods of time, is relatively new (King 1999). Since its inception, there has been concern over its potentially adverse effects on individuals placed into ERH—particularly about its effects on mental health (Haney 2018; Reiter et al. 2020; Franco et al. 2020). In turn, a large amount of research on the potential effects of ERH on incarcerated persons has emerged (see, for e.g., Smith 2006; Arrigo & Bullock 2008; Williams 2016; Bulman 2012; Reiter et al. 2020; Aranda-Hughes et al. 2021; Seinnick et al. 2021; Pullen-Blasnik et al. 2021; Mears et al. 2021).

However, there has been little attention to how ERH may affect those who work in it. Prior work has found that prison work is stressful (Finn 1998; Armstrong & Griffin 2004; Tewksbury & Higgins 2006; Brough & Williams 2007; Keinan & Malach-Pines 2007; Steiner & Wooldredge 2015; James & Todak 2018; May et al 2020) and that the stress can adversely affect their professional and personal lives (Hughes & Zamble 1993; Triplett et al. 1996; Triplett 1999; Lambert et al. 2002; Griffin et al 2006; Obidoa et al. 2011; Misis et al. 2013; Armstrong et al. 2015; Lambert et al. 2017; Jaegers et al. 2020). Due to its harsh environment, ERH may have an even greater impact on personnel (Butler et al. 2012). Those who work within these units are responsible for some of the most difficult to manage individuals in the correctional system (Aranda-Hughes 2021). Therefore, it can be anticipated that personnel who work in the housing may be uniquely affected by the environment.

3.2.2 The Effects of Prison Work on Correctional Personnel

Prison work is a stressful and may negatively affect the mental and physical health of prison personnel. Personnel are at high risk of being witness to or involved in violent incidents (Byrne & Hummer 2007; Ricciardelli & Gazsco 2013; Steiner & Wooldredge 2017; Regehr et al. 2021). They also risk being exposed to other disturbing incidents, such as self-harm incidents and deaths (Spinaris et al. 2013). Scholars have found that exposure to such traumatic events may cause high levels of stress, resulting in short- and long-term adverse effects to mental health (Van Der Kolk 2015; Lupien et al 2018). Not surprisingly, corrections work is consistently ranked among the highest in risk of suicide, with recent work finding links between suicide among corrections personnel and occupational work factors (Frost & Monteiro 2020). Because of the potentially detrimental costs to correctional personnel, scholars have increasingly called for greater attention to different work-related aspects that may affect the mental health of correctional personnel (Lerman 2017; Regehr et al. 2019; Frost & Monteiro 2020).

The impacts of prison work may not only affect personnel mental health but also may affect their interpersonal relationships (Triplett et al. 1999; Griffin 2006; Lambert et al. 2006, 2007, 2010, 2015; Obidoa et al. 2011; Armstrong et al. 2015, Vickovic & Morrow 2020). There are multiple aspects of prison work that may do so. Overtime hours is one example. Due to the high level of turnover and staff shortages in many correctional systems, personnel are often mandated to work overtime hours. Prior research has found that frequent overtime work may result in decreased time to devote to family care and obligations (Lambert 2006). The inability to tend to the family may result in strained relationships with intimate partners and emotional distancing from their children.

Other aspects of prison work, such as fear for physical safety, witnessing a traumatic incident, or being victimized, may also affect interpersonal relationships (Armstrong et al. 2015). Such factors may result in a range of emotions that are not typically experienced, and personnel may have trouble expressing the effects of the emotions. Some personnel may choose not to discuss their work experiences and emotions with their families to avoid causing undo worry. Family members may feel shut out, resulting in strained relationships. Ultimately, family strain may interfere with job performance, exacerbating work-related stress and its effects (Lambert et al 2006; Armstrong et al. 2015; Nohe et al. 2015; Vickovic & Morrow 2020).

3.2.3 Prison Work and Emotional Numbing

Correctional personnel work in unpredictable environments and may respond to the uncertainty in various ways. For example, they may develop unhealthy eating habits, such as using "comfort food" that is high in fat and sugar to cope with prison work (Waterhouse et al. 2003). Some personnel may turn to alcohol or drugs as a response to the difficult work conditions (Burke & Deszca 1986; Carlson & Thomas 2006; Garland 2002). Personnel may also respond to prison work by detaching from their emotions (Ricciardelli & Gazso 2013). As in the military, mental toughness is highly valued within the culture of the criminal justice system—particularly in correctional settings (Smith 2021). Officers are trained to set aside their emotions and minimize emotional reactions when incarcerated individuals verbally or physically assault them or others (Crawley 2004; Ricciardelli & Gaszo 2013). Officers are expected to tolerate psychological discomfort and to maintain a high level of professionalism in the face of adverse incidents, and to otherwise do so may be perceived as weakness. Thus, emotional numbing may be a salient response to the chaotic conditions of the correctional environment.

Emotional numbing is the inability to fully engage with one's personal feeling or the feelings of others (Horowitz 1986; Litz 1992; Litz & Gray 2002; Rhineberger-Dunn et al. 2016; Walters 2020; Higgins 2021). It is a psychological defense mechanism used to shut out distressing feelings and can manifest as avoidance, denial, and detachment. On a temporary basis, emotional numbing can help individuals manage internal and external stressor that may cause harm to mental health. However, on a prolonged basis, it can prevent individuals from experiencing healthy processes of confrontation and can result in harm to emotional well-being (Hayes et al. 1996; Najmi et al. 2007; Bryan et al., 2012; Kaplow et al. 2014). Indeed, studies have found emotional numbing to be linked with a multitude of mental health conditions, including depression and anxiety, as well as suicide ideation and attempts (Hayes et al. 1996; Najmi et al. 2007). Individuals who experience emotional numbing may have feelings of sadness or negativity and, generally, positive emotions are minimally felt. Individuals may also find it difficult to anticipate feeling long-term happiness ever happening again. They may even have difficulty remembering how feelings of joy felt.

Prior research has found that correctional personnel report feeling emotionally numb or detached from their feelings as a result of correctional work (Pogrebin & Poole 1996; Crawley

2013; Ricciardelli & Gazso 2013; Rhineberger-Dunn et al. 2016; Ricciardelli & Power 2020; Walters 2020). For example, Ricciardelli and Power (2020) conducted interviews with correctional officers and found that officers commonly reported feeling detached or lacking any empathy in their responses to witnessing violence or incidents of self-harm among the incarcerated population (p. 98). They also found that violence in correctional work becomes normalized, which contributes to numbing effects. Emotional numbing then may be a default response to the stressful and sometimes chaotic nature of correctional work (Rhineberger-Dunn et al. 2016; Ricciardelli & Power 2020). However, the mechanism is likely to be activated at the expense of mental health.

3.2.4 Emotional Numbing and Work in Extended Restrictive Housing

ERH is a highly restrictive and monitored environment and is sometimes referred to as a "prison within a prison" (Aranda-Hughes et al. 2021, p. 412). The working conditions may be especially challenging for personnel. Prior scholarship and personnel accounts have documented some of the challenges (Mears and Watson 2006; Sullivan 2006; Cloud et al. 2015; Mears et al. 2021). For example, in a media interview, an officer who worked in ERH reported several factors that were unique to the environment that negatively impacted his well-being and that of other officers. He described the dreary conditions and feeling "stuck" in windowless concrete building. The officer also complained about the daily verbal abuse he experienced by those incarcerated in the housing and the "us-versus-them" mentality adopted by the inmates, which is more prevalent in ERH compared to GPH (Sullivan 2006).

To date, studies have not focus on the emotional numbing effects from work in ERH. However, prior work has examined other effects of the housing. For example, Mears and Watson (2006) interviewed correctional personnel to examine the broader impacts of restrictive housing. Some participants in their study reported that the work in ERH is more challenging and stressful than work in other areas of the prison. In a more recent study, Mears and colleagues (2021) conducted focus groups and interviews with correctional personnel in which personnel described the challenges of working in ERH. For example, personnel described working with dangerous and manipulative incarcerated persons in ERH and the resulting adverse effects to their emotional well-being. These studies did not systematically examine the emotional numbing

responses to the ERH work, but their findings do suggest that ERH work is uniquely stressful.

3.3 Hypotheses

Building on prior research, the study tests the following two hypotheses:

H1: Work in extended restricted housing will be associated with greater emotional numbing. Personnel who work in ERH manage the most difficult people in the prison system. Some of these individuals may be verbally and physically abusive toward personnel. Some may engage in extreme antisocial behaviors. Consequently, personnel may respond through emotionally numbing to survive work in ERH.

H2: Emotional numbing will result in a wide range of consequences to interpersonal relationships and work performance for those who work in extended restrictive housing. Prior work has found that emotional numbing may have a wide range of negative consequences (Erbes et al. 2011). For example, those who experience emotional numbing may have more difficulty in expressing emotions and communicating with their families and friends, resulting in strained relationships. In addition to the consequences on interpersonal relationships, their work may also be affected. ERH personnel may have difficulty empathizing with incarcerated individuals and seeing them as people. In turn, the ways in which they manage these individuals may be negatively impacted.

3.4 Data and Methods

The study employs a mixed-methods approach. To test the hypotheses, I draw on two data sources. The first is survey data collected from state correctional personnel who worked with the Florida Department of Corrections (FDC) at the time that the survey was administered. The second source is qualitative data collected from focus groups and interviews with FDC personnel. Below, I describe the data in more detail.

3.4.1 Florida Department of Corrections Personnel Survey

The FDC personnel survey was part of a broader research project funded by the National Institute of Justice (NIJ). The survey was administered to 19,166 correctional personnel between November 2019 and January 2020 and included questions about personnel's work experiences

and their perceptions of restrictive housing and incarcerated individuals. More importantly, the survey asked questions about emotional numbing as a result of work in ERH and, separately, as a result of work in general population housing. It is important to note that the questions about emotional numbing are perceptual measures on the perceive emotional numbing effects from work in each type of housing. In other words, the survey questions did not ask about personal experience and do not measure *actual* experienced emotional numbing. Still, personnel from each type of housing interact with one another and can speak to observed changes over time.

Prior to the survey administration, approval for the study was obtained from the University's Human Subjects Protection Institutional Review Board. Participants did not receive an incentive for participating in the study. Qualtrics (2019) was used to design and administer to the FDCs 50 major correctional institutions. In total, of the 19,166 potential participants, 10,212 personnel consented to and completed the survey, resulting in a 53.3% participation response rate. However, due to anomalies in the survey administration at one facility, the data from that facility were dropped and not included in the final sample (n = 9,656).

3.4.2 Dependent Variables

ERH work emotional numbing. To capture the perceived potential for emotional numbing from work in ERH,[3] four survey measures were included in the quantitative analyses. The measures included are: (1) To what extent does work in close management housing desensitize staff to their family members' feelings? (2) To what extent does work in close management housing desensitize staff to their friends' feelings? (3) To what extent does work in close management housing desensitize staff to seeing violence? (4) To what extent does work in close management housing desensitize staff to the unfair things that happen to others? Participants were provided with the following options: 1 = Not at all, 2 = Moderately, or 3 = Extremely (range = 1 - 3).

General population housing (GPH) work emotional numbing. To capture the perceived potential for emotional numbing from work in GPH, similarly, four survey measures

[3] Florida does not use the term "extended restrictive housing" and instead uses the term "close management." However, what is referred to as "close management" is consistent with how the literature describes extended restrictive housing: the prolonged confinement of a person in a cell, alone or with another individual, for up to 24 hours a day and for management purposes. The term "close management" was used in the survey because personnel were familiar with the term.

identical to those listed above but referencing GPH were also included in the analyses. The measures included are: (1) To what extent does work in a general population prison desensitize staff to their family members' feelings? (2) To what extent does work in a general population prison desensitize staff to their friends' feelings? (3) To what extent does work in a general population prison desensitize staff to seeing violence? (4) To what extent does work in a general population prison desensitize staff to the unfair things that happen to others? Identical to the emotional numbing questions about ERH, participants could respond with 1 = Not at all, 2 = Moderately, or 3 = Extremely (range = 1 - 3).

3.4.3 Independent Variables

ERH work versus GPH work. The independent variable is the type of housing that they had experience working in. Each dependent variable measure from each type of housing will be compared to its corresponding counterpart. Therefore, the outcome will depend on the type of housing worked.

3.4.4 Focus Groups and Interviews

The focus group and interview data were collected as part of the same broader NIJ study on the impacts of ERH. The data was collected from ten Florida state prisons between November 2017 and February 2020. Five of the prisons included in the study had designated ERH buildings integrated within the prisons. At the beginning if the study, Florida concentrated ERH to five prisons, including one women's facility, across multiple regions of the state. Because the focus of the broader study was ERH, all five of these facilities were included.

In contrast to the ERH facilities, four of the prisons were classified as GPH facilities and did not have ERH on site. Three of the GPH facilities were included because they were identified through administrative records as sending and receiving a high number of incarcerated persons to or from ERH facilities, and staff could speak to their experiences with individuals before and after ERH. One GPH facility had nearly identical demographics (e.g., prison size, security levels, staff-to-inmate ratio) but sent few incarcerated persons to ERH. The facility was included to gain understanding about the potential differences in management styles that could help explain the contrasting numbers of persons sent to ERH. In addition to the ERH and GPH

facilities included in the qualitative data collection, one prison that served as a step-down facility for individuals freshly released from ERH was included. The prison was included to gain insight about experiences with those just released from ERH and to learn about programming to facilitate transfer back to GPH.

Upon arriving to each study site, the researchers were first provided a tour of the prison, focusing on the areas related to the broader NIJ study, which included housing units, recreation areas, visiting areas, and medical and mental health offices. The purpose of the tours was to gain insight about the prison experiences of both incarcerated individuals and personnel. Moreover, the observations during the tours allowed the researchers to ask questions that had not been considered prior. After each the tour, two focus groups with 5-10 personnel per group (n = 133) were conducted. Personnel included senior and junior correctional officers, medical and mental health personnel, programming staff, and classification officers. Each focus group lasted between one and two hours in length. Interviews with wardens and other high-ranking administrators (n = 11) were also conducted. Interviews typically lasted 45 minutes in length. In total, 144 personnel participated in the focus groups and interviews.

Three or more researchers attended each focus group and interview. One researcher served as moderator and the others took detailed notes. The focus groups took place either in the break area or a conference room of the prison. Interviews took place in offices. For security purposes, recording devices were not allowed inside of the prisons. Therefore, all notes were handwritten. After each focus group or interview, the researchers debriefed, compared notes to ensure all discussion was captured. Within 24 hours of each visit, each researcher transcribed their notes into a word document and the data was synthesized into one document. Each researcher then independently reviewed the document for accuracy and potential discrepancies.

For the current study, I analyzed the qualitative data for themes about the sources of emotional numbing within ERH and separately in GPH. I also examine the data to identify the consequences of personnel emotional numbing to family members, friends, to witnessing violence, and to the experiences of others.

3.4.5 Methods

To examine and test the numbing effects of restrictive housing, I analyzed the quantitative and qualitative data. First, to test hypothesis 1, I analyzed the survey data using descriptive and paired sample t-test analyses. All statistical analyses were conducted using the Stata version 17 statistical package (2021).

Next, I identified themes regarding the sources that may help to explain the factors that result in emotional numbing for each type of housing. Thematic analysis, which is a widely used and trusted analysis method for identifying, analyzing, organizing, describing, and reporting themes within qualitative data (Braun & Clarke 2006; Nowell et al. 2017), was employed. Specifically, themes about emotional numbing from work in ERH were identified and compared to themes about emotional numbing from work in GPH. Then, I identified themes regarding the consequences of emotional numbing from work in ERH. Specifically, for the personnel who work in ERH, themes about the consequences that emotional numbing has on interpersonal relationships and work performance were identified.

3.5 Findings

3.5.1 Quantitative Analysis

First, I conducted descriptive analyses to examine the characteristics of personnel (table 3.1). The personnel demographics from the sample size were comparable to those from the population sampling frame. Next, I conducted bivariate analyses for all personnel and then, separately, for only personnel who had reported that they had worked in both ERH and GPH (ERH group) to examine the means of emotional numbing between the two types of housing. As shown in table 3.2, among all personnel (n = 9,656), on average, participants reported greater emotional numbing from work in ERH.

Table 3.3 includes the ERH group and was included to examine the responses of those who could speak to their experiences of emotional numbing in both ERH and GPH. The results were similar to those from all personnel. Compared to work in GPH, these participants reported that emotional numbing is greater in in ERH.

Table 3.1. Personnel Characteristics from the Corrections Personnel Survey

	Mean / %	S.D.	Range
Male	59.46	—	0-1
Race/ethnicity			
White, non-Hispanic	61.14	—	0-1
Black, non-Hispanic	20.58	—	0-1
Hispanic	12.58	—	0-1
Other	5.70	—	0-1
Age	38.60	11.94	18-78
Education			
High school or equivalent	32.22	—	0-1
Some college	50.69	—	0-1
Bachelor's degree	11.40	—	0-1
Master's, J.D., or doctoral degree	4.68	—	0-1
Corrections experience (in years)	9.69	6.86	1-21
Occupational position			
Senior officers	15.22	—	0-1
Sergeant or correctional officers	73.13	—	0-1
Medical, MH, program staff	6.15	—	0-1
Other	5.50	—	0-1
N = 9,656			

To test H1, I conducted a formal test of significance to determine whether the differences in responses to the numbing effects from work in ERH were, on average, statistically greater, relative to the numbing effects of GPH work. To do so, first, I conducted t-tests for each of the four emotional numbing measures for all personnel, regardless of where they had worked in the prison (n = 9,656). Next, I repeated the t-tests for only personnel who had reported working in ERH *and* GPH (n = 4,299). Although the measures were perceptual, examining how personnel who had experience working in both types of housing provides some insight into the experiences of these personnel. As shown in Tables 3.4 and 3.5, the results of the t-tests revealed support for hypothesis 1: Participants reported that work in ERH is more likely to result in emotional numbing for personnel. For example, when including all personnel, there was a statistically significant difference in the mean for emotional numbing to family members' feeling from work in ERH versus work in GPH ($t(9{,}655) = 13.70$, $p < .001$), but the effect size was modest (0.11).

Table 3.2. Perceptions about Emotional Numbing (EN) from Working in Extended Restrictive Housing (ERH) and General Population Housing (GPH) among All Personnel

	Mean / %	S.D.	Range
Emotional Numbing from ERH			
To family members' feelings	2.03	0.65	1-3
To friends' feelings	2.02	0.65	1-3
To seeing violence	2.28	0.67	1-3
To the unfair things that happen to others	2.09	0.67	1-3
Emotional Numbing from GPH			
To family members' feelings	1.96	0.62	1-3
To friends' feelings	1.95	0.61	1-3
To seeing violence	2.14	0.62	1-3
To the unfair things that happen to others	2.02	0.61	1-3

N = 9,656

Table 3.3. Perceptions about Emotional Numbing (EN) from Working in Extended Restrictive Housing (ERH) and General Population Housing (GPH) among Personnel Who Worked in ERH and GPH

	Mean / %	S.D.	Range
Emotional Numbing from ERH			
To family members' feelings	2.03	0.66	1-3
To friends' feelings	2.02	0.65	1-3
To seeing violence	2.33	0.66	1-3
To the unfair things that happen to others	2.10	0.66	1-3
Emotional Numbing from GPH			
To family members' feelings	1.92	0.62	1-3
To friends' feelings	1.91	0.61	1-3
To seeing violence	2.13	0.62	1-3
To the unfair things that happen to others	1.99	0.60	1-3

N = 4,299

Table 3.4. Personnel-Reported Emotional Numbing from Work in ERH vs GPH

		ERH	GPH	Cohen's d	*t*-value	p-value
Emotional Numbing …						
To family members' feelings	M SD	2.03 (0.65)	1.96 (0.62)	0.11	13.70	.001
To friends' feelings	M SD	2.01 (0.65)	1.95 (0.61)	0.09	14.17	.001
To seeing violence	M SD	2.28 (0.67)	2.14 (0.62)	0.22	26.47	.001
To the unfair things that happen to others	M SD	2.08 (0.66)	2.01 (0.61)	0.11	14.33	.001

N = 9,656

Table 3.5. Personnel-Reported Emotional Numbing from Work in ERH vs GPH among ERH Group

		ERH	GPH	Cohen's d	*t*-value	p-value
Emotional Numbing …						
To family members' feelings	M SD	2.03 (0.66)	1.92 (0.62)	0.17	14.90	.001
To friends' feelings	M SD	2.02 (0.65)	1.91 (0.61)	0.17	14.87	.001
To seeing violence	M SD	2.33 (0.66)	2.13 (0.62)	0.31	24.42	.001
To the unfair things that happen to others	M SD	2.10 (0.66)	1.99 (0.60)	0.17	14.58	.001

N = 4,299

The results were similar for the subset of personnel who reported working in ERH and GPH, except that the means for emotional numbing were smaller for work in GPH and in some cases larger for work in ERH. The effect sizes were, again, modest (table 3.5).

3.5.2 Qualitative Analysis

Emotional numbing was a common theme among most personnel who worked in ERH and, although emotional numbing was reported among some of the GPH personnel, the theme did not surface nearly as frequently as it did among ERH personnel. The sources of emotional numbing typically centered around three major themes: interactions with difficult inmates in ERH, the violence in ERH, and witnessing disturbing incidents, such as self-harm and suicide. Personnel also discussed the consequences of emotional numbing. Below, I discuss each theme in more detail.

Interactions with difficult inmates. Work in ERH is challenging because personnel interact with difficult individuals. ERH personnel reported that ERH houses the "worst of the worst people in the Florida correctional system." One officer reported that personnel who work in ERH are "exposed to the worst human behavior," adding that the incidents that personnel are witnessed to would "shock" others. When ask to describe the day-to-day experience of work in ERH, one officer stated, "working in [ERH] is like fighting a war every day. You never know what to expect." Another officer described ERH as a "high-risk environment for violence." Personnel explained that when violent incidents occur, they are generally more serious than those in GPH. Moreover, verbal abuse reportedly occurs frequently. One officer explained that "if an inmate threatens an officer, the officer has to have the nerve to continue to walk in front of the inmate's cell and check in on the inmate. Officers cannot let the threat bother them."

To mitigate the challenges of their daily interactions with these individuals, personnel reported that they become "numb" to the abuse. Most personnel reported that emotional numbing is a by-product of all corrections work and added that emotional numbing is necessary to survive work in ERH. They added that personnel who cannot master the ability to emotionally numb are unlikely to fare well in ERH work.

Violence in ERH. ERH is a violent environment. The housing was designed to house the most dangerous individuals in the prison system. Thus, personnel who work in the housing may be at high risk of witnessing violence. Indeed, ERH personnel reported that, although violence is a part of prison life, when it occurs in ERH, it is more serious. Individuals housed in ERH reportedly spend much of their time "plotting" ways to harm personnel. They added that, given the opportunity, "inmates will attack officers." Some individuals reportedly use items in their cells to create weapons to harm personnel. When serious injuries occurred, other personnel "are left to clean up the bloody mess."

Violent incidents, particularly those between incarcerated persons and staff, result in emotional numbing for personnel. Personnel reported that they cannot take time to emotionally process violent incidents, or they will not be able to continue to effectively perform their work responsibilities. Instead, they must be able to emotionally detach so that they can continue to maintain the prison operations and tend to the other individuals in ERH. Participants reported that personnel who can emotionally detach are able to better handle incidents in ERH.

Witness to self-harm and suicide. Self-harm and suicide are prevalent in ERH. Personnel reported that there are a high number of persons with mental illness (PMIs) who are housed in ERH. The finding is consistent with prior work that examined the rates of PMIs in the FDC ERH (Siennick et al. 2021). Some PMIs reportedly deteriorate emotionally during their time in ERH and turn to self-harm or suicide. When these incidents occur, officers are responsible for the lives of these individuals until medical personnel arrive. For example, officers reported that they may have to perform lifesaving first aid on individuals who have attempted suicide. Personnel also reported that self-mutilation not associated with attempted suicide is a common occurrence in ERH. For example, some individuals will "bang their head on the wall until it bleeds" or they will use items in their cells to cut their skin. The self-injuries are sometimes severe and result in "bloody messes." The incidents are reportedly stressful and can be traumatic for new personnel or those who have difficulty adapting to ERH work.

Personnel become emotionally numb to self-harm and suicide. Self-harm and suicide incidents "no longer shock" them because they "see a lot of crazy stuff in [ERH]." One officer stated that over his time working in ERH he had come to view self-harm incidents as common behavior. The officer reported that, as a result, if he were to witness self-harming behavior outside of the prison environment, he would "remain calm" because the incident "would not

bother" him. To illustrate the extreme reliance on emotional numbing, another officer reported, "If an officer were standing in line at Walmart and saw someone stab themselves, the officer would probably just walk around them and continue to check out."

The consequence of emotional numbing. Emotional numbing, reportedly, has affected the work and personal lives of personnel. Although it may have protective factors, emotional numbing may also adversely affect the mental health and personal lives of personnel. Personnel reported that they rely on emotional numbing to be able to work in the prison system and those who work in ERH reported that the use of emotional numbing is especially useful in their work. ERH personnel viewed the ability to desensitize as a necessary evil. That is, while they viewed it as an "important skill that only the best staff" can master, they also viewed it as "one of the biggest downsides to working in ERH." They reported that emotional numbness "helps them to deal with difficult [ERH] inmates" while on the job, but they experience difficulty "turning it off" in their personal lives. Some ERH personnel reported that they had become increasingly "callous and jaded" in the workplace and it had spilled into their personal lives. They added that their families and friends had recognized the "cold sense" that personnel had developed since working in ERH, which resulted in strained interpersonal relationships.

Feelings of shame associated with emotional numbing was also a common theme that arose among ERH personnel. For example, some ERH personnel reported that in their personal lives, they attempt to hide their lack of emotions for fear of being judged by their families and friends. One officer reported that he attempts to "wall off" the emotional numbness when he is with his family so that they do not view him in a negatively light. Another officer described the reliance on emotional numbing toward violence as "something not right about that." In other words, though personnel recognized the benefit of emotional numbing while on the job, they also recognize that the mechanism may also have adverse consequences.

Indeed, emotional numbing reportedly resulted in adverse impacts on mental health. Most ERH personnel reported that they no longer feel joy the way that they use to, and some have turned to alcohol as a way of dealing with emotional numbing. Over time, the void of positive feelings reportedly results in preference for a reclusive lifestyle. For example, many ERH personnel reported that that they prefer to stay home during their time off rather than to go out and spend quality time with their families and friends. They explained that activities that previously felt enjoyable, no longer did.

3.6 Conclusion

The aim of the study was to contribute to the scholarship on the impacts of the punitive turn on contemporary correctional systems by examining one of the most punitive management strategies within the criminal justice system—ERH. Specifically, the purpose of the study was to assess the effects of work in ERH by bringing attention to the cost to personnel mental health—beyond stress—associated with work in the housing. To do so, I drew on focus group, interview, and survey data collected from corrections personnel and applied a mixed-methods approach to examine the sources and consequences of emotional numbing. I hypothesized that work in ERH would be associated with greater emotional numbing for personnel and that the stress of the housing would explain the effect. I also hypothesized that emotional numbing would result in a wide range of consequences on the personal and work lives of personnel.

The results of the survey data provided modest support for the first hypotheses. The results showed that work in ERH was associated with greater emotional numbing toward the feelings of personnel's family and friends, seeing violence, and to the unfair things that happen to others. However, the differences were not substantial. The focus groups and interview data revealed greater differences and identified the sources of emotional numbing of ERH work. Themes that arose within the focus group and interview data provided insight on the consequences of emotional numbing, such as desensitized feelings toward incarcerated individuals in ERH, adverse impacts to personnel mental health, and strained relationships. The sources of emotional numbing included managing extremely difficult incarcerated persons and exposure to traumatic incidents, such as violence and self-harm and suicide.

3.6.1 Limitations

There are several limitations that warrant discussion. First, data from the study come from only one state—the State of Florida. Thus, the findings can only be generalized to the FDC. Still, the FDC is the third largest correctional system in the country which employs a highly diverse population of personnel. Moreover, ERH in Florida is similar to how other states describe their own ERH. As a result, the findings provide direction for examining the effects of ERH on personnel in other states.

Second, the survey measures on emotional numbing were perceptual measures and did

not directly measure the experience of emotional numbing. In turn, the data did not allow for a comparison of *experienced* emotional numbing between personnel who worked in ERH and those who worked in GPH. Nevertheless, personnel within the prisons interact frequently with one another and are able to speak to their perceptions of personnel who work in ERH and the perceived personality changes of these individuals over time.

Third, the data were cross-sectional. That is, personnel were interviewed only once, and they only took the survey at one time. Follow-ups were not conducted for either type of data. Thus, the potential that personnel could have been influenced by historical events that had occurred at the time of the data collection is a possibility. However, although personnel were only interviewed once, the qualitative data were collected over nearly two years and similar themes continued to emerge over that time frame. In addition, the survey results were consistent with the qualitative findings. Thus, historical events may, at least partially, be ruled out.

3.6.2 Implications

The study has several implications. First, the study contributes to the scholarship on the consequences of the punitive turn by showing that the punitive turn has not only impacted the individuals and their families of those who are caught in the criminal justice system, but it also affects those who work within the system. Much of the research to date has focused on the impacts of ERH on incarcerated individuals, yet the findings indicate that personnel are also affected by the housing. To mitigate negative feelings that occur from ERH work personnel shut down their emotions. Although emotional numbing helps them to survive work in the extreme environment, it adversely affects their mental health, their relationships with their families, and their views of incarcerated individuals. Scholars have increasingly called for more research on the effects of prison work on personnel precisely because their experiences may ultimately affect those whom they manage (Lerman 2017).

Second, the study sheds light on the potential consequences on emotional numbing for prison system order. As the prison population rose with the punitive turn, the level of meaningful interaction between personnel and incarcerated individuals diminished, which may impact the rehabilitation process and overall system order. Indeed, personnel reported that they have become emotionally numb toward the experiences of those incarcerated. The consequence

may ultimately result in an increased adoption of an "us versus them" mentality and reluctance to improve in behavior by incarcerated individuals.

Third, the findings suggests that prison can have adverse effects on correctional personnel well-being beyond just stress. Much of the research on prison workers, to date, has predominantly focused on work-related stress and has found overwhelming evidence to suggest that stress is common among personnel (see, for e.g., Butler et al. 2020). Yet, few studies have explored the potential for other adverse mental health effects, like emotional numbing. The analysis found that personnel reportedly experienced emotional numbing and that it occurred as a direct result of working in the prison environment, but it was reportedly greater in ERH. Future work should examine whether there are other adverse effects from work in ERH.

Fourth, the study suggests that extended restrictive housing may not only have a negative impact on those incarcerated in the housing, but also to those who work within the housing. Much of the work to date has focused on the effects of ERH on incarcerated persons, with little focus on others. Yet, the data suggest that ERH may have impacts on the prison personnel who work in it. For example, the focus group and interview data provided multiple accounts by personnel who had described feeling the need to use emotional numbing to mitigate the stressors of the housing. Although some GPH personnel also reported experiencing emotional numbing, the accounts were overwhelmingly from ERH personnel who described having to use the strategy to navigate the extreme environment of ERH. In addition, although the emotional numbing measures from the survey data were perceptual, the qualitative portion of the study did allow personnel to provide personal accounts. Future research should investigate, quantitatively, the degree to which emotional numbing is personally experienced from work in ERH.

Fifth, the study provides evidence to suggest that the impacts of work in ERH extend to others, including family and friends. Prior work has examined the effects of work-family balance among correctional workers and has found that poor balance of the two to lead to strained relationships (see, e.g., Lambert et al. 2015). However, to my knowledge, no other work has examined the effects of work in ERH on interpersonal relationships. Both the survey data and the focus group and interview data revealed that the families and friends of personnel may also be adversely affected by ERH. Through the survey, personnel reported that they perceived work in ERH to result in emotional numbing toward the feelings of family and friends at greater rates, relative to work in GPH. Further, during the focus groups and interviews personnel

described increasingly feeling emotionally numb toward their families and friends. They further elaborated that that their families had recognized the changed in personnel since beginning work in ERH, resulting in strained family relationships. Future research should examine the effects of work in ERH on these relationships and include views from family and friends.

Sixth, in examining both quantitative and qualitative data, the study is able to provide greater insight into how and why the unique aspects of ERH result in greater emotional numbing effects for personnel when compared to work in general population. It is difficult for quantitative data and analyses to provide a complete picture and qualitative data is limited in that it cannot often be generalized (Niaz 2006). However, merging the two types of data into a mixed-methods approach can provide a richer description of a complex problem by allowing for more divergent viewpoints, as well as providing contextual insight (Creswell et al. 2011). Future research on ERH should continue to employ a mixed-methods approach to better understand the various impacts of the housing.

Finally, there are implications for policy. Specifically, there is a need for attention to the mental health of correctional personnel who have been exposed to traumatic incidents, specifically for those who work in ERH. During the focus groups and interviews, there were multiple accounts of the emotional and physical consequences of managing individuals in ERH. In addition to emotional numbing, which was a frequent theme across all ERH facilities, some personnel reported turning to an increased use of alcohol to avoid having to think about the incidents that occur daily in the ERH.

The paramilitary structure of the correctional environment may promote a culture where the suppression of emotions is viewed in a positive light (Smith 2021). Emotional numbing, then, is viewed as a skill that "good" officers can master—particularly in response to ERH work. However, as the findings from this study suggest, emotional numbing can have detrimental effects on personnel. It is to the benefit of the correctional systems to keep their staff healthy if they wish to achieve adequate staffing levels and improve their performance.

CHAPTER 4

A THREE-FACTOR MODEL OF OFFICERS' VIEWS OF SOLITARY CONFINEMENT EFFECTS ON THE MENTAL HEALTH OF INCARCERATED PEOPLE

4.1 Introduction

Until the mid-1970s, rehabilitation was central to American prison policy. Incarcerated persons were encouraged to develop occupation skills and resolve emotional-related issues, such as anger and aggression (Chesney-Lind & Mauer 2003; Kreager & Kruttschnitt 2018). In the decades that followed, however, the emphasis shifted to more control-oriented approaches for managing incarcerated persons. The increased reliance on extended solitary confinement (ESC) is one such prominent example (Crewe & Laws 2018; Labrecque 2019).

ESC entails the segregation of an individual from the general population, who is placed into a cell alone for up to 24 hours a day. Due to its isolating nature, there has been international condemnation of the practice among scholars and policy makers alike. The practice has most notably been criticized for its potentially adverse effects on the mental health of those placed into it (Metzner & Fellner 2013; Reiter & Blair 2015; Haney 2018). The criticism may be viewed as warranted, particularly since research has found that people with mental illness (PMIs) are imprisoned at disproportionately high rates and that these individuals may be more likely to be placed into ESC (Lovell et al. 2000; Siennick et al. 2021; Mears et al. 2021).

Despite the criticism and its potentially adverse effects on the mental health of incarcerated persons, prison systems continue to rely on ESC (Mears et al. 2021). One reason for its continued use may be that some personnel do not perceive the housing as harmful. To date, little is known about the factors that shape correctional personnel perceptions about ESC and how the housing may impact individuals housed in it. Research has examined officer perceptions of custodial practices over rehabilitation more generally, (Cullen et al. 1989; Farkas 1999; Gordon 2006; Lambert et al. 2009) but research has not focused on personnel perceptions about the effects of ESC on incarcerated persons or what factors shape these beliefs.

Correctional officers hold a great deal of discretion over the strategies that they use to

manage incarcerated persons (Lerman & Harney 2019). Their perceptions about how the housing affects individuals may provide insight about why some individuals are placed into it and, in turn, how these individuals respond to the conditions of the housing. Thus, scholars have called for research that examines how prison personnel perceive mental illness among incarcerated persons and the strategies used to manage them (Siennick et al. 2021). Scholars, too, have called for use of theory to explain these relationships (Foster 2016).

Individual traits and beliefs may help to explain the continued reliance on solitary confinement. Scholars have found links between individual traits, beliefs about punishment, and support for various criminal justice related strategies to manage crime. For example, studies have found that people who hold more punitive beliefs are also more likely to support the use of capital punishment (Applegate et al. 2000; Unnever et al. 2005; Foglia & Connell 2019). The findings from these studies are valuable because they lend to our understanding about which personal beliefs shape the policies that people support. Other studies have focused on potential predictors of punitiveness and have found that people who are more empathetic tend to also be less supportive of punitive measures for offenders (Unnever et al. 2005). In contrast, those who hold an agentic perspective take on the belief that people are responsible for their own behavior (Bandura 1999) and, thus, may be more likely to opt for punitive measures to address undesirable behavior. In prisons, when misconduct or violence occurs, officers who more strongly value the agentic perspective may view more punitive measures as beneficial for correcting behavior, whereas those who are more empathetic may be less likely to do so. To date, studies have yet to examine the relationship between officers' traits and beliefs, punitiveness, and whether these factors shape their perceptions about the effects of ESC on incarcerated persons.

The goal of this study is to contribute to scholarship on the effects of the punitive turn and its influence on contemporary correctional systems. In particular, it aims to shed light on correctional officers' views about the potential impacts on inmate mental health. To this end, it examines whether officers view ESC as adversely affecting the mental health of incarcerated persons. It examines as well what influences these views, and, specifically, whether officers' traits and personal beliefs—about punishment as a strategy for managing inmates, empathy, and individual agency as a determinant of life outcomes—shape their views about ESC's mental health impacts. Drawing on several literatures, the central hypotheses are that officers will view

ESC as harmful to mental health, but that those who endorse punishment as an effective strategy will be less empathetic, and who view individual agency as the main determinant of life outcomes will be less likely to view ESC as having adverse effects. To test these hypotheses, the study draws on survey data from a large sample of correctional officers. A central implication from the study is that the punitive turn may be supported in direct and indirect ways by the operations of prison systems, such as reliance on ESC, and by the intersection of these operations with views that system actors hold about punishment, empathy toward others, and agency.

4.2 Background

4.2.1 The Rise of Solitary Confinement in the Punitive Era

The punitive turn has had widespread impacts on American society. One of the more recognized outcomes of the punitive turn has been mass incarceration. In just a few decades, the incarcerated population grew substantially (Bureau of Justice Statistics 2021), with a large portion of persons with mental illness (PMIs) included within the population. Although prior studies have found varied prevalence rates of PMIs across different prison systems, scholars agree that PMIs are overrepresented in the criminal justice system (see, Prins 2014). However, prison systems were not designed to house these individuals. Instead, prisons were designed with a focus on security and employ individuals to also focus on security and order. ESC is one method that correctional systems rely on to maintained order.

ESC represents one of the most punitive management strategies in prison (Lovell et al. 2020). Correctional systems use ESC to manage those who cannot be safely managed in any other area of the prison. These individuals have been identified as too dangerous to live among the general population and are placed into a cell alone for much of the day and with limited privileges. Due to its isolating and extreme nature, there has been international condemnation of its use and it has been criticized as an inhuman practice (Metzner & Fellner 2013; Reiter & Blair 2015; Haney 2018). Despite the recent increased scholarship focused on ESC, the practice and its impacts are still not well understood. Nevertheless, current research suggests that ESC does not achieve deterrent effects, nor increase prison order (Briggs et al. 2003; Sundt 2016). ESC is also costly because it requires specialized units and a greater number of personnel to manage it

compared to general population housing. In addition, some research suggest that it may adversely affect the mental health of persons incarcerated in it (Ahalt et al. 2016; Luigi et al. 2020). These adverse effects may be greater for incarcerated PMIs, who may not only be overrepresented in the prison system, but also in ERH. Despite the findings from prior studies and the potentially adverse effects on mental health, ESC continues to be used.

4.2.2 The High Prevalence of Persons with Mental Illness in the CJS

An unintended consequence of punitive criminal justice policies has been the high number of persons with mental illness (PMIs) in the criminal justice system. A 2017 Bureau of Justice study found that 66% of incarcerated women and 35% of incarcerated men had been diagnosed with a mental health disorder prior to entering prisons, with women more likely than men to have met the threshold for serious psychological distress (SPD). The study also found that 17% of individuals incarcerated for a violent crime were more likely to have met the threshold for serious psychological distress compared to those incarcerated for non-violent crimes. Yet only 37% of individuals incarcerated who had been diagnosed with a mental health disorder in prisons had received mental health treatment, such as prescribed medication or therapy (Bronson & Berzofsky 2017).

Other studies have also found high rates of PMIs in prisons. Some scholars estimate that mental illness within correctional settings is up to four times the rate of the general population (James & Glaze 2006; Torrey et al. 2010; Al-Rousan et al. 2017). Al-Rousan et al. (2017) examined the rates of mental illness among state incarcerated persons and found that nearly half of the population had been diagnosed with a mental health illness. Karlsson and Zielinski (2020) examined rates of mental illnesses among women in prison and found that incarcerated women experience a greater prevalence of mental illness relative women in the general public.

Incarcerated PMIs are at heightened risk of engaging in prison miscount (Adams 1986; Toch & Adams 1986; Felson et al. 2012; Houser et al. 2012; Walters & Crawford 2014; Celinska & Sung 2014; Blowers & Bevins 2015; Stoliker 2016; Matejkowski 2017; Reidy et al. 2017; Severson 2019; Semenza & Grosholz 2019; Henry 2020). For example, Felson and colleagues (2012) drew from the 2004 Survey of Inmates to examine the relationships between various forms of misconduct, including physical and verbal toward staff, physical and verbal aggression

toward inmates, weapon offenses, substance violations, and other non-violent offenses, and different types of mental illness diagnoses. The researchers identified positive relationships between all categories of prison misconduct and mental illness. Stoliker (2016) found similar results also drawing on the 2004 Federal Survey of Inmates.

Incarcerated persons who either engage in frequent misconduct or major rule violations may be deemed as too difficult to manage in the general population, and then may be placed into ESC. Much of the current research, in fact, has found that PMIs are over-represented in solitary confinement housing (Lovell et al. 2000; Clark 2018; Severson 2019; Dellazizzo et al. 2020; Siennick et al. 2021; Jahn et al. 2022). For example, Clark (2018) examined the use of segregation following prison misconduct and found that those who had been diagnosed with a mental illness prior to the misconduct were approximately thirty-six percent more likely to be placed into segregation. Severson (2019) found similar results among a sample of incarcerated men and women. More recently, Siennick et al. (2021) found that mental illness was associated with a up to 170% increase in the odds of placement into ESC for incarcerated men.

The overrepresentation of PMIs in ESC has drawn criticism. Opponents of the housing argue that it is inhumane and harmful to mental health—regardless of mental health history, but especially for those with existing mental health conditions. Although the extent to which placement into the housing causes adverse effects is not fully understood, research has found associations between ESC and adverse mental health symptoms (Haney 2003; Arrigo & Bullock 2008; Luigi et al. 2020; Reiter et al. 2020). For example, Reiter and colleagues (2020) conducted in-depth interviews and Brief Psychiatric Scale assessments with randomly selected incarcerated persons in Washington who had been placed into ESC and found that approximately half of their sample experienced symptoms of depression, anxiety, or guilt while in ESC. Luigi et al. (2020) conducted a meta-analysis to determine whether research to date has found evidence to support the argument that solitary confinement is harmful to mental health and found that, generally, studies have found associations between solitary confinement placement and adverse harms to mental health and increases in self-harm and suicide (see, generally, Haney 2018).

One potential reason for its continued use, then, may be that some people do not believe that ESC is harmful to the mental health of incarcerated persons, despite some of the prior research and accounts from mental health experts, as well as individuals placed into the housing. Why then would some people not believe that the harsh conditions of ESC can have adverse

impacts on inmate mental health, given the widespread condemnation? One potential explanation may be the personal traits and perceptions of incarcerated persons held by personnel. For example, some personnel may be less empathetic toward incarcerated persons and disregard the belief that ESC may be harmful. Others may view ESC as helpful for correcting behavior, thus, rationalizing the use of the ESC and refuting the notion that it may be harmful.

4.2.3 Correctional Officers' Perceptions of Solitary Confinement

Agency, empathy, and punitiveness are three ideological factors that may indirectly contribute to the continued used of ESC, as these factors may directly influence how personnel view incarcerated individuals. Below, I describe each factor in more detail. Drawing on prior scholarship, I present an argument for how each factor may be directly or indirectly related to perceptions about the impacts of ESC on the mental health of incarcerated individuals.

Agency. Perceptions about individual agency may influence perceptions about ESC. Bandura (2018) argued that agency operates through personal, behavioral, and environmental determinants. Since personal determinants hold a central role, the agentic perspective argues that people play a role in shaping events and the courses of their lives. In other words, when a person makes a cognitive decision to engage in certain behavior, the person has, in part, shaped the consequence of that behavior. Thus, some people develop the belief that individuals have the power to change the course of their life paths and when one fails to do so in a positive manner, it is solely the fault of that person. When applying the concept of agency to the prison setting, then, some personnel may believe that incarcerated persons are solely responsible for their success or failure in prison rehabilitation.

Still, some personnel may perceive that not all incarcerated individuals hold the ability to make rational decisions and view these individuals as less culpable for their own actions. For example, studies have found that officers view incarcerated PMIs as less blameworthy when they engage in misconduct relative to non-PMIs (Callahan 2004; Lavoie et al. 2006; Melnikov et al. 2017). Research has also found that officers are typically more supportive of rehabilitative programming over punishment for PMIs who engage in misconduct (Galanek 2013).

Based on prior work, then, officers who view agency as an important factor for shaping outcomes may be more likely to support punishment to correct behavior, especially for those

who are cognitively able to make rational decisions. They may also be more likely to believe that because ESC is helpful for correcting behavior, it is unlikely to be harmful to incarcerated individuals. The concept may be akin to that of parents who use corporal punishment in child rearing. Parents who spank their children, generally, view the strategy as helpful rather than harmful (Kish & Newcombe 2015). Among some officers, the use of ESC may also be viewed as an effective way of managing and helping individuals.

Empathy. Empathy is another factor that may play a role in perceptions about ESC. People who are empathetic are able to take on the point of view of an another, imagine themselves in another person's position, or relate another person's experience as their own (Davis et al. 2004). Scholars have found that empathy is related to punitiveness, as well as prosocial behaviors, including forgiveness, helping, and verbal sympathy (Unnever & Cullen 2009; Unnever et al. 2012; Foglia & Connell 2019). Unnever and Cullen (2009) argued that individual differences in punitiveness can be, in part, explained by the degree to which they can empathetically relate with offenders. Empathy, then, may help to shape perceptions about those who have been placed into ESC and its impacts on their well-being.

Scholarship has found that empathy predicts perceptions about a wide range of criminal justice related topics, such as support for capital punishment (Applegate et al. 2000; Unever et al. 2005; Foglia & Connell 2019), empathy for victims (Bongiorno et al. 2020), and empathy toward incarcerated individuals (Bloksgaard & Prieur 2021; Vaughn & Johnson 2021, Tarrant & Torn 2021). For example, Unnever et al. (2005) examined whether empathy predicted support for the death penalty and found a negative relationship. That is, people who were more empathetic were less likely to support capital punishment. Boag and Wilson (2014) drew from a sample of college students to examine empathy and bias toward incarcerated persons and found that after interacting with these individuals, students reported lower levels of bias and higher levels of empathy toward them. Thus, correctional officers who hold little empathy toward incarcerated individuals may be more likely to support harsher punishments for those who engage in misconduct. They may also be less concerned with the impacts of various management strategies, like ESC, on incarcerated persons. To date, studies have yet to examine whether officer empathy is related to views about the use of ESC and its effects on incarcerated persons.

Punitiveness. As discussed above, punitiveness may predict support for punitive criminal justice policies and empathy may predict a person's level of punitiveness. Scholars have defined punitiveness as "a person's level of support for harsher sanctions and/or crime policies, with an emphasis on increasing the quantity of people punished, as well as the intensity and length of punishment" (King and Maruna 2009, p. 156). Much of the research that has focused on punitiveness has drawn from survey responses from the general public (Applegate et al. 2000; Unever et al. 2005; Boag & Wilson 2014; Foglia & Connell 2019). Studies have found that, among the public, individuals who are more socially conservative, lower educated, and those who are older hold more punitive attitudes toward offenders (Payne et al. 2004; Silver & Silver 2017). Nevertheless, scholars argue that sample demographics alone do not predict why some people are more punitive than others and call for research that includes other factors, such as personal beliefs and prior experiences (Unnever & Cullen 2010). In addition, the public knows little about working in the criminal justice system and their perceptions do not have a direct daily impact on incarcerated individuals. Prison officers work directly with incarcerated persons and their level of punitiveness may have an immediate impact on these individuals. For example, an officer who is more punitive may opt for punishment over alternative approaches when individuals engage in misconduct

Prior work on punitiveness among correctional officers paints a mixed portrait, with some studies finding that officers support rehabilitative programming and others finding support for more punitive measures to manage the prison population. Various factors, such as frequency of contact with incarcerated individuals and occupational rank or position of correctional personnel may influence support for, or against, rehabilitation over punishment. For example, Lombardo (1989) found that officers who spent more time with incarcerated persons became more punitive over time. In contrast, Kelly (2014) examined punitive attitudes among prison staff in a maximum-security prison and found that the least punitive staff were those who had many years of experience working directly with incarcerated persons. That is, personnel who spent more time with incarcerated individuals became less punitive over time.

Occupational position or rank may also be correlated with punitiveness. Tewksbury and Mustaine (2008) surveyed correctional personnel about professional orientation across five correctional ideologies to examine the differences in perceptions about incarceration. They found that administrative staff were supportive of rehabilitation, while correctional officers

viewed retribution as the main purpose of incarceration. The inconsistent findings in the literature warrant additional research to explore the factors that contribute to punitiveness among correctional officers, as well as the potential consequences of punitiveness on the use of various forms of correctional strategies.

4.3 Current Study

Against this backdrop, the goal of this study is to contribute to scholarship on the impacts of the punitive turn on contemporary prisons by examining factors that may influence the use of ESC. In particular, it examines the factors that shape personnel views about punishment, incarcerated individuals, and the impacts of ESC on incarcerated individuals. To do so, the study uses survey data to test whether perceptions about individual agency, empathy, and support for punitive inmate management practices shape these perceptions. Below, I discuss the hypotheses, with hypotheses 2-6 depicted in figure 4.1.

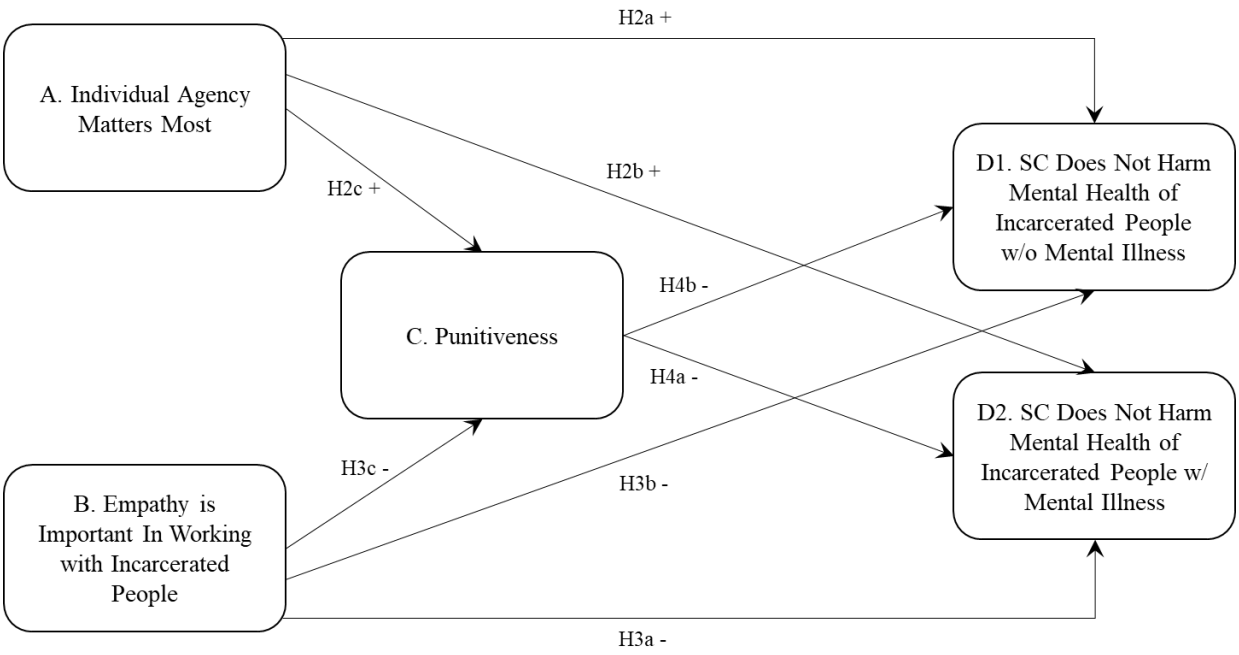

Figure 4.1. Agency, Empathy, and Punitiveness and Hypothesized Relationships with Views that Solitary Confinement Does Not Harm the Mental Health of Incarcerated People

H1: **Most prison personnel will be more likely to agree that ESC adversely effects the mental health of incarcerated persons.** There is a consensus among scholars that ESC has an impact on inmate mental health (see Garcia 2016). For example, studies have found that some individuals in this housing experience anxiety, depression, insomnia, and experience paranoia after release from the housing (Haney 2018).

Due to the potentially adverse effects on inmate mental health, ESC has received international condemnation. For example, in its passage of the Mandela Rules, the United Nations prohibits the confinement of a prisoner to a solitary cell for no more than 15 days. Other human rights groups, such as the American Civil Liberties Union and Amnesty International, also criticize ESC as a constitutional violation (Ahalt et al. 2016; Frost & Monteiro 2016).

Moreover, there is widespread consensus about the harmful the impacts of ESC, including among some correctional systems personnel. For example, there have been first-hand accounts by prison personnel who have spent time in solitary confinement on the negative effects of the housing (Goode 2014). Most notably, however, the consensus about the harms to incarcerated persons among personnel can be seen in the national efforts to limit the use of ESC in general (Applebaum 2015; Cloud et al. 2015). It would stand to reason, then, that prison personnel would be likely to perceive the housing as harmful to the mental health of incarcerated persons placed into it.

H2a (A→D1): Officers who subscribe to the belief that individual agency determines life outcomes will be more likely to report that ESC does not harm inmate mental health for non-PMIs. Individuals who subscribe to the ideology that individual agency determines life outcomes may view others as rational actors that can make rational choices. They are less likely to consider the influence of structure on life outcomes. Thus, some officers may hold the belief that inmates have the individual will to remain mentally tough in ESC and may not consider the influence of the harsh conditions of the housing on the will of inmates.

H2b (A→D2): Officers who subscribe to the belief that individual agency determines life outcomes will be more likely to report that solitary confinement does not harm the mental health of PMIs. PMIs may be viewed by some officers as an exception to the concept of individual agency. Some officers may not view these individuals as rational actors who have actively chosen to engage in misconduct. Thus, although there will be a positive relationship, the effect will be less pronounced.

H2c (A→C): Officers who subscribe to the belief that individual agency determines life outcomes will be more likely to hold punitive beliefs. Individuals who hold more punitive beliefs tend to believe that behavior results from a conscious decision and, therefore, one should be held responsible when engaging in negative behavior (McKelvie 2013). Thus, officers who are more punitive may be likely to believe that inmates make the choice to engage in misconduct and should be held responsible through punishment.

H3a (B→D1): Officers who are more empathetic toward incarcerated persons will be less likely to believe that ESC does not harm the mental health of non-PMIs. Officers who are less empathetic may be less likely to be concerned with the effects of ESC. They may view those who are placed into it as deserving and perceive any mental health-related complaints as a simply another manipulation tactic.

H3b (B→D2): Officers who are more empathetic toward incarcerated persons will be less likely to believe that ESC does not harm the mental health of PMIs. Individuals who are less empathetic may have little patience for those who engage in misconduct. They may also have less patience when incarcerated individuals complain about various ailments, including mental health issues. These officers may view these individuals in ESC as manipulative and perceive that they use their mental illness as an excuse to be let out of the housing.

H3c (B→C): Officers who are more empathetic toward incarcerated persons will be less punitive. Those who are less empathetic may be less likely care about how different management strategies affect incarcerated persons. Officers may perceive them as undeserving of empathy and deserving of punishment when they engage in misconduct.

H4a (C→D1): Officers who are more punitive will be less likely to perceive that ESC is harmful to the mental health of non-PMIs. Those who hold punitive beliefs do so because they believe that individuals who engage in negative behavior require methods to correct the behavior (Lansford et al. 2014). In this sense, the purpose of punishment, is to correct the negative behavior—that is, punishment is viewed as positive. If punishment is viewed as positive, then it would stand that it would not be perceived as harmful to the individual being punished. That is, despite the widespread condemnation, officers may rationalize the continued use of solitary confinement by viewing it as helpful to inmate behavior, rather than harmful.

H4b (C→D2): Officers who are more punitive will be less likely to perceive that ESC harms the mental health of non-PMIs. Officers who hold punitive beliefs may be likely to rationalize the use of solitary confinement for incarcerated PMIs more so than for non-PMIs. They may view mental illness as a behavioral issue that can be remedied through punishment and perceive solitary confinement as helpful, rather than harmful.

4.4 Data and Methods

4.4.1 Florida Department of Corrections Personnel Survey

The study draws on survey data from a large sample of FDC correctional personnel. The survey data was collected as part of a larger National Institute of Justice study focused on the impacts of ERH on prison systems, personnel, and incarcerated persons. As part of the broader study, and prior to the development of the survey, focus groups and interviews were conducted with correctional personnel to gain greater insights about how ERH is used within the FDC. The data collected from the contextual inquiry was used to develop the survey.

The survey was administered through Qualtrics (2019) to nearly 19,166 correctional personnel across 50 major correctional institutions. Personnel were asked to complete the survey during their shift and computer stations were set up at each site to ensure that personnel could complete the survey during work hours. In total, 10,212 personnel participated in the survey, resulting in a 53.3 percent response rate. Due to data irregularities from one study site, the data from that site were dropped from the analyses. Thus, the final sample was 9,656.

The current study focus is on the perceived mental health effects of solitary confinement on those incarcerated in the housing. Therefore, only personnel who responded that they had experience working in the housing were included in the study analyses (n = 4,594). Further, for the path analyses, only correctional officers who had worked in solitary confinement were included in that analysis (3,774). ESC unit officers were included for two reasons. First, ERH officers spend much of their working hours directly observing inmates in this housing. As a result, they are uniquely positioned to form opinions about how ESC affects inmates, based on how inmates behave during their time in the housing. Second, officers have a great deal of

discretion over the management strategies that they use, and their chosen strategies may affect how incarcerated individuals experience prison life.

4.4.2 Outcome Variables

Solitary confinement does not harm the mental health of incarcerated persons without mental illness. The first dependent variable represents personnel's perceptions of the effects of extended solitary confinement on the mental health of incarcerated individuals who had been identified as having a mental illness. Specifically, personnel who reported that they had experience working in extended solitary confinement were asked to agree or disagree to the following statement: "Mental health deteriorates in [extended solitary confinement] for inmates not identified as mentally ill" (0 = No, 1 = Yes). The measure was reverse coded for a more intuitive interpretation of the path analysis.

Solitary confinement does not harm the mental health of incarcerated persons with mental illness. The second dependent variable represents personnel's perceptions of the effects of extended solitary confinement on the mental health of incarcerated individuals who have not been identified as having a mental illness. In the survey, personnel were asked whether they agreed or disagreed with the statement: "Mental health deteriorates in [extended solitary confinement] for inmates identified as mentally ill" (0 = No, 1 = Yes). In line with the first dependent variable, this dependent variable was also reverse coded for the path analysis.

4.4.3 Key Predictors

Individual agency. The first key independent variable represents perceived agency, or responsibility, for life choices. Personnel were asked to indicate the extent that they agreed or disagreed with the following statement: "Individual choices, not one's circumstances, determine success in life" (1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree). For the analysis, the variable was recoded as a dichotomous variable (0 = Disagree or strongly disagree, 1 = Agree or strongly agree).

Empathy for inmates. The second key independent variable represents empathy. Personnel were asked the indicate the extent that they agreed or disagreed with the following statement: "A good approach for managing inmates is to listen to their concerns" (1 = Strongly

disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree). For the analysis, the variable was recoded as a dichotomous variable (0 = Disagree or strongly disagree, 1 = Agree or strongly agree).

4.4.4 Mediating Variable

Punitiveness. To test for intervening factors, one mediating variable was included in the analysis. The mediating variable represents the level of punitive beliefs held by personnel. To capture the concept, personnel were asked to indicate the extent that they agreed or disagreed that "Too few punishments for inmates contribute to misconduct throughout the FDC" (1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree). Just as the two independent variables, the mediating variable was recoded as a dichotomous variable (0 = Disagree or strongly disagree, 1 = Agree or strongly agree).

4.4.5 Control Variables

Multiple control variables were included in the analysis to account for factors that may potentially influence the effects on the dependent variable. The control variables are those typically used in other studies focused on correctional officers (see, e.g., Butler et al. 2021). The first control variable included in the analysis is the gender reported by personnel. Female served as the reference group in the analysis (0 = Female, 1 = Male).

Race-ethnicity. Race-ethnicity is the second control variable included in the analysis. The survey asked personnel to report their race and were provided with the following categories: White, Black or African American, American Indian or Alaska Native, Other (U.S. Census 2019). They were also asked whether they identified as Hispanic, Latino, or if Spanish origin (U.S. Census 2019). The variables were recoded into the following dummy variable (0/1) categories: White, non-Hispanic; Black, non-Hispanic; Hispanic; Other. Whites served as the reference group in the analysis.

Education. Education is the third control variable. Personnel were asked to report their highest level of education and could choose between "High school or equivalent," "Some college," "Bachelor's degree," "Master's or JD," or "Doctorate." Few participants reported that they had a master's degree, JD, or Doctorate. Therefore, the variable was collapsed and recoded

into the following four dummy variables (0/1): High school or equivalent, some college, bachelor's degree, advanced degree. High school or equivalent was the reference group.

Years of experience. Years of experience was included as a fourth control variable to account for the work experience in a correctional setting. Personnel were asked to report how long that had worked in the field of corrections. They were provided with a drop-down menu with options that ranged from "1 = Less than 1 year" to "21 = 20-or-more years."

Officer rank. Officer rank is the fifth control variable. Recall that only correctional officers were included in the analysis. To account for responsibilities and the level of direct exposure to incarcerated individuals in the housing associated with the rank of the officer, two dummy variables (0/1) that represented senior and junior officers was included in the analysis. Senior ranking officers, who serve more administrative roles, included lieutenants, captains, majors or colonels. Junior ranking officers, which are typically assigned as front-line officers, included sergeants and correctional officers.

Facility. The facility in which personnel worked at the time of the survey was identified in the model to account for cluster effects. In total, 49 facilities were included in the analysis.

4.4.6 Methods

To examine the data, I employed bivariate and path analysis. More specifically, I conducted bivariate analyses to test whether personnel, regardless of the occupational position that they held, were more likely to belief that ESC harms the mental health of individuals. The analysis was conducted using Stata 17 (2021).

To test hypotheses 2 through 4, I developed a non-recursive path model to analyze the perceptions of the correctional officers who reported that they had experience working in ESC (n = 3,774). Path analysis, which is a type of structural equation modeling, is used to examine direct and indirect relationships between observed variables. A non-recursive model tests the relationships between two or more variables in which each variable is sometimes a cause and sometimes an effect, thus, suggesting a reciprocal relationship between the variables (Finch & French 2015). Path analysis is a rigorous and preferential method for testing potential mediating factors in statistical analysis (Hayes & Preacher 2014). Thus, the method is optimal for the study, which aims to test the direct and indirect factors that shape officers' perceptions about the

impact of extended restrictive housing. Stata 17 (2021), which includes a statistical package that was specifically developed for structural equation modeling, is used to conduct the path analysis.

4.5 Findings

First, recall that H1 stated that most personnel would perceive that ESC is harmful to the mental health of incarcerated individuals. To test H1, I examined the descriptive statistics of the entire sample of personnel (wardens, officers, medical and mental health personnel, programming personnel, and classification officers) who reported that they had worked in ESC during their corrections career. The results show that almost half of personnel indicated that mental health does not deteriorate for PMIs while in ESC (49.9%; n = 2,326) and 57.5% (n = 2,667) of personnel reported that they did not perceive ESC as harmful to the mental health of those without a diagnosed mental illness.

I then examined the characteristics and responses of only correctional officers who had worked in ESC. As shown in table 4.1, fewer than half of officers (48.4%; n = 1,828) reported that ESC does not harm the mental health of incarcerated PMIs and still fewer officers (41.7%; n = 1,573) reported that ESC does not harm the mental health of incarcerated non-PMIs. Thus, based on the bivariate analyses, most officers do not believe that ESC is harmful to the mental health of incarcerated individuals.

Next, I turn to the results for H2, H3, and H4 included in the path model. The analysis tested whether empathy and agency predicted perceptions about whether ESC harms the mental health of incarcerated persons and whether these relationships were mediated through punitiveness. First, to test the model fit, I relied on nested models and the resulting BIC for each model. The full model generated the smallest BIC, which suggests that the variables included in the full model resulted in the best model fit. I will first focus on the direct path results from the key predictors (agency and empathy) to all endogenous variables (the two outcomes and the mediator).

The hypothesis for the first path (H2a; A→D1) stated that officers with an agentic perspective would be more likely to perceive ESC as not harmful to incarcerated non-PMIs. As shown in table 4.2 and figure 4.2, the results of the path analysis indicate that officers who reported higher values on the agency measure were associated with an increase in odds that they would perceive ESC as not harmful to the mental health of non-PMIs (OR = 1.13, S.E. = 0.04).

Table 4.1. Descriptive Statistics of Correctional Officers with ERH Experience

	Mean / %	S.D.	Range
Dependent Variables			
No harm to MH of those w/ mental illness	48.44	—	0-1
No harm to MH of those w/o mental illness	58.32	—	0-1
Independent Variables			
Individual agency matters most	3.08	—	1-4
Empathy important in prison work	2.87	—	1-4
Mediating Variable			
Punitiveness	3.15	—	0-1
Control Variables			
Male	73.11	—	0-1
Race/ethnicity			
White, non-Hispanic	62.59	—	0-1
Black, non-Hispanic	18.49	—	0-1
Hispanic	12.40	—	0-1
Other	6.52	—	0-1
Education			
High school or equivalent	33.20	—	0-1
Some college	54.40	—	0-1
Bachelor's degree	10.23	—	0-1
Master's, J.D., or doctoral degree	2.17	—	0-1
Corrections experience (years)	10.11	6.76	1-21
Occupational position			
LT, CPT, MAJ, or COL	13.62	—	0-1
Sergeant or corrections officer	86.38	—	0-1
Facility	—	—	1-49

1. N = 3,774 is the subset of correctional officers who had experience working in extended solitary confinement.

Table 4.2. Path Analysis Estimates for Direct Relationships Between Predictors, Mediator, and Controls on Outcomes

Parameter Estimate	Odds Ratio	S. E.
Predictors		
Agency → No harm to non-mentally ill	1.13***	0.04
Agency → No harm to mentally ill	1.11**	0.04
Agency → Punitiveness	1.15***	0.04
Empathy → No harm to non-mentally ill	0.77**	0.04
Empathy → No harm to mentally ill	0.67***	0.03
Empathy→ Punitiveness	0.87	0.08
Punitiveness → No harm to non-mentally ill	0.96	0.04
Punitiveness→ No harm to mentally ill	0.93	0.04
Controls		
No Harm to Mentally Ill (MI)		
Corrections exp. → No harm to MI	1.00	0.01
Males → No harm to MI	1.08	0.07
Black → No harm to MI	0.80*	0.07
Hispanic → No harm to MI	0.78*	0.10
Other → No harm to MI	1.18	0.19
Some college → No harm to MI	1.05	0.07
Bachelor's → No harm to MI	0.91	0.11
Advanced degree → No harm to MI	0.63	0.17
Senior CO → No harm to MI	1.39**	0.15
No Harm to Non-Mentally Ill (non-MI)		
Corrections exp → No harm to non-MI	1.02*	0.01
Males → No harm to non-MI	1.17	0.11
Black → No harm to non-MI	0.85	0.08
Hispanic → No harm to non-MI	0.86	0.08
Other → No harm to non-MI	1.28	0.20
Some college → No harm to non-MI	0.99	0.08
Bachelor's → No harm to non-MI	0.78	0.10
Advanced degree → No harm to non-MI	0.44***	0.12
Senior CO → No harm to non-MI	0.82*	0.08

*p <. 05; **p < .01; ***p < .001 (two-tailed); n = 3,774

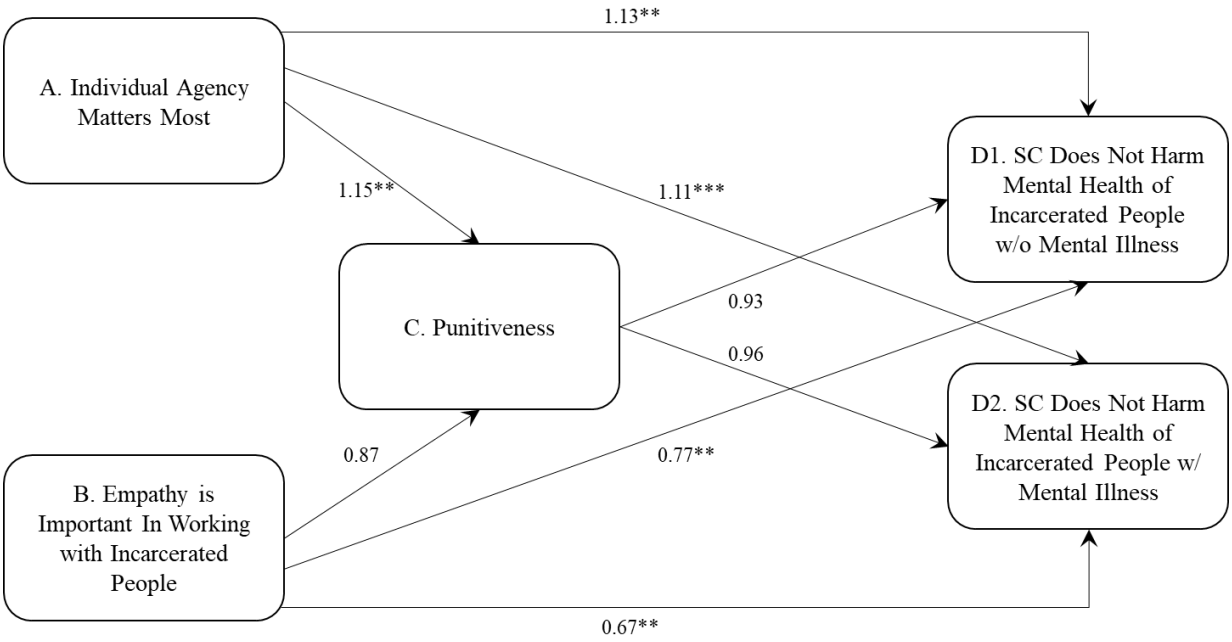

Figure 4.2. Agency, Empathy, and Punitiveness and Views that Solitary Confinement Does Not Harm the Mental Health of Incarcerated People
*p <. 05; **p < .01; ***p < .001 (two-tailed); n = 3,774

The hypothesis for the second path (H2b; A→D2) stated that officers who reported higher scores on individual agency would be more likely to report that ESC is not harmful to the mental health of incarcerated PMIs. The results for the direct path indicate support for the H2a. Officer who reported that held an agentic perspective were also more likely to report that ESC is not harmful to the mental health of PMIs (OR = 1.11, S.E. = 0.04).

I then examined the relationship between agency and punitiveness. Recall that H2c (A→C) stated that agency would be positively associated with punitiveness. The results revealed support for H2c. That is, officers who reported higher levels about perceptions of individual agency were more likely to report higher levels of punitiveness (OR = 1.15, S.E. = 0.04).

Next, I turn to the results for the predictor, empathy. H3a (B→D1) stated that officers who were more empathetic would be less likely to perceive ESC as not harmful to the mental health of incarcerated non-PMIs. The results showed that officers who were reportedly empathetic empathy were also less likely to perceive ESC as not harmful to non-PMIs (OR =

0.77, S.E. = 0.04).

The analyses also show support for H3b (B→D2). Officers who reported higher levels of empathy were more likely to perceive ESC as not harmful to the mental health of PMIs (OR = 0.67, S.E. = 0.03). However, for H3c (B→C), which stated that empathy would negatively predict officer punitiveness, the findings suggested no support for H3c.

Similarly, H4a (C→D1) and H4b (C→D2) were not supported. The direct effects from officer punitiveness to the perception that ESC does not harm the mental health of non-PMIs, nor PMIs showed no statistical significance.

Third, as shown in tables 4.3 and 4.4, I employed a formal test of significance to examine whether the relationships between agency or empathy and perceptions about the effects of ESC on the mental health of either incarcerated PMIs or non-PMIs. The results revealed no statistically significant indirect effects for either predictor. That is, the relationships between key predictors and perceptions about the effects of ESC on mental health—regardless of the identified emotional condition of individuals—were not mediated by punitiveness.

Table 4.3. Mediating Effects for Path Analysis with Agency and Empathy Predictors, Punitiveness Mediator, and No Harm (NH) to Mental Health of Persons with Mental Illness (PMIs) in Solitary Confinement Outcome

Predictor →	Mediator(s)	Outcome	OR	S.E.	z-value
Agency →	Punitiveness →	NH: PMI	0.99	0.01	-1.45
Empathy →	Punitiveness →	NH: PMI	1.01	0.01	1.58

Note: Indirect paths tested with 5,000 bootstraps; n = 3,774

Table 4.4. Mediating Effects for Path Analysis with Agency and Empathy Predictors, Punitiveness Mediator, and No Harm (NH) to Mental Health of Persons without Mental Illness (non-PMIs) in Solitary Confinement Outcome

Predictor →	Mediator(s)	Outcome	OR	S.E.	z-value
Agency →	Punitiveness →	NH: non-PMI	0.99	0.01	-1.03
Empathy →	Punitiveness →	NH: non-PMI	1.01	0.01	0.80

Note: Indirect paths tested with 5,000 bootstraps; n = 3,774.

4.6 Conclusion

The aim of this study was to contribute to scholarship on the impacts of the get-tough era on contemporary prison systems. To do so, I examined officer perceptions about punitiveness, empathy, and individual agency to determine whether these perception shape officers views about the effects of ESC on the mental health of incarcerated PMI and non-PMIs. Gaining a greater understanding about the factors that shape officer personal beliefs about incarcerated individuals and how these beliefs shape their perceptions about the impacts of ESC on the mental health of incarcerated persons provides insights into why ESC continues to be used.

First, hypothesis 1 showed that approximately half of personnel who had worked in ESC reported that ESC is harmful to the mental health of PMIs. Fewer personnel reported that ESC is harmful to incarcerated persons with no identified mental health illness.

Second, the results showed support for H2a and H2b, which stated that officers who held an agentic perceptive would be more likely to perceive ESC as not harmful to the mental health of incarcerated PMIs and non-PMIs. The findings also revealed a positive relationship between perceptions about individual agency and punitiveness.

Third, I also found support for hypothesis 3a and 3b, which stated that empathy would be negatively associated with the perception that ESC is not harmful to the mental health of PMIs or non-PMIs. However, I did not find support for hypothesis H3c, which stated that empathy would predict punitiveness. I also did not find support for H4a or H4b, both which stated that punitiveness would be associated with perceptions about harms to the mental health of non-PMIs

or PMIs. Nor did I find that the relationships between the key predictors (agency and empathy) and perceptions about the harms of solitary confinement to mental health were mediated by punitiveness.

The study has several implications for theory. First, the study lends to theories about punitiveness by examining how personal beliefs among correctional personnel contribute to their punitiveness. The findings suggest that beliefs about individual agency may shape whether individuals support punitive criminal justice policies and may matter more so than a person's level of empathy. Scholars have theorized that empathy is salient for understanding punitiveness (Unnever & Cullen 2009). However, much of the prior work has tested these relationships using samples of non-criminal justice actors. The study findings suggest that other personal factors, such as perceptions about agency, may be more important when applying theories of punitiveness to the correctional environment.

Second, the study highlights how different theoretical models may be used to examine personnel's perceptions of incarcerated persons and the impacts of incarceration. To do so, I examined literature from multiple disciplines and developed a theoretical model. Although not all study hypotheses were supported, the study does contribute to the literature by providing a more nuanced understanding about whether certain personal beliefs shape personnel's views of incarcerated persons and, in turn, may help to explain the continued support for ESC.

Third, more broadly, the three-factor theoretical model used in the study can be extended to understand the views of other criminal justice system actors about the individuals whom they interact with, as well as how these perceptions may shape criminal justice system policies. Thus, the model may be applied to examine various outcomes among other criminal justice actors, such as judges who sentence individuals or prosecutors who commonly make plea deals.

The study also has several implications for research. First, the study provides insight into how personnel view the impacts of ESC on the mental health of incarcerated individuals. There is a need for future research to examine the perceptions of other criminal justice system actors and the factors that may influence their views. I found that personal beliefs influence perceptions about the effects of ESC. How correctional personnel perceive the effects ESC may, in part, explain the continued use of ESC. If this is the case, similar effects may occur in other areas of the criminal justice system. For example, judge's views about offenders may influence their support for longer sentences or, alternatively, programming in lieu of jail or prison time.

Second, the study sheds light on how officer beliefs shape their views about the mental health outcomes of solitary confinement for individuals. Future work should examine whether prior personal experience contributes to officers' beliefs about mental illness. Mental illness is highly stigmatized and, often, not discussed within families. In turn, some individuals have little understanding about how different environmental factors may affect mental health and what the symptoms of deteriorating mental illness look like. Therefore, personal history may, in part, explain why some officers hold certain beliefs about mental health impacts.

Third, the study provides insight into how views about individual agency and empathy toward incarcerated individuals shape officers views about punishment. Studies have examined other factors within the prison environment that maybe associated with officer perceptions and experiences. For example, prior work has found a negative association between job satisfaction and negative perceptions about incarcerated persons. However, supervisory support may be positively associated with job satisfaction, suggesting that there are factors that can help to moderate negative perceptions held by officers (Cheeseman et al. 2011). Future research should examine how other factors, such as facility level characteristics, influence officer perceptions about punishment and ESC use.

Last, the study has implication for policy. In particular, there is a need for increased correctional training for managing incarcerated PMIs. Studies have found that prisons are populated with a high number of PMIs (James & Glaze 2006). Correctional officers are primarily trained in security procedures to ensure that prisons are safe and orderly. They are not trained to identify—or deal with—behaviors associated with mental illness. To the extent that individual traits and personal beliefs shape officers' perceptions about the effects of ESC on incarcerated persons and their continued support for it, there is a need to understand why and whether the housing is an appropriate strategy to use.

CHAPTER 5

CONCLUSION

The aim of this dissertation was to gain a better understanding about the use and impacts of management strategies within contemporary prisons. In particular, my goal was to illuminate the potential impacts of ERH on correctional personnel and how their perceptions about incarcerated individuals may influence their perceptions about the impacts of ERH on incarcerated individuals. Drawing on data from focus groups, interviews, and survey responses from a sample of state correctional personnel in Florida, I employed a mixed-methods approach to examine their experiences and perceptions of work in ERH. The broad goals of the dissertation were to illuminate: (1) The impacts of the punitive turn, (2) The impacts of restrictive housing, (3) The impacts of work in ERH on personnel mental health and physical well-being, and (4) The factors that contribute to the continued use of restrictive housing.

To achieve these goals, I answered the following specific research questions: (1) Do the work-related stressors of ERH result in greater stress for personnel compared to the work-related stressors of GPH? (2) Are the emotional numbing responses greater from work in ERH relative to the emotional numbing responses from work in GPH? (3) Do empathy, perceptions about individual agency, and punitiveness predict personnel perceptions about the effects of ERH on the mental health of incarcerated persons? I now turn to a summary of the study findings and their implications.

5.1 Stressors and Stress from Work in Extended Restrictive Housing

In chapter 2, I focused on the stressors and stress of ERH work and the effects of stress on the mental health and well-being of personnel who work in the housing. To do so, I examined both quantitative and qualitative data. The quantitative data came from the personnel survey, which included questions about the various stressors that may be experiences by prison personnel, and the qualitative data came from the focus groups and interviews. Using bivariate analyses, I compared how personnel responded to questions about the stressors from work in general population housing (GPH) and ERH. I then used thematic analyses to examine the

qualitative data by developing themes about the stressors in each type of housing and the impacts of the stressors on prison personnel.

Consistent with prior work, I found that most personnel experience stress from prison work and do so regardless of where they work within the prison. However, based on the statistical analyses of the survey responses, personnel reported that the work-related stressors of ERH were greater, relative to those in GPH. The findings from the qualitative analysis suggested that the differences were more pronounced than what the survey results showed. That is, during the focus groups and interviews, correctional personnel stated that the work-related stressors were much greater in ERH when compared to the stressors from GPH than what the survey results suggest.

To test whether the stressors from each type of housing predicted stress, I developed a cumulative index that included all six stressors from each type of housing and included it as a key predictor in three different regression models. The results revealed that stressors from each type of housing were associated with stress, but the stress from ERH did not appear to be greater than stress from GPH. The analysis of the qualitative data did reveal that the stress from ERH impacts personnel uniquely. For example, personnel described experiencing greater anxiety and depression as a result of work in ERH, suggesting that the overall adverse effects from prison work may be amplified when personnel work in ERH.

5.2 Emotional Numbing from Work in Extended Restrictive Housing

In chapter 3, I further explored how personnel respond to the extreme conditions of ERH. Drawing on the survey data, I examined responses to questions about emotional numbing from work in ERH and compared them to responses about emotional numbing from GPH. The results showed that, on average, participants reported greater emotional numbing from work in ERH relative to work in GPH.

Drawing on the qualitative data, I identified several themes in which personnel described feeling emotionally numb as a result of work in ERH. They explained that emotional numbing is used to deal with the difficult conditions of the housing and that it may occur consciously, as well as unconsciously. For example, personnel reported that emotional numbing was a skill that only "elite" personnel could develop and those who could master the skill were more likely to

handle ERH work well. However, for most personnel, one consequence of using emotional numbing for work was that it could, inadvertently, extend into their personal lives. In turn, many personnel reported becoming increasingly self-isolated and depressed, and their interpersonal relationships had become strained.

5.3 Individual Traits and Beliefs and Perceptions About the Harms of ERH

In chapter 4, I focused on the use and impacts of long-tern single cell confinement, also referred to as extended solitary confinement (ESC). In particular, I examined whether personal beliefs and perceptions about different management strategies shaped officer perceptions about the impacts of ESC to incarcerated persons. To do so, I developed a theoretical model to examine whether officer empathy, views about individual agency, and level of punitiveness, shaped perceptions about mental health in ESC. I then employed path analysis to test the three-factor theoretical model, with empathy and agency as key predictors and punitiveness as mediating the relationships between the predictors and the outcomes.

The analysis revealed that empathy and views about individual agency predicted perceptions about the impacts of ESC to mental health. Empathetic officers were more likely to report that ESC is harmful to the mental health of incarcerated PMIs and non-PMIs. Officers who held a more agentic perspective—the belief that individuals shape their own outcomes—were more likely to believe that ESC is not harmful to the mental health of incarcerated PMIs and non-PMIs. However, the study did not find a significant relationship between empathy and punitiveness. Nor did the findings show that officer punitiveness predicted perceptions about the effect of ESC on the mental health of PMIs not non-PMIs. I also did not find evidence of mediating effects. For example, I did not find that the relationship between empathy and perceptions about the impacts of ESC to be mediated by punitiveness. Below I discuss the implications of the findings.

5.4 Theoretical Implications

Several implications and theoretical contributions flow from the dissertation. First, the dissertation extends theory on the punitive turn by providing evidence that shows that the

punitive turn has had broader societal impacts than previously understood. For example, mass incarceration has had dramatic effects on communities. It, too, has had effects on those who work inside of prisons. Correctional work is stressful and mass incarceration has introduced additional challenges to the occupation, such as overcrowded conditions, an increase in PMIs within the prison environment, and an increased use of control-oriented management strategies. Although these conditions have adversely affected incarcerated persons, they have also resulted in more stress for personnel. The stress, in turn, has had a wide range of adverse effects to personnel's well-being.

Second, the dissertation extends theory on organizational and operational stressors by showing how these concepts can be applied to the prison environment, and, more specifically, to ERH. Policing scholars posit that police work-related stressors typically occur at the organizational level and, separately, at the operational level. Scholars argue that it is important to examine organizational and operational stressors separately to gain insight into which sources of stress are more salient, as well as to identify which sources may be addressed at the organizational level (McCreary & Thompson 2006). I found that, like police work, prison workers experience considerable stress from both sources and that some stressors are uniquely greater in ERH. For example, I found that overtime demands (operational stressor) occur due to staffing shortages (organizational stressor). Staffing shortages have a greater impact on ERH work because (at least in Florida) ERH work is gender-specific (i.e., female officers may only manage women, and male officers may only manage men) and officers require specialized training to work in the units. Illuminating how organizational and operational stressors from ERH differ from those in GPH aids in understanding the unique challenges of work in ERH.

Third, the dissertation contributes to theory on the effects of prisons by providing evidence to suggest that prison work may have an emotional numbing effect and that the effect may be amplified in ERH. ERH is arguably the most intense form of deprivation in prison. Personnel who work in this environment are exposed to some of the most extreme behavior by incarcerated persons, including having bodily fluids thrown at them and witnessing self-mutilation and suicide. I found that one response to work in ERH is emotional numbness. In addition, I identified instances in which personnel actively sought to become emotionally numb so that they could manage work in ERH. However, at least among some personnel, emotional numbing has inadvertently extended into their personal lives and has resulted in adverse effects.

For example, personnel described that they had become withdrawn from their families and had trouble feeling happiness.

Fourth, the dissertation contributes to theories about punitiveness. To date, much of the scholarship has focused on the general public's support for punitive policies, with little work focused on the perceptions of ERH among correctional workers. Examining the perceptions of ERH among prison personnel may shed light on why certain criminal justice practices continue to be used, despite calls to discontinue these practices.

Fifth, the dissertation contributes to theory through the testing of a three-factor theoretical model in chapter 4, which can be extended to understand whether the perceptions of other criminal justice system actors' influence criminal justice system policies. The theoretical model provided a greater understanding about how individual traits and personal beliefs may shape officers' perceptions of ERH and its impacts on incarcerated persons' mental health. Future work could extend the theoretical model to other criminal justice actors to examine whether their views about how offenders shape their views about the impacts of various policies.

5.5 Research Implications

The dissertation also has several implications for research. First, the dissertation highlights that a focus on correctional workers can lend a unique perspective for understanding restrictive housing. Prior work on ERH has almost exclusively focused on its impacts on incarcerated individuals. By including personnel in this body of research, scholars can gain a more nuanced understanding about the broader effects of the housing. Future research should continue to examine the views of prison personnel—as well as other criminal justice actors.

Second, the dissertation sheds light on the benefits of a mixed-methods approach. Specifically, using qualitative data, coupled with quantitative data, better illuminates the challenges correctional staff face daily. It also provides insights into how work experiences extend to other areas of their lives—specifically for personnel who work with those identified by the prison system as the most difficult to manage.

The focus groups and interviews provided additional context to the survey responses. For example, the overall stress effects from each housing do not appear to be substantially different. However, drawing on the qualitative data, I found that personnel described the stressors of ERH

work as having a greater impact on personnel than did the stressors of GPH work. One possibility may be that the qualitative data overstated the experiences of ERH work, while quantitative data understated personnel's experiences in ERH. Future research should examine potential contributing factors on staff experiences and examine these using multiple approaches.

Third, it contributes to research on the effects of correctional work by highlighting the potentially adverse effects of emotional numbing effects that personnel use to cope with work in ERH. In doing so, the dissertation provides evidence to suggest that work in ERH can adversely affect the emotional well-being of personnel. For example, I found that, while emotional numbing is viewed by officers as a skill to develop for prison work, they also described its harmful consequences, such as emotional withdrawal from their families and friends. The detachment, in turn, resulted in strained relationships. Future research should examine how family members are affected by personnel's work in ERH. Studies could include interviews and surveys with family members to gain their perspective about behavioral changes before, during, and after their time working in ERH. The impacts of ERH work on family members may be another collateral consequence of the punitive turn.

Fourth, the dissertation provides insight into how personnel view the impacts of extended solitary confinement (ESC) on the mental health of incarcerated individuals. It does so by shedding light on how officer views about individual agency and empathy toward incarcerated persons shape their views about ESC's effects on the mental health of incarcerated persons. Having knowledge about what factors shape correctional officer views of solitary confinement use and its outcomes provides one potential explanation for its continued use. Prior work has found that people with mental illness are over-represented in ERH (Siennick et al. 2021; Mears et al. 2021), despite that fact that the housing may have adverse impacts to individuals and, as evidence from this dissertation suggest, to those who work in it. Studies should continue to examine how personal beliefs shape the ways in which officers view and manage individuals. Future research should also extend the three-factor theoretical model to other criminal justice system actors to learn whether their personal beliefs impact the ways in which they deal with others who enter the criminal justice system.

5.6 Policy Implications

The dissertation also has several policy implications. First, there is a need to address the mental health and well-being of correctional personnel. Research has found that chronic stress has a wide range of adverse effects, both on mental and physical health (see, for e.g., Lerman 2017). Prior work has also found that correctional personnel experience stress-related disorders at rates greater than combat veterans (Lerman; James & Todak). A recent study found that these rates are worsening, rather than improving (Lavender & Todak 2021). Poor health may impede on personnel's ability to adequately carry out their assigned responsibilities, they may be more likely to get injured or injure others when chronic stress occurs, and turnover and understaffing may worsen in already understaffed correctional systems. In turn, not only is the security of the prison compromised, but the safety of the broader community is also placed at risk.

Second, there is a need to address the well-being of personnel who work with individuals in extended restrictive housing. These personnel may be at higher risk of serious injury. They may also be more likely to witness violent and disturbing incidents, such as having bodily fluids thrown on them and witnessing self-mutilation and attempted and successful suicides. Exposure to these types of incidents may result in long-term stress and trauma. Providing frequent mental health services and organizational support may help to mitigate the potential long-term adverse effects to personnel.

Third, there is a need for increased correctional training for managing mentally ill inmates. Contemporary prisons are populated with a high number of individuals with mental illness (James & Glaze 2006; Bronson & Berzofsky 2017). Yet, correctional officers are primarily trained in security procedures to ensure that prison operations run smoothly and safely. They are not trained to identify—or deal with—behaviors associated with mental illness. Prisons would benefit from expanding on current training curriculum focused on identifying and managing special populations, like persons with mental illness. Correctional systems would also benefit from hiring more mental health personnel to work closely with security staff to incorporate a more therapeutic approach for dealing with certain individuals.

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BIOGRAPHICAL SKETCH

Maria Vivian Hughes received her Bachelor of Arts degree in Psychology from the University of Washington in 2009, and a Master of Arts degree in Sociology from Kansas State University in 2016. She will join the faculty in the School of Public Affairs at the University of Colorado-Denver in August of 2022. Her research focuses on correctional policy, prison experiences for incarcerated individuals and personnel, and violence. She has completed multiple federal-funded research projects, included a recent project funded by the National Institute of Justice on the impacts of restrictive housing on inmates, personnel, and the correctional system with Drs. Daniel P. Mears, William Bales, Sonja Siennick, George Pesta, and Jennifer Brown.