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# Female Incarceration and Prison Social Order: An Examination of Gender Differences in Prison Misconduct and In-Prison Punishments

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Female Incarceration and Prison Social Order: An Examination of Gender Differences in  
Prison Misconduct and In-Prison Punishments

by

Elisa L. Toman

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
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College of Community and Behavioral Sciences  
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## TABLE OF CONTENTS

List of Tables .....	iv
List of Figures .....	vi
Abstract .....	vii
Chapter One: Introduction .....	1
This Dissertation .....	5
Substantive Chapters .....	7
The Nature of Male and Female Formal Misconduct .....	7
Gender and Race Differences in Prisons' Official Responses to Inmate Misconduct .....	9
Assessing the Effectiveness of In-Prison Punishments for Females and Males .....	10
Implications of the Dissertation .....	11
Structure of the Dissertation .....	13
Chapter Two: The Nature of Male and Female Formal Misconduct .....	15
Introduction .....	15
Theories of Inmate Misconduct .....	18
The Importation Perspective .....	19
The Deprivation Perspective .....	20
Gender and Racial/Ethnic Variation in Trends and Predictors of Misconduct .....	21
Importation Theory and Gender and Racial/Ethnic Variation in Formal Misconduct .....	23
Deprivation Theory and Gender and Racial/Ethnic Variation in Formal Misconduct .....	25
Multiracial Feminism .....	27
Multiracial Feminism and the Prison Experience .....	27
This Chapter .....	28
Data and Methods .....	29
Findings .....	33
Bivariate Gender and Racial/Ethnic Differences in Institutional Misconduct .....	35
Gender and Racial/Ethnic Differences in the Likelihood of Misconduct .....	41
Variation in Common Predictors of the Likelihood of Misconduct .....	46
Gender and Racial/Ethnic Differences in the Counts of Misconduct .....	48
Variation in Common Predictors of Counts of Misconduct .....	51
Conclusion and Discussion .....	53
Implications for Theory and Research .....	56

Implications for Policy.....	59
Chapter Three: Gender and Race Differences in Prisons' Official Responses to Inmate	
Misconduct.....	61
Introduction.....	61
Focal Concerns Theory: Understanding Sentencing Trends .....	64
Focal Concerns Perspective and the Effect of Gender on Sentencing.....	65
Female Sentencing Trends: The Chivalry and "Evil Woman" Hypotheses .....	66
Gender and Racial/Ethnic Differences in In-Prison Sentencing Patterns.....	68
The Implications of Inmate Status on In-Prison Sentencing Patterns.....	69
"Carrots-and-Sticks" in Male and Female Correctional Facilities .....	70
Sentencing Theories' Applicability to Patterns in In-Prison Sentencing.....	71
Similarities and Differences Between In-Prison Sentencing and Court	
Sentencing.....	72
This Chapter.....	74
Data and Methods .....	75
Findings .....	77
Gender and Racial/Ethnic Differences in the Likelihood of Receiving	
Disciplinary Confinement.....	79
Gender and Racial/Ethnic Differences in the Likelihood of Receiving Less	
Harsh Sanctions .....	81
The Likelihood of Receiving Disciplinary Confinement for Violent and	
Nonviolent Offenses .....	85
Discussion and Conclusion.....	89
Implications for Theory and Research.....	92
Implications for Policy.....	94
Chapter Four: Assessing the Effectiveness of In-Prison Punishments for Females and	
Males.....	96
Introduction.....	96
Deterrence, Defiance, and Criminal Justice Sanctions .....	99
The Deterrent Effect of In-Prison Punishments.....	100
The Legitimacy Problem of In-Prison Punishments.....	101
In-Prison Punishments as Added Pains of Imprisonment.....	102
The Effectiveness of In-Prison Punishments for Males and Females.....	103
Management Differences and Gendered Effects of In-Prison Punishments.....	103
Gender Differences in the Pains of Imprisonment.....	104
This Chapter.....	106
Data and Methods .....	107
Findings .....	110
The Effect of Disciplinary Confinement on Future In-Prison Misconduct.....	112
The Effect of More Lenient Sentences on Future In-Prison Misconduct.....	121
Discussion and Conclusions .....	133
Implications for Theory and Research.....	136
Implications for Policy.....	140

Chapter Five: Conclusions .....	142
Implications.....	143
References.....	146
Appendices.....	170
Appendix A: Florida Department of Corrections Approval for Data Usage .....	170

## LIST OF TABLES

Table 2.1:	Descriptive Statistics — Demographic Characteristics .....	34
Table 2.2:	Descriptive Statistics — Disciplinary Infractions.....	35
Table 2.3:	Mixed Effects Logistic Regression Models of Disciplinary Infraction Types on Measures of Inmate Characteristics (n = 237,792 inmates, 172 facilities) .....	42
Table 2.4:	Mixed Effects Logistic Regression Models of Disciplinary Infraction Types on Measures of Inmate Characteristics, Interaction Terms (n = 237,792 inmates, 172 facilities).....	43
Table 2.5:	Summary of Top 5 Significant Predictors of Disciplinary Infractions by Inmate Subgroups .....	47
Table 2.6:	Negative Binomial Regression Models of Count of Disciplinary Infraction Types on Measures of Inmate Characteristics (n = 169,627) .....	49
Table 2.7:	Negative Binomial Regression Models of Count of Disciplinary Infraction Types on Measures of Inmate Characteristics, Interaction Terms (n = 169,627) .....	50
Table 2.8:	Summary of Top 5 Significant Predictors of Count of Disciplinary Infractions by Inmate Subgroups .....	52
Table 3.1:	Descriptive Statistics (n = 92,760).....	79
Table 3.2:	Mixed Effects Logistic Regression of Disciplinary Confinement on Measures of Inmate Characteristics (n = 92,760 inmates, 167 facilities).....	80
Table 3.3:	Mixed Effects Logistic Regression of Loss of Gain Time vs. Disciplinary Confinement on Measures of Inmate Characteristics (n = 76,815 inmates, 167 facilities) .....	82
Table 3.4:	Mixed Effects Logistic Regression of Extra Work Duty vs. Disciplinary Confinement on Measures of Inmate Characteristics (n = 83,404 inmates, 167 facilities) .....	84
Table 3.5:	Mixed Effects Logistic Regression of Disciplinary Confinement on Measures of Inmate Characteristics (Violent and Nonviolent Inmates).....	86

Table 4.1:	Descriptive Statistics (n = 77,890).....	111
Table 4.2:	Mixed Effects Logistic Regression of Types of Second Disciplinary Infraction on Measures of First Disciplinary Confinement Sanction (vs. Lesser Sanction) and Inmate Characteristics (n = 77,890 inmates nested in 167 facilities) .....	112
Table 4.3:	Mixed Effects Survival Analysis of Time until Second Disciplinary Infraction on Measures of First Disciplinary Confinement Sanction (vs. Lesser Sanction) and Inmate Characteristics (n = 77,890 inmates nested in 167 facilities) .....	117
Table 4.4:	Mixed Effects Logistic Regression of Types of Second Disciplinary Infraction on Measures of First Loss in Gain Time Sanction (vs. Disciplinary Confinement Sanction) and Inmate Characteristics (n = 59,430 inmates nested in 167 facilities).....	122
Table 4.5:	Mixed Effects Survival Analysis of Time until Second Disciplinary Infraction on Measures of First Loss in Gain Time Sanction (vs. Disciplinary Confinement Sanction) and Inmate Characteristics (n = 59,430 inmates nested in 167 facilities).....	126
Table 4.6:	Mixed Effects Logistic Regression of Types of Second Disciplinary Infraction on Measures of First Extra Work Duty Sanction (vs. Disciplinary Confinement Sanction) and Inmate Characteristics (n = 64,450 inmates nested in 167 facilities).....	131
Table 4.7:	Mixed Effects Survival Analysis of Time until Second Disciplinary Infraction on Measures of First Extra Work Duty Sanction (vs. Disciplinary Confinement Sanction) and Inmate Characteristics (n = 64,450 inmates nested in 167 facilities).....	133



## LIST OF FIGURES

Figure 2.1:	Life Tables, Weeks until Disciplinary Infraction .....	38
Figure 2.2:	Predicted Probabilities of Disciplinary Infractions by Gender and Race/Ethnicity.....	45
Figure 2.3:	Predicted Count of Violent Disciplinary Infractions by Gender and Race/Ethnicity.....	51
Figure 3.1:	Predicted Probabilities by Disciplinary Infraction Type and Gender, with 95% C.I.s.....	87
Figure 3.2:	Predicted Probability by Gender, Race/Ethnicity, and Age for Nonviolent Infractions (Model 3) .....	88
Figure 4.1:	Predicted Probabilities of Second Disciplinary Infraction by Gender and Type of In-Prison Punishment (Disciplinary Confinement versus Non-Disciplinary Confinement Sanction).....	115
Figure 4.2:	Time to Second Disciplinary Infraction for Inmates Punished with Disciplinary Confinement or Lesser Sanction .....	119
Figure 4.3:	Predicted Probability of Second Disciplinary Infraction by Gender and Type of In-Prison Punishment (Loss of Gain Time versus Disciplinary Confinement) .....	125
Figure 4.4:	Time to Second Disciplinary Infraction for Inmates Punished with Loss of Gain Time or Disciplinary Confinement .....	128

## ABSTRACT

The dramatic increase in the U.S. prison population has renewed scholarly interest in the prison experience. Researchers have built upon and extended classic theories of inmate behavior to better understand the mechanisms that lead to inmate violence and misbehavior. Yet, scholars still consider what happens to inmates inside of prison a “black box,” due to limited systematic assessments of the prison experience. This body of scholarship is also limited by its narrow focus on males, as theories of inmate behavior have been developed around male experiences and, in turn, ignore the possibility that gender may influence prison life. Feminist theory suggests that assessments of the prison experience necessitate a focus beyond a “gendered” analysis, to one that simultaneously takes in to account race and ethnicity. Theory indicates that the intersection of gender, race, and ethnicity influence the prison experience and the way in which prison staff react to behaviors of different inmate groups.

Accordingly, the goal of this dissertation is to address these research gaps and to systematically examine female inmate behavior and official reactions to behavior. Specifically, this dissertation examines three domains of the prison experience. First, it examines gender and race/ethnicity-based variation in the trends and predictors of formal in-prison misconduct. Second, the dissertation explores gender and racial/ethnic differences in how prisons sanction inmate misconduct and focuses specifically on the use of disciplinary confinement, losses of gain time, and assignment to extra work duty. Third, the dissertation assesses how in-prison

punishments influence future in-prison misconduct and examines whether there is gender and racial/ethnic variation in those effects.

Towards this goal, this dissertation uses longitudinal data that come from the Florida Department of Corrections (FDOC), and include all inmates that entered Florida prisons between 2005 and 2011. The data are especially useful in the assessment of the female prison experience, because they include a large enough sample of female inmates of Black, White, and Hispanic background to allow for systematic empirical assessments, which are typically rare in the study of this type of population. This dissertation uses a number of different analytic techniques, including bivariate comparisons, life table analyses, multilevel logistic regression models, negative binomial regression, and multilevel survival analyses.

The dissertation's analyses identify several critical results that advance prison research, theory, and policy. First, the findings highlight that there are notable gender and racial/ethnic differences in official misconduct, which point to the possibility of behavioral differences or differential rule enforcement, or perhaps both. At the same time, this dissertation shows that prior incarceration and age are the strongest predictors of misconduct, violence, and order violations for Black, White, and Hispanic males and females. Second, this dissertation identifies disciplinary confinement as the most frequently used in-prison sanction across male and female inmates incarcerated in Florida prisons. Third, empirical assessments showed little to no deterrent effect of harsher in-prison punishments (e.g., disciplinary confinement). More broadly, the findings underscore a need for more nuanced assessments of the female prison experience, and one that can account better for officer decision making patterns. The dissertation concludes with an overview of the findings, and a discussion of theory, research, and policy implications.

## CHAPTER ONE: INTRODUCTION

The escalation of America's imprisonment rate over the past four decades has led to a resurgence of research examining inmates' experiences in prison and the challenges institutions face maintaining safety and order in the prison environment. These challenges include inmate violence and misconduct, which have become more pressing concerns for prisons as states have dramatically expanded the size of their inmate populations. Researchers have built upon classic works by Clemmer (1940) and others (Goffman, 1961; Irwin & Cressey, 1962; Sykes, 1958; Sykes & Messinger, 1960) to advance our understanding of the wide-ranging experiences inmates have and the implications of those experiences for violence and misbehavior and, more broadly, how inmates navigate prison life (e.g., Adams, 1992; Bottoms, 1999; Blevins, Listwan, Cullen, & Jonson, 2010; Crewe, 2009; Tasca, Griffin, & Rodriguez, 2011). Although a rich literature exists exploring various aspects of incarceration, scholars commonly argue that what happens inside of prisons is still largely a "black box," meaning that limited systematic, empirical research has been conducted to address a range of looming theory and policy questions centered on inmate experiences (e.g., Mears, 2008). In particular, only limited empirical knowledge exists about the nature of inmate violence and misbehavior, the ways in which prisons sanction misconduct, and the consequences those sanctions have on future behavior (DeLisi, 2003; DeLisi, Trulson, Marquart, Drury, & Kosloski, 2011; Houser & Belenko, 2015; Morris, 2016; Nagin, Cullen, &

Jonson, 2009; Reisig & Mesko, 2009). As I discuss further below, this dissertation seeks to address these research gaps directly.

Prison theory and research is also limited by its narrow, almost exclusive focus on males (Clemmer, 1940; Irwin & Cressey, 1962; Sykes, 1958). The clear majority of the prison population is indeed made up of males, and so studies typically center on their experiences. Findings are generalized to all inmates, which implicitly ignores gender differences. However, there are females in prisons and this fact alone justifies research and theory that seeks to understand the female prison experience (Bosworth, 1999; Chesney-Lind, 1998). Moreover, the population of female inmates has burgeoned over the past decade, and the rate of female incarceration has increased dramatically (Carson & Mulako-Wangota, 2017). Yet, empirical studies rarely focus on female inmates and theorizations about in-prison behavior typically ignore the possibility that gender may influence prison life and life afterwards (Holsinger, 2014; Pollock, 2002; Salisbury, van Voorhis, & Spiropoulos, 2009; Stohr, Jonson, & Lux, 2015).

Although gendered theorizing and inattention to females in criminological research is not uncommon (Adler, 1975; Merlo & Pollock, 2015; Steffensmeier & Allan, 1996), why have females been left out of empirical prison studies? In some instances, data on females, compared to males, are limited. Some scholars have, however, stated flatly (and, respectfully, wrongly), that female inmates are relatively unimportant, as they represent less than 10 percent of the total imprisoned population (Zimring, 1990 as cited in Holsinger, 2014). Feminist scholars attribute the lack of attention to female inmates and, more broadly, to understanding how gender shapes and conditions “the” prison experience and life afterwards, to the fact that prison philosophy, design, and implementation are largely male-centered. Programming and in-prison treatments are typically geared toward male-specific needs, female facilities are often secondary to male facilities

in quality and upkeep, and even prison staffing—prison officers have historically been almost entirely male—seemingly ignores the unique needs of any given state’s female population (Holsinger, 2014; Stephan, 2008). Feminist criminology recognizes too the need to construct approaches to studying social institutions, such as the prison, that are capable of accounting for complex circumstances that lead to female offending (Wattanaporn & Holtfreter, 2014).

Inattention to gender in prison research is problematic. A substantial body of literature suggests that there are qualitative and theoretically important differences between male and female inmates and the experiences they have before and during incarceration have critical implications for prison adjustment and prison social order (Celinska & Siegel, 2010; Craddock, 1996; Datesman & Cales, 1983; Hart, 1995; Jiang & Winfree, 2006; Kruttschnitt & Gartner, 2003; McClellan, 1994; McClellan, Farabee, & Crouch, 1997; Mears, Cochran, & Bales, 2012; Owen, 1998; Pollock, 1986, 2002; Steiner & Wooldredge, 2013; Ward & Kassebaum, 1965; Wright, Salisbury, & van Voorhis, 2007). For example, scholars suggest that female inmates, on average, come from backgrounds characterized by higher victimization rates than their male counterparts (Greenfeld & Snell, 1999; Kruttschnitt & Gartner, 2003; McClellan et al., 1997). Severe histories of abuse are typically accompanied with mental health problems and substance addiction, which have the potential to impact both prison (mal)adjustment and the way prison officials react to incarcerated women (Adams & Ferrandino, 2008; Houser, Belenko, & Brennan, 2012; Molnar, Buka, & Kessler, 2001). Substantial differences also exist in the atmosphere of male and female prison facilities. Female facilities tend to be fewer in number than male facilities, which limits programming and treatment options and makes visitation more difficult (Bastick & Townhead, 2008; Celinska & Siegel, 2010; Holsinger, 2014). And, not least, females are more likely to have been separated from minor children, which can affect the prison experience and re-entry

challenges (Arditti & Few, 2006; Glaze & Maruschak, 2008; Tasca, Turanovic, White, & Rodriguez, 2014). These and several other theoretically relevant gender differences exist and may condition the experiences of incarceration, including misconduct patterns, the reaction of prison staff to inmate (mis)behaviors, and the consequences of in-prison punishments.

A focus on gender and its role in shaping prison experiences and treatment of inmates by prisons must be accompanied by a simultaneous examination of race and ethnicity. Indeed, prior theory and scholarship underscore the need for prison research that considers how the intersection of gender and race/ethnicity affects incarceration and, specifically, in-prison behavior, adjustment, and the ways in which the prison system interacts with inmates (Adams, 1992; Berg & DeLisi, 2006; Crenshaw, 2011; Holsinger, 2014; Steiner & Wooldredge, 2009). Males and females of different racial/ethnic backgrounds may have qualitatively different experiences prior to and during incarceration. Research highlights, for example, that although both male and female inmates face challenges connecting with family during incarceration and child-parent visitation is overall low (Hairston, 1991), Hispanic mothers are found to have a substantially higher likelihood of child visitation than any other subgroup (Casey-Acevedo & Bakken, 2002). And, more relevant for the focus of this dissertation, prior research on inmate misconduct highlights that males are overall more likely than females to engage in misconduct (Craddock, 1996; see however, McClellan, 1994), and that Black females compared to White females, have misconduct rates similar to the typical male inmate (Steiner & Wooldredge, 2014). Not least, the intersection of gender and race/ethnicity may influence prison officers' perceptions of inmates and condition staff-inmate relations (Hemmens & Marquart, 2000; Poole & Regoli, 1980).

Feminist theory also calls for a combined assessment of gender and race/ethnicity in the prison setting (Arnold, 1990; Bosworth, 1996; Crenshaw, 2011; Holsinger, 2014; Richie, 2012).

Scholars argue that the intersection of gender and race/ethnicity place individuals at different levels of a power hierarchy, which in turn affects access to social institutions over the life course and social interactions with others (Baca Zinn & Thornton Dill, 1996; Burgess-Proctor, 2006). This, in theory, holds consequences for the prison experience overall, and, more specifically, for how men and women of different racial/ethnic backgrounds will adjust to imprisonment and for how they will be treated by correctional officers. Due to these possible variations, assessments of the prison experience necessitate a focus beyond a binary, “gendered” analyses to one that can take in to consideration gender, race, and ethnicity.

### **This Dissertation**

In short, existing prison theory and research have largely ignored gender differences in “the” prison experience, and studies of inmate behavior have overlooked the possibility of an intersectional effect of gender and race/ethnicity. The larger prison literature in turn, is missing a key part of a critical research puzzle. Feminist scholars have consistently indicated that the use of gender-neutral and prison-specific theories may be inadequate in helping to understand the female prison experience (Bosworth, 2003; Heide, 1974; Holsinger, 2014; Daly & Chesney-Lind, 1988; Simpson, 1989). Multiracial feminism in particular, provides a perspective that accounts for gender and other sources of inequality, such as race and ethnicity, and in turn affords a useful lens through which the incarceration experience may better be understood (Baca Zinn & Thornton Dill, 1996; Burgess-Proctor, 2006; Chowdhury, 2015). What is needed is more research that examines the intersection of gender, race/ethnicity, and prison experiences generally and, more specifically, research that seeks to better understand how gender and race/ethnicity influence inmate behavior and prisons’ responses to it.



*Against this backdrop, the purpose of this dissertation is to address these research gaps and to advance scholarship on incarceration, gender, and race/ethnicity by systematically examining the nature of Black, White, and Hispanic male and female official misconduct, gender and racial/ethnic differences in prisons' official responses to misconduct, and gender and racial/ethnic differences in the impact of in-prison punishments on future in-prison misconduct.*

Specifically, the dissertation seeks to answer three questions. **First**, is there gender- and race/ethnicity-based variation in trends and predictors of in-prison misconduct? This question is addressed in a chapter that examines bivariate differences in the types, seriousness, and timing of official misconduct Black, White, and Hispanic males and females engage in, and whether common predictors of misconduct vary between these inmate subgroups. **Second**, are there gender and racial/ethnic differences in how prisons sanction inmate misconduct? This question is addressed in a chapter that assesses whether there are gender and racial/ethnic differences in in-prison punishments (e.g., disciplinary confinement, losses in gain time, assignment to extra work duty) that institutions use in response to infractions. **Third**, how do in-prison punishments influence future inmate misconduct and are there gender and racial/ethnic differences in those effects? This question is addressed in a chapter that focuses on the impacts of in-prison punishments and variation in those impacts between Black, White, and Hispanic male and female inmates on likelihoods of, and timing to, future misconduct.

To answer these questions, the dissertation uses data from the Florida Department of Corrections (FDOC) Custody Assessment and Reclassification System (CARS).<sup>1</sup> These data are particularly useful as they include detailed and longitudinal information for a 6.5-year period on inmate misconduct, in-prison punishment data, and theoretically relevant covariates such as

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<sup>1</sup> Permission to use these data was granted by the FDOC Chief of Research and Data Analysis (see Appendix A).

demographic information, socioeconomic profiles, prior incarceration, and criminal histories. Florida's imprisoned female population accounts for 7% of the total incarcerated female population across the nation and is the second largest in the U.S. (The Sentencing Project, 2016). In turn, the data include large numbers of males and females who are of Black, White and Hispanic background. In addition, the FDOC has a system of disciplinary rules and procedures that apply across institutions, which allows for a systematic assessment of formal policies. Taken together, these characteristics make Florida an ideal setting for studying gender and racial/ethnic differences in the nature of, reactions to, and consequences of inmate misconduct.

### **Substantive Chapters**

The dissertation consists of three interrelated substantive chapters exploring the intersection of gender and race/ethnicity and its effect on the prison experience, focusing specifically on misconduct, in-prison punishments, and the effects thereof on future misconduct. These chapters work to advance research on the differences between male and female prison experiences, and more broadly, prison social order. Each chapter is described below.

#### **The Nature of Male and Female Formal Misconduct**

Given the potential gender and racial/ethnic differences in the prison experience and its potential influence on behavior, this chapter empirically examines official prison infractions and explores the nature of Black, White, and Hispanic female compared to male misconduct. In this chapter, I present theoretical arguments that hypothesize differences in the patterns of inmate misconduct, and variation in the strength of common predictors of inmate behavior. Existing prison research has advanced theories of inmate behavior to better understand factors that lead to misconduct (Adams, 1992; Cao, Zhao, & van Dine, 1997; Crewe, 2011; Thomas, 1977). Prison

research and theory however, is largely male centered and overlooks gender and racial/ethnic differences in the prison experience, which may be influenced by pre-prison lives, prison facility characteristics, and differential treatment by staff (Chesney-Lind & Rodriguez, 1983; Craddock, 1996; McCorkel, 2006; Owen, 1988; Stohr, Jonson, & Lux, 2015). Patterns of misconduct and the strength of common predictors of misconduct may differ by gender and race/ethnicity due to variations in histories of victimization and associated mental health problems, types and reactions to strain, and the importance of social ties pre- and during imprisonment (Belknap, Holsinger, & Dunn, 1997; Blevins, Listwan, Cullen, & Jonson, 2010; Broidy & Agnew, 1997; Hart, 1995; Jiang & Winfree, 2006). Multiracial feminism provides impetus for examining an intersectional approach in prison research. The perspective suggests that gender and race/ethnicity structure the availability of opportunities, behavioral patterns, and societal reactions to behaviors (Baca Zinn & Thornton Dill, 1996; Burgess-Proctor, 2006). It is possible that gender and race/ethnicity condition the effect of predictors of inmate behavior, that differences associated in imported characteristics shape the misconduct patterns of Black, White, and Hispanic males and females, and that prison officials will treat (mis)behavior of these inmate subgroups in unique ways.

The goal of this chapter is to provide a systematic assessment of gender and racial/ethnic differences in the patterns and predictors of formal inmate infractions. Towards this goal, the chapter utilizes data that include a large inmate population incarcerated between 2005 and 2011. The analyses include four steps. First, descriptive statistics examine the types and frequency of infractions Black, White, and Hispanic males and females engage in. Second, life table analyses examine gender and racial/ethnic differences in the timing to misconduct. Third, multilevel logistic regression and count models examine the main and interactive effects of gender and race/ethnicity on misconduct. Fourth, split-sample analyses compare and rank the effects of

predictors of inmate misconduct across Black, White, and Hispanic male and female inmates.

### **Gender and Race Differences in Prisons' Official Responses to Inmate Misconduct**

This chapter shifts focus to prisons' formal responses to inmate misconduct, and the potential effects of gender and race/ethnicity on this decision-making process. In this chapter I present a theoretical discussion regarding possible gender and racial/ethnic differences in how prisons sentence inmate misconduct and then present an empirical examination that tests whether this variation exists. The sentencing literature outside of prison suggests that young Black males are sentenced more harshly than any other group (Spohn, 2002; Steffensmeier & Demuth, 2006; Steffensmeier, Ulmer, & Kramer, 1998). It is plausible that sentencing perspectives such as the focal concerns framework, the chivalry hypothesis, and the "evil woman" model may apply to sentencing inside prison walls. The gender and racial/ethnic disparities observed outside of the prison may occur inside of the prison as well. Female inmates may continue to benefit from their gender status and receive relative lenient treatment. On the contrary, female inmates may become stripped of gendered stereotypes due to their inmate status and be subjected to harsher treatment that more closely resembles that of males. Black and Hispanic females may be subjected to harsher treatment as the chivalry hypothesis would suggest that they do not have stereotypical female characteristics—middle class, White—that motivate chivalrous treatment by male decision makers (Visser, 1983). Only little empirical research exists to date that systematically examines in-prison sentencing, and the vast majority of this research is centered only on disciplinary confinement (see e.g., Butler & Steiner, 2017).

Accordingly, the goal of this chapter is to empirically examine potential gender and racial/ethnic differences in how prisons respond to inmate misconduct. Towards this goal, this chapter uses a sample of inmates who have incurred at least one disciplinary infraction. In Florida,

inmates typically receive one of three sanction types—disciplinary confinement, loss of gain time, and assignment to extra work duty—which constitute the three dependent variables examined in this chapter. The analyses use a series of multilevel logistic regression analyses to systematically compare gender and racial/ethnic effects, including interaction terms, on the likelihood that inmates receive one of the three sanctions. The last analytic step restricts the analyses to inmates who were sanctioned for a violent, and separately, a nonviolent offense, to determine whether a gender gap becomes exacerbated, as suggested by the evil woman hypothesis.

### **Assessing the Effectiveness of In-Prison Punishments for Females and Males**

There is also limited empirical knowledge regarding the effectiveness of in-prison punishments and whether variation exists in the effects of in-prison punishments on males and females of different racial/ethnic backgrounds. To fill this research gap, this chapter explores the impact of three in-prison sanctions—disciplinary confinement, loss of gain time, and extra work duty—on future inmate misconduct, and examines potential gender and racial/ethnic variations in these effects. Theoretical insights from the deterrence perspective suggest that tougher punishments should elicit lower rates of criminal involvement (Beccaria, 1764; Bentham, 1789; Cullen, Jonson, & Nagin, 2011; Stafford & Warr, 1993). However, defiance theory argues that some harsh punishments may impact criminal behavior in the opposite direction—they may be criminogenic (Sherman, 1993). Harsh in-prison sanctions, like disciplinary confinement, may not serve their deterrent purpose, because inmates may not view them as legitimate. Instead, they may increase the pains of imprisonment commonly linked to misconduct (Sykes, 1958; Useem & Kimball, 1989). Gender and racial/ethnic differences in the deterrent effect of in-prison punishments may also arise due to differences in the pains of imprisonment, an uneven balance between remunerative and coercive controls in female prisons, and variations in management

strategies of male and female inmates.

The goal of this chapter is to empirically examine how commonly utilized in-prison sanctions influence future in-prison misconduct, and whether these effects vary by gender and race/ethnicity. Towards this goal, the chapter utilizes data that come from a large inmate population that have incurred at least one disciplinary infraction, received a formal sanction in response to that infraction, and who have served their entire sentence. The analyses utilize multilevel logistic regression and multilevel survival models to examine whether in-prison punishments serve their deterrent purpose, and whether there are gender and racial/ethnic differences in the effects of in-prison punishments on the likelihood and timing to future misconduct, violent misconduct, and nonviolent misconduct.

### **Implications of the Dissertation**

The intersection of gender and race/ethnicity, and its effect on the prison experience constitute an emerging area of criminological research and theory (Belknap, 2001; Carlen, 1983; Daly, 1994; Hartnagel & Gillan, 1980; Kruttschnitt & Gartner, 2003; Owen, 1998; Pollock, 2002; Steiner & Wooldredge, 2009, 2013; Wright, Salisbury, & van Voorhis, 2007) and this dissertation will provide several theoretical and empirical contributions to this area. First, this dissertation contributes to the work of unpacking the “black box” that constitutes incarceration experiences by systematically examining a large and diverse inmate population. Second, this work is also important for pushing forward theory. If gender and racial/ethnic variations in the prison experience do indeed exist, theoretical models require updating. It is, on the other hand, possible that common predictors of misconduct work in parallel ways for Black, White, and Hispanic male and female inmates, in which case the generalizability of theories of inmate behavior would be strengthened. If, however, any appreciable differences emerge, such that inmate or facility

characteristics exert different effects on inmate subgroups, the gender-neutrality of these theories would be called in to question. Because this dissertation examines official data, the findings may also shed light on how prison staff reacts to misconduct committed by different groups of inmates, and so provides motivation for future research to examine the specific mechanisms that structure officers' decisions to formally charge inmates with disciplinary infractions.

Third, the implications of this dissertation will also be important for theory, research, and policy that concern the official sentencing of inmates in prisons. Uncovering gender and racial/ethnic differences in how prisons sanction inmate misconduct is important because any identified disproportionalities can diminish inmates' perceptions of the legitimacy of the corrections system (Tyler, 2010). Disparate sentencing would also raise concern about the fairness of the treatment of inmates, and spur on policy efforts to improve equal treatment of inmates (Babcock, 1981). If gender and racial/ethnic differences in in-prison sentencing emerge and if they mirror those that emerge in the criminal justice system, the findings would provide support to the sentencing literature, which identifies young Black males as being at risk of harsher punishment. The results also provide motivation for future research to examine why any observed differences in in-prison punishment occur. Finally, if gender and race/ethnicity based variation emerges, questions for policy and research are raised, including whether in-prison punishment trends currently in use provide an effective mechanism for improving inmate behavior.

Fourth, the results of this dissertation will have important implications for theory, research, and prison policies aimed at improving safety and order of the prison environment. Uncovering a deterrent effect of harsh in-prison punishments, for example, may suggest that there is an appreciable benefit for prison order and safety that stems from harsh sanctions. If gender differences in the deterrent effect are found, such that either males or females "benefit" from harsh

in-prison punishments, this would suggest that theories of sentencing used to understand patterns that occur outside of the prison—like chivalry and “evil woman” hypotheses—apply also inside of the prison. It would also raise interesting questions regarding the gender-neutral policies prisons operate under. However, it is possible that the analyses will reveal no effect on future misconduct, or, worse, a criminogenic effect. In either case this may indicate that current sanctioning practices may be ineffective. The findings of this dissertation will provide impetus for future research to closely examine the mechanisms which structure in-prison punishments’ effectiveness.

### **Structure of the Dissertation**

Chapter 1 describes the goals and objectives of the dissertation, and outlines gaps related to prison research, gender, and race/ethnicity, along with specific questions and analytic strategies that will be used to address them.

The dissertation utilizes data from the Florida Department of Corrections (FDOC) Custody Assessment and Reclassification System (CARS). Any given chapter uses a different subsample of inmates and different analytic techniques based upon the chapter’s specific goals. Because of these differences, each chapter includes a self-contained data and methods section describing the sample and analytic strategy employed for the analysis in that particular chapter.

Chapter 2 examines official in-prison infractions and explores the nature of Black, White, and Hispanic female compared to male misconduct. Towards this goal, the chapter explores theoretical perspectives of inmate misconduct and discusses the strengths and weaknesses of prison theory for understanding gender and racial/ethnic differences in prison behavior and the causes of misconduct (e.g., inmate maladjustment, deprivations and importation, victimization, legitimacy, etc.). This chapter identifies critical research questions relevant to understanding in-prison behavior and related gender and racial/ethnic differences. I examine official inmate



disciplinary infractions descriptively and then explore some of the “usual suspect” predictors of misconduct that might differ between genders and races/ethnicities.

Chapter 3 builds on the previous chapter and shifts focus to prisons’ official responses to inmate misconduct. The chapter summarizes the limited body of prior theory and research focused on in-prison punishments and presents theoretical arguments about key gender and racial/ethnic differences that might be anticipated in how prisons respond to inmate misconduct. The focus of this chapter is an empirical examination that explores via bivariate and multilevel regression analyses, punishments and factors that predict them. Specifically, this chapter empirically examines gender and racial/ethnic differences in in-prison punishments.

Chapter 4 empirically examines gender and racial/ethnic differences in the impact of in-prison punishment on future in-prison misconduct. Analyses focus on the impacts of those punishments, and in particular, the amount of variation in those impacts between Black, White, and Hispanic male and female inmates. The focus of this chapter is on an empirical examination that explores via multilevel regression and survival analyses the effect of types of in-prison punishments on the likelihood and timing to future misconduct, and whether those effects are influenced by inmates’ gender and race/ethnicity.

Chapter 5 summarizes the findings of the previous chapters, and provides a discussion for the dissertation’s implications for future research, theory, and policy.

## **CHAPTER TWO: THE NATURE OF MALE AND FEMALE FORMAL MISCONDUCT**

### **Introduction**

The escalation of the U.S. prison population has led to a resurgence of scholarly attention to “the” prison experience, inmate behavior, and the effects on prison social order (Bottoms, 1999; Gendreau, Goggin, & Law, 1997; Sparks, Bottoms, & Hay, 1996; Toch, Adams, & Grant, 1989). Researchers have built upon and extended classic studies of inmate behavior and prison cultures and environments to explore the factors that lead to inmate misconduct (Adams, 1992; Edgar & O’Donnell, 1998; Ellis, Grasmick, & Gilman, 1974; Goffman, 1961; Irwin & Cressey, 1962; Steiner, 2009). Taken together, this body of scholarship has advanced theories of inmate behavior to better understand the context of inmate adjustment to the prison setting and inform policies related to preventing misconduct.

Despite these advancements, prison research has generally been dominated by studies and theories centered on male inmates. And although there is indication of a growing female inmate population (Carson & Anderson, 2016), many scholars have yet to shift focus to the study of women in prison. There is evidence to suggest too that women have qualitatively different prison experiences, influenced by their lives prior to incarceration, features of the prison facility, and that prison staff manage female behavior differently than male behaviors (Chesney-Lind & Rodriguez, 1983; Craddock, 1996; McCorkel, 2006; Owen, 1988; Stohr, Jonson, & Lux, 2015). While only a small number of scholars have attempted to disentangle potential differences in the predictors of male and female misconduct, there is reason to anticipate that variations in pre-

prison experiences and features of the prison have salient theoretical effects on inmate behavior. This body of research suggests that differences in histories of victimization, types and reactions to strains, and social networks pre- and during imprisonment, may alter misconduct patterns of incarcerated women (Belknap, Holsinger, & Dunn, 1997; Blevins, Listwan, Cullen, & Jonson, 2010; Broidy & Agnew, 1997; Hart, 1995; Jiang & Winfree, 2006).

Feminist criminology also suggests theoretical warrant for anticipating gender variation in prison misconduct patterns, the strength of the predictors of misconduct, and the ways in which prison staff respond to misconduct (i.e., writing up inmates for formal infractions). Multiracial feminism posits that the intersection of gender, race/ethnicity, and class contextualize women's lives and behavior by determining societal power relations, and in turn explain patterns of punishment and criminalization (Baca Zinn & Thornton Dill, 1996; Burgess-Proctor, 2006; Fisher & Reese, 2011). There is also growing consensus among criminologists that gender, race/ethnicity, and class should be taken into consideration when examining offending trends (Bell, 2013; Simpson, 1991) and that these characteristics structure decision-making patterns in the justice system (Daly & Tonry, 1997; Spohn & Holleran, 2000; Steffensmeier, Ulmer, & Kramer, 1998). Gender and race/ethnicity may shape pre-prison experiences by affecting access to pro-social opportunities and life behind bars through prison officials' reactions to behavior (Burgess-Proctor, 2006) and so conditions determined by the intersection of gender and race/ethnicity may influence trends and predictors of in-prison misconduct.

Taken together, theory and empirical research suggest critical gender differences in criminal behavior, yet, we know little about whether gender differences emerge in prison misconduct—the equivalent of crime that occurs inside of prisons (Chesney-Lind, 1998), and no studies to my knowledge have examined the intersection of gender with race/ethnicity in this

context. As I describe further below, studies that do exist are limited in at least three ways. First, prior studies have typically relied upon small or non-random samples or utilized limited methodological techniques to estimate gender differences in misconduct patterns (Gover, Pérez, & Jennings, 2008). Second, prior empirical studies have utilized a limited conceptualization of misconduct by not differentiating between violent and nonviolent misconduct (Celinska & Sung, 2014; Gover et al., 2008; Jiang & Winfree, 2006). Third and not least, prior studies have examined differences in misconduct between males and females but have not gone further to assess whether differences exist within gender groups (Craddock, 1996; Gover et al., 2008; Harer & Langan, 2001; Jiang & Winfree, 2006; Steiner & Wooldredge, 2014).

Against this backdrop, the goal of this chapter is to address these research gaps and systematically assess gender and racial/ethnic differences in the nature of formal infractions. Towards this goal, I develop a series of theoretical arguments centered on gender and racial/ethnic variation in the types, seriousness, timing to, and predictors of inmate misconduct. This chapter utilizes official data from the Florida Department of Corrections (FDOC) Custody Assessment and Reclassification System (CARS) on a large, statewide inmate admissions cohort to examine the nature of Black, White, and Hispanic female and male misconduct. The analyses consist of two parts. First, I provide a systematic examination of all formal infractions engaged in by Black, White, and Hispanic male and female inmates, and assess whether there are differences in the types, seriousness, and timing of misconduct at the bivariate level. The analyses then shift to multilevel regression analyses that systematically examine gender and racial/ethnic variation in common predictors of types and seriousness of formal misconduct.

This chapter proceeds in the following order. I begin with a brief overview of the existing theories of inmate misconduct, followed by a discussion of potential gender and

race/ethnicity influences on prison behavior models. I then examine how multiracial feminism can inform prison-specific theory to account for the potential influence of the intersection of gender and race/ethnicity on prison adjustment patterns and official responses to inmate behavior. Next, I provide an overview of the data and sample, followed by a discussion of the analytic strategy, which uses descriptive statistics, life table analyses, multilevel logistic regression techniques, and negative binomial modeling to identify differences between gender and racial/ethnic groups in the trends and predictors of formal misconduct. This is followed by a discussion of the results and implications of the findings for future theory, research, and policy.

### **Theories of Inmate Misconduct**

The incarcerated population in the United States has quadrupled over the last three decades. Roughly 2.2 million individuals are housed in prisons today, including 1.9 million males and 203,000 females (Carson & Golinelli, 2014). The current prison population also contains more serious inmates than two decades ago. For example, while in 1991 about 30 percent of males and 17 percent of females were incarcerated for a violent offense, recent statistics indicate that 54 percent of male and 36 percent of female inmates are sentenced for a violent offense (Carson & Anderson, 2016; Carson & Golinelli, 2014). This expansive and more serious prison population has amplified correctional administrators' concerns for prison order and safety, as resources to maintain an orderly prison have not increased at the same rate as the incarcerated population (Lawrence, 2014).

Scholarly interest in understanding “the” prison experience has similarly expanded, and researchers have drawn on classic prison studies to inform their understanding of how inmates behave behind bars (Adams, 1992; Cao, Zhao, & van Dine, 1997; Crewe, 2011; Thomas, 1977). The importation perspective, based on classic works by Clemmer (1940) and others (Irwin &

Cressey, 1962; Schrag, 1954) examines the influence of factors inmates bring in to the prison. The deprivation hypothesis, put forth by Sykes (1958; see also, Sykes & Messinger, 1960), argues that inmates suffer from “pains of imprisonment” inherent to the prison context, that shape inmate behavior. These archetypal models for understanding inmate behavior and compliance with prison regulations have been extended and most contemporary research is informed by both frameworks (see e.g., Cao et al., 1997; Huebner, 2003; Jiang & Fisher-Giorlando, 2002; McCorkle, Miethe, & Drass, 1995).

### **The Importation Perspective**

Importation theory is a leading model of inmate behavior. The theory argues that personal characteristics and behavioral patterns that are in place prior to incarceration influence inmate adjustment to the prison environment and ability to comply with the prison’s rules (e.g., Irwin & Cressey, 1962). Specifically, typical interpretations of the theory argue that behavior in prison is determined by inmate demographic characteristics, socioeconomic background, and socialization (Irwin & Cressey, 1962). That is, the predictors of rule-breaking within correctional institutions mirror those that predict deviance outside of prison (Berg & DeLisi, 2006; Tasca et al., 2010).

In accordance with the importation model, studies have identified a range of inmate characteristics that influence behavior and adjustment to the prison setting. This research finds that younger inmates, inmates with lower educational achievement, inmates who are not married, non-religious inmates, those that hold antisocial attitudes, and inmates with an extensive criminal history are more likely to misbehave (Clear and Sumter, 2002; Gendreau et al., 1997; Goncalves, Goncalves, Martins, & Dirkzwager, 2014; Steiner, Butler, & Ellison, 2014). Inmates with mental illness and substance abuse problems have also been identified as struggling with

imprisonment (Toch & Adams, 1989; Flanagan, 1983; Zamble & Porporino, 1988). Scholarship indicates too that there is variation in the impact of imported characteristics on the seriousness of misconduct, such that their influence may be more salient when examining in-prison violence versus order violations (Walters & Crawford, 2013). Contemporary research has also expanded the scope of the perspective by examining imported cultural norms (Mears, Stewart, Siennick, & Simons, 2013; Walters, 2015) and testing whether prison culture can be “imported” back into the community (Walters, 2016).

### **The Deprivation Perspective**

By contrast, the deprivation thesis shifts focus to the salience of experiences inmates have during incarceration and argues that inmates suffer from “pains of imprisonment”, which include loss of liberty, security, and autonomy inherent to the prison experience (Sykes, 1958; Sykes & Messinger, 1960). The prison environment depersonalizes inmates and alienates them from society, which, in turn, may minimize the relevance of personal characteristics that might influence deviance (Thomas, 1977). The model argues that instead the “pains of imprisonment” increase the risk of maladjustment as inmates struggle to cope with the conditions of confinement (Blevins et al., 2010; Siennick, Mears, & Bales, 2013).

This idea has spurred on research that has identified contemporary prison features such as overcrowding and facility security level that influence misconduct (Bench & Allen, 2003). Although the evidence of the effect of some facility variables on misconduct is not yet conclusive (see e.g., Franklin, Franklin, & Pratt, 2006), studies find that prison overcrowding can lead to increased infraction rates, and that higher custody classifications increase the likelihood of misconduct (Gaes & McGuire, 1985; Worrall & Morris, 2011). Scholarship has examined the effect of prison architecture, visitation patterns, time served, the excess of rules, and other prison

strains and it largely lends support to the idea that features of the prison affect how inmates will cope with their incarceration (Cochran, 2012; Hochstetler & DeLisi, 2005; Huey & McNulty, 2005; Morris, Carriaga, Diamond, Piquero, & Piquero, 2012; Morris & Worrall, 2010; Siennick, et al., 2013).

Taken as a whole, scholarship indicates that considering inmate characteristics and features of the prison together provide a useful theoretical framework for understanding how inmates adapt to prison life and for how prison order and safety can be maintained. Notably, and as I will discuss below, the theoretical models used most commonly in the prison literature do not make any direct statements of how the intersection of gender and race/ethnicity can have a salient influence on prison misconduct. The models of inmate behavior discussed here were developed, and have been assessed almost exclusively, around the experiences of male inmates. Consequently, the question remains whether these theoretical models are applicable to the female inmate population (Kruttschnitt & Gartner, 2003; Pollock, 2002; Steiner & Wooldredge, 2014).

### **Gender and Racial/Ethnic Variation in Trends and Predictors of Misconduct**

Little scholarly attention has been given to potential variation in male and female misconduct trends and predictors. Existing studies observe only few differences in the correlates of inmate misconduct, which suggests that the sources of inmate behavior may not vary substantially between males and females (Craddock, 1996; Gover et al., 2008; Steiner & Wooldredge, 2014). This literature indicates that prior incarceration and criminal record characteristics (e.g., offense type, sentence length, etc.) tend to exert a greater influence on males than females (Gover et al., 2008). Age has been consistently identified as a risk factor of misconduct regardless of gender (Steiner & Wooldredge, 2014). Gover and colleagues (2008) find that time served exerts a stronger influence on misconduct for females, and Steiner and



Wooldredge (2014) identify a gendered effect in programming participation on misconduct, such that incarcerated men who spent more time in programming are less involved in order violations.

This existing body of literature, however, is hampered by small sample sizes, limited methodological techniques and conceptualizations of misconduct, and restrictions to binary examinations of males and females. Gover and colleagues (2008) for example, use a sample of just 57 female inmates and examine a dichotomous, global indicator of general misconduct. Other studies are similarly subject to small or non-random samples (Steiner & Wooldredge, 2014; Wright et al., 2007), and those that have substantial samples examine binary misconduct outcomes that are unable to differentiate between violent and order violations (Celinska & Sung, 2014; Jiang & Winfree, 2006). Notably, no study to date has disentangled variation in misconduct that may occur within gender by race/ethnicity. There may be theoretically relevant differences in the predictors of violence and order violations, and in the likelihood of prison staff to write inmates up for violations, which may be masked by these limitations.

Nonetheless, these studies indicate that prison theories of inmate behavior may be useful frameworks for understanding the potential impacts of the intersection of gender and race/ethnicity on inmate misconduct patterns and predictors. There is theoretical reason to anticipate that, despite making no particular hypotheses in regard to gender, prison-specific frameworks can explain some of the variation in male and female inmate behavior and prison staff reactions to misbehavior. Key variables that fall under these frameworks may also operate differently within gender across race/ethnicity. A failure to account for intersectional differences by treating inmates as a homogeneous population masks potentially important gender and racial/ethnic differences in the prison experience.

## **Importation Theory and Gender and Racial/Ethnic Variation in Formal Misconduct**

The importation perspective provides theoretical reason to anticipate gender and racial/ethnic differences in the patterns of inmate misconduct centered on mental health and strain. Female inmates may face greater struggles adjusting to imprisonment because they import a more severe history of abuse and neglect (Stohr et al., 2015). Abuse tends to be associated with a greater risk of mental illness, and incarcerated women are more likely to report struggling with their mental well-being than males (James & Glaze, 2006). Studies indicate too that inmates who are not able to follow prison rules are those that battle with their mental well-being and substance addiction (Adams, 1983; Houser et al., 2012; James & Glaze, 2006; Wright et al, 2007). In turn, one would expect that females may engage in misconduct in the early periods of imprisonment when unattended problems associated with mental health and substance abuse become most acute. Officers may also misinterpret symptoms of mental illness for misbehavior (Houser et al., 2012), especially during this early period when officers are unfamiliar with the new inmate. This may contribute to higher rates of misconduct among the female prison population in the beginning stages of imprisonment.

Relatedly, scholarly work finds that females tend to internalize problems due to mental illness, while males externalize such problems (Avison & McAlpine, 1992). Research also shows that gender differences in externalizing problems are less pronounced among Black than White individuals—White women are less likely to externalize problem behaviors in comparison to White men, than Black women are in comparison to Black men (Brown, Sellers, Brown, & Jackson, 1999; Rosenfeld, Phillips, & White, 2006). Consequently, behavioral patterns in prison may be varied by the intersection of gender and race/ethnicity such that Black females' misconduct patterns may resemble more closely those of males than those of White females.

Gender differences also emerge in the types and reactions to strain inmates may import.

Broidy and Agnew (1997) argue that the type of strains and emotional reactions differ for males and females, and that this may provide context for the higher rates of male crime. Male strain for example, is centered on the failure to achieve material success, while problems associated with social bonds can be a source of female strain (Broidy & Agnew, 1997). It is possible that the effect of loss of familial ties on misconduct may be more notable for females, while imported socioeconomic strains may exert a stronger influence on males. In short, gendered differences in strain may impact the strength of imported characteristics on the risk of inmate misconduct.

Racial/ethnic differences in types of strains have also been identified (Pérez, Jennings, & Gover, 2008; Piquero & Sealock, 2010; Spohn & Wood, 2014; see however, Peck, 2013).

Scholars find that Hispanic and Black individuals may be exposed to unique forms of strain such as discrimination that can in turn influence crime rates (Pérez et al., 2008; Simons, Chen, Stewart, & Brody, 2003). Imported strains that are race/ethnicity-specific may be more pronounced predictors of misconduct among Black and Hispanic males and females than among White inmates. At the same time, prison officers may hold implicit biases against Black and Hispanic inmates, which may make officers more likely to formally write up misbehaviors, thus increasing the overall involvement of Black and Hispanic inmates in official prison misconduct.

Recent work by Walter and Crawford (2013) and others suggests that importation variables are more salient predictors of violent misconduct than order violations (Cao et al., 1997). Female inmates are typically involved in misconduct that is less serious, and involves less violence (McClellan, 1994). In turn, it may be anticipated that the strength of imported variables may be overall less important for understanding female misbehavior, and that other theoretical mechanisms explain female patterns of misconduct.

## **Deprivation Theory and Gender and Racial/Ethnic Variation in Formal Misconduct**

There is also theoretical reason to anticipate differences in misconduct based on the deprivation framework. Women may have substantially different prison experiences and display unique patterns of misconduct because they may be more affected by the social isolation of imprisonment. Female inmates are more likely to be primary caretakers of minors (Glaze & Maruschak, 2008), and the separation from their children may cause stress and anxiety, which has a potential effect on coping with imprisonment and following prison rules (Blevins et al., 2010; Houck & Loper, 2002). Stressors are further amplified, because most states operate just a handful of female facilities, which increases the likelihood that mothers will be housed far away from their children, making visitation rare. Florida, for example, operates 15 female facilities, compared to over 130 male facilities (Florida Department of Corrections, 2015). And across the nation, women are on average housed 160 miles further from their families than men (Bastick & Townhead, 2008; Coughenour, 1995). Hemmens and Stohr (2014) suggest too that separation from families is potentially more arduous for Black inmates, because the maintenance of social ties is more difficult than for White inmates. This is because Black inmates typically come from urban cities and are incarcerated in rural counties, which operate to disproportionately increase the distance and socioeconomic barriers that visitors of Black inmates face (e.g., Cochran et al., 2016). By extension, these barriers make it vastly more challenging for families to visit (Hemmens & Stohr, 2014; Woldoff & Washington, 2008).

Taken together, these differences may have important implications for the timing of misconduct. Females may be more likely to misbehave in the initial stages of incarceration due to greater separation anxiety. This early period of incarceration may be especially arduous for Black females, if they indeed face undue strain stemming from worsened isolation from their children and families (e.g., Hemmens & Stohr, 2014; Poehlmann, Dallaire, Loper, & Shear,

2010). It may also mean that the impact of certain deprivation variables, such as sentence length, will be stronger among the female population, as the shock of anticipating lengthier incarceration terms may be amplified by the stressors of being away from minor children.

Gender and racial/ethnic differences in patterns of misconduct may also emerge due to social ties inmates form within prisons. Social support networks inside prisons, typically measured as participation in inmate-organized groups (e.g., faith-based programming) and vocational training groups, decrease the likelihood of prison rule violations (Camp, Daggett, Kwon, & Klein-Saffran, 2008; Jiang, Fisher-Giorlando, & Mo, 2005). Qualitative inmate accounts suggest that this may be so, because programming participation helps to increase inmates' sense of self-worth and aids in the formation of prosocial ties (Richmond, 2014). Scholars also suggest that social support levels are higher among female inmates than male inmates (Hart, 1995), and that males prefer to keep to themselves while incarcerated females typically form family-like groups to aid in coping with imprisonment (Evans & Wallace, 2008; George, 2010). Some scholarly work also finds that Black and Hispanic inmates are less likely to participate in prison programs (Camp et al., 2008).

If females are more inclined to form social bonds during incarceration, prior research suggests that their patterns of misconduct may differ from their male counterparts, and that coping with imprisonment may be less difficult (Clone & DeHart, 2014; Giallombardo, 1966b; Jiang & Fisher-Giorlando, 2005; Jiang & Winfree, 2006; Kaplan, 1989; Ward & Kassebaum, 1965). One may anticipate that females display overall less misconduct, and that the types of misconduct females do engage in are less serious and less likely to involve violence toward their fellow inmates. However, because research suggests that Black and Hispanic inmates are less likely to participate in in-prison programming, and so in turn may be less likely to form pro-

social bonds in prison, Black and Hispanic men and women may be at an increased risk of engaging in misconduct when compared to their White counterparts.

### **Multiracial Feminism**

A separate body of research aims to move away from prison-specific theory developed almost exclusively around the experiences of White males, and apply a multiracial feminist perspective to understanding inmate behavior (Bosworth, 2003; Chesney-Lind, 2006; Heide, 1974; Holsinger, 2014; Daly & Chesney-Lind, 1988; Simpson, 1989). This framework grew largely out of discontent with the state of feminist theory in the 1960s, which placed emphasis on binary differences between males and females and overlooked more nuanced disparities (Baca Zinn & Thornton Dill, 1996). Multiracial feminism argues that men and women exist in multiple power hierarchies based on their gender, race/ethnicity, and class status. These characteristics interact and structure the opportunities available to individuals, how people behave, and societal reactions to behaviors. This framework is useful because it calls for simultaneous consideration of gender- and racial/ethnic-based variation in the prison experience, and scholars suggest that multiracial feminism provides the most salient analytic framework to examining the experience of female inmates (Baca Zinn & Thornton Dill, 1996; Burgess-Proctor, 2006).

### **Multiracial Feminism and the Prison Experience**

Intersectionality has provided a useful lens for criminologists to examine trends in offending patterns and formal system responses (Daly & Tonry, 1997; Steffensmeier et al., 1998), pathways to crime (Brookman, Mullins, Bennett, & Wright, 2007; Erez & Berko, 2010), and may be similarly useful for understanding behavior and responses within prisons. Yet, an intersectional approach has not been examined in the context of inmate behavior. Prison

research until recently has treated inmates as a homogeneous population, one that is similar not only in the way they behave, but in the way corrections officers interact with them. Multiracial feminism suggests that imprisoned women have qualitatively different prison experiences and that the race/ethnicity of inmates shapes their incarceration. Opportunities available to males and females, and to Black, White, and Hispanic inmates may differ. Corrections officers' perceptions of inmate behavior may be based on inmates' gender and racial/ethnic background. Taken as a whole, multiracial feminism provides impetus for an intersectional approach in the study of inmate behavior.

### **This Chapter**

The goal of this chapter is to examine trends in inmate misconduct, the predictors of misconduct, and specifically to focus on the intersection of gender and race/ethnicity in this context. Towards this goal, this chapter asks two specific research questions.

*Research Question 1:* Do Black, White, and Hispanic males and females differ in their patterns of formal misconduct?

This analysis will focus on differences in the prevalence and timing to misconduct generally, and violent and nonviolent infractions. Insights from prison-specific theory and multiracial feminism suggest that there will be distinct patterns of misconduct. Males may be written up for violent misconduct at higher rates and females may have higher order violation rates. The acute isolation felt by female inmates in the beginning of their sentence may also manifest itself in higher misconduct rates earlier in their incarceration. The existing body of literature suggests too that prison staff will treat Black and Hispanic females more similarly to males than White females, thus higher rates of misconduct may be anticipated for these inmate subgroups.

*Research Question 2:* Do common predictors of misconduct based on importation and deprivation models of inmate behavior work in parallel ways for Black, White, and Hispanic male and female inmates?

The analyses will center on the strength of commonly examined importation and deprivation variables on misconduct generally, and separately violence and order violations. Existing scholarship points to both common and unique risk factors between gender and racial/ethnic groups. Imported characteristics such as familial ties may be stronger predictors of female misconduct, while economically-based variables may be more important for males. At the same time, the literature suggests that deprivations may be stronger predictors of female misconduct, especially Black female misconduct. Overall, however, importation variables may be more salient predictors of male than female misconduct patterns, due to the more serious and violent nature of male in-prison misconduct (Harer & Langan, 2001).

## **Data and Methods**

The analyses for this chapter use data from the Florida Department of Corrections (FDOC) Custody Assessment and Reclassification System (CARS) for a large cohort of inmates incarcerated between July 1, 2005 and December 30, 2011. The data provide official misconduct (disciplinary infraction) information as well as demographic characteristics, prior record information, and inmates' primary offenses. The total sample consists of 237,792 inmates nested within 172 facilities. To account for the nested nature of the data, multilevel modeling is used across the logistic analyses, and robust standard errors in the count analyses. In the multilevel models, facilities are the level 2 unit of analysis and inmates are the level 1 unit of analysis. To



prevent problems associated with right-hand censoring, the count analyses are limited to a subsample of inmates who have served their entire prison sentence ( $n = 169,627$ ).

*Dependent variables.* The focus of this chapter is on gender and racial/ethnic differences in formal inmate misconduct. Seven dependent variables are explored. The life table analyses employ a measure of the amount of days until the first disciplinary infraction. Three indicators of disciplinary infractions are the dependent variables for the logistic regression. They identify inmates who have incurred at least one disciplinary infraction of any type (0 = none, 1 = at least one DI), at least one violent disciplinary infraction (0 = none or nonviolent DI, 1 = at least one violent DI), and at least one nonviolent disciplinary infraction (0 = none or violent DI, 1 = at least one nonviolent DI). To examine seriousness of misconduct, the count model analyses include three dependent variables: a count of disciplinary infractions of any type, of violent misconduct, and of nonviolent misconduct inmates incurred over the course of their sentence.

*Independent variables.* The chapter includes an indicator of gender (0 = female, 1 = male), and three variables measure race and ethnicity, Black (reference), White, and Hispanic. Florida provides an ideal context for this chapter's focus, as there are enough males and females across all three categories of race/ethnicity to be considered in the analyses. The data also provide information on variables that are important correlates of misconduct (for an overview see e.g., Gendreau et al., 1997; Goncalves et al., 2014; Steiner et al., 2014). Sociodemographic information includes whether an inmate has at least a high school education (0 = no, 1 = yes), whether an inmate is married (0 = no, 1 = yes), and whether an inmate is religious (0 = no, 1 = yes). Primary offense information includes five dichotomous indicators of a violent, property (reference), drug, sex, and other primary offense. An indicator categorizes inmates who the court identified as having committed their crime to support a drug habit (0 = no, 1 = yes).

Sentence length is measured in months, and prior prison commitment is a count of the number of times an inmate has previously been committed to prison.

The data also include information on whether an inmate was designated by the court as a habitual felony offender (0 = no, 1 = yes) or a habitual violent felony offender (0 = no, 1 = yes) (see Florida Statute 775.084). A habitual offender designation is given to individuals previously convicted of two prior non-drug related felonies in Florida, and whose current felony was committed while under supervision of the criminal justice system, or within 5 years of the previous felony. A habitual violent offender status is given to individuals who meet these criteria, but whose prior and current offenses are violent. Both designations can result in an extended prison sentence. The data include inmates' sentencing guidelines score. In 1983, Florida enacted sentencing guidelines, which structure sentencing decisions for non-capital felony offenders. Current guidelines include a point system for ranking felonies, which range from 1 (e.g., fleeing or attempting to elude law enforcement, supply unauthorized driver's license, offense against intellectual property, etc.) to 10 (e.g., sale of contraband prescription drug resulting in death, aggravated manslaughter of a child, home invasion robbery with firearm, etc.). The sentencing guidelines variable used in the analyses includes the 1 to 10 measure and provides an indicator of the seriousness of inmates' primary offense.

*Analyses.* I conduct a series of bivariate and multivariate analyses that examine potential gender and racial/ethnic variation in the patterns and predictors of in-prison misconduct. The analyses proceed in the following stages. First, I provide descriptive statistics for the full sample, and separately males and females. Next, I provide descriptive statistics that are specific to disciplinary infractions for the full sample, males, females, and for Black, White, and Hispanic males and females. Second, I conduct life table analyses, which examine the timing to the first

disciplinary infraction, the first violent disciplinary infraction, and the first nonviolent disciplinary infraction for Black, White, and Hispanic males and females. This approach is nonparametric and so makes no distributional assumption about the underlying misconduct process (Namboodiri & Suchindran, 1987). To determine whether there are gender and racial/ethnic differences in the timing of misconduct, the survival distributions for Black, White, and Hispanic males and females are compared to one another using the log rank chi square statistic (Namboodiri & Suchindran, 1987, pp. 79).

Third, I conduct multilevel logistic regression analyses that examine the main and interactive effects of gender and race/ethnicity on the likelihood of disciplinary infractions, violent infractions, and nonviolent infractions. Multilevel modeling is used to account for the statistical problems—namely, the underestimation of standard errors—inherent to the clustering of individuals within places (Kreft & de Leeuw, 1998). The inmates, which serve as the level 1 unit of analyses, are clustered in 172 facilities, which constitute the level 2 unit of analyses. To examine whether the predictors of misconduct vary between inmate subgroups, I run split-sample analyses for the six groups and calculate effect sizes for each predictor based on the values of the odds ratio (Borenstein, Hedges, Higgins, & Rothstein, 2009). The effect sizes are ranked and the top five variables are presented for each inmate subgroup and across the three disciplinary infraction types. Ancillary analyses (not shown) were conducted in which three-way interactions between gender, race/ethnicity, and each one of the predictors were examined to provides a robustness check for any identified differences in the split-sample analyses.

Next, I examine a series of count-based regression models to examine the main and interactive effects of gender and race/ethnicity on the number of disciplinary infractions, violent infractions, and nonviolent infractions. The same procedure as that utilized in the multilevel

models is used to examine the intersectional effect of gender, race/ethnicity, and commonly utilized predictors of misconduct. To account for the clustered nature of the data, the analyses are clustered on the facility indicators and robust standard errors are estimated. To rank the predictor variables in the count models, I calculate the percentage difference between the predicted counts at low (mean minus 1 standard deviation) and high (mean plus 1 standard deviation) values of each covariate. The top five variables based on the differences in predicted counts in each model will be displayed. Ancillary analyses (not shown) were conducted using interactions between gender, race/ethnicity, and each covariate to provide a robustness check.

## **Findings**

Descriptive statistics for the sample are included in table 2.1. Across the 237,792 inmates, 89 percent are male and 11 percent are female. The average age for males is 33 and 34 for females. 46 percent of the sample is Black, 44 percent is White, and 10 percent is Hispanic. The majority of male inmates are Black, and the majority of female inmates are White. About a third of male inmates and nearly 40 percent of females have at least a high school education. 8 percent of the male sample is married and about 10 percent of the female sample is married. 84 percent of males and 93 percent of females are religious. The most common primary offense type for males is a property offense and a drug offense for females. Among males, 8 percent are habitual offenders and 1 percent are violent habitual offenders, 2 percent and less than 1 percent of female inmates received these designations. 18 percent of males and over a third of females committed a crime to support a drug/alcohol habit. The average sentencing guidelines score is 5 (e.g., retail theft of \$300 or more, selling or manufacturing cocaine, etc.), and the average sentence length is 58 months for males and 34 months for females. Males have been committed to prison one prior time and the average prior prison commitment for females is less than one.

**Table 2.1** Descriptive Statistics — Demographic Characteristics

	Full Sample (n = 237,792)				Male (n = 210,982)				Female (n = 26,810)			
	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max
Male	0.89	0.32	0	1	-	-	-	-	-	-	-	-
Age	33.11	10.88	14	84	32.94	11.00	14	84	34.44	9.78	16	71
Black	0.46	0.50	0	1	0.48	0.50	0	1	0.34	0.47	0	1
White	0.44	0.50	0	1	0.41	0.49	0	1	0.61	0.49	0	1
Hispanic	0.10	0.30	0	1	0.11	0.31	0	1	0.05	0.21	0	1
High School Educated	0.32	0.47	0	1	0.31	0.46	0	1	0.39	0.49	0	1
Married	0.08	0.28	0	1	0.08	0.27	0	1	0.10	0.31	0	1
Religious	0.85	0.36	0	1	0.84	0.37	0	1	0.93	0.26	0	1
<i>Primary Offense Type:</i>												
Violent	0.24	0.42	0	1	0.24	0.43	0	1	0.19	0.39	0	1
Property	0.30	0.46	0	1	0.29	0.46	0	1	0.35	0.48	0	1
Drug	0.28	0.45	0	1	0.27	0.44	0	1	0.36	0.48	0	1
Sex	0.04	0.20	0	1	0.05	0.21	0	1	0.01	0.07	0	1
Other	0.14	0.35	0	1	0.15	0.35	0	1	0.10	0.30	0	1
Habitual Offender	0.08	0.27	0	1	0.08	0.28	0	1	0.02	0.15	0	1
Violent Habitual Offender	0.01	0.09	0	1	0.01	0.10	0	1	0.00	0.04	0	1
Crime to Support Habit	0.20	0.40	0	1	0.18	0.38	0	1	0.35	0.48	0	1
Sentencing Guidelines Score	5.19	2.28	1	10	5.28	2.27	1	10	4.48	2.25	1	10
Sentence Length (Months)	55.15	88.34	12	600	57.81	91.64	12	600	34.17	51.39	12	600
Time Served (Months)	16.52	14.42	0.03	77.84	16.96	14.70	0.03	77.84	13.06	11.45	0.03	77.44
Prior Prison Commitments	0.96	1.56	0	18	1.01	1.60	0	18	0.55	1.13	0	15

These demographic characteristics largely mirror national estimates (Carson & Anderson, 2016). Thus, although the data come from a single state, the features of inmates incarcerated in Florida closely mirror national averages.

### Bivariate Gender and Racial/Ethnic Differences in Institutional Misconduct

Turning next to table 2.2 through 2.4, disciplinary infraction specific descriptive statistics are provided for the full sample, males, and females in panel A, for Black, White, and Hispanic males in panel B, and for Black, White, and Hispanic females in panel C. Disciplinary infractions are abundant in this population, and mirror national estimates (James & Glaze, 2006). About 41 percent, or 97,494 inmates incarcerated in Florida’s prisons incur at least one infraction over the course of their imprisonment.

**Table 2.2** Descriptive Statistics — Disciplinary Infractions

Panel A.												
	Full Sample (n = 237,792)				Males (n = 210,982)				Females (n = 26,810)			
	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max
Any DI	0.41	0.49	0	1	0.42	0.49	0	1	0.32	0.47	0	1
<i>DIs by type:</i>												
Violent (0/1)	0.08	0.27	0	1	0.08	0.27	0	1	0.07	0.25	0	1
Sex (0/1)	0.02	0.15	0	1	0.02	0.15	0	1	0.02	0.14	0	1
Property (0/1)	0.03	0.17	0	1	0.03	0.18	0	1	0.01	0.12	0	1
Disorderly (0/1)	0.10	0.29	0	1	0.10	0.30	0	1	0.08	0.27	0	1
Defiance (0/1)	0.27	0.44	0	1	0.28	0.45	0	1	0.19	0.39	0	1
Reg. Vio. (0/1)	0.10	0.31	0	1	0.10	0.30	0	1	0.13	0.34	0	1
Contraband (0/1)	0.08	0.26	0	1	0.08	0.27	0	1	0.06	0.24	0	1
Drug (0/1)	0.02	0.15	0	1	0.02	0.15	0	1	0.01	0.07	0	1
<i>Count of DIs:</i>												
Total	1.04	1.85	0	7	1.08	1.88	0	7	0.74	1.54	0	7
Violent	0.15	0.53	0	4	0.15	0.54	0	4	0.10	0.43	0	4
Nonviolent	1.02	1.84	0	7	1.06	1.88	0	7	0.70	1.52	0	7
<i>Timing to DI:</i>												
Days until 1 <sup>st</sup>	189	192	0	1939	191	194	0	1939	170	176	0	1717
Days until 2 <sup>nd</sup>	118	150	0	1968	119	152	0	1968	102	131	0	1380
Days until 3 <sup>rd</sup>	98	132	0	1634	100	133	0	1634	82	114	0	1237

**Table 2.2** Descriptive Statistics — Disciplinary Infractions (Continued)

Panel B.												
	Black Males (n = 100,965)				White Males (n = 87,210)				Hispanic Males (n = 22,368)			
	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max
Any DI	0.46	0.50	0	1	0.37	0.48	0	1	0.40	0.49	0	1
<i>DIs by type:</i>												
Violent (0/1)	0.10	0.29	0	1	0.06	0.24	0	1	0.08	0.27	0	1
Sex (0/1)	0.04	0.19	0	1	0.01	0.08	0	1	0.01	0.11	0	1
Property (0/1)	0.03	0.18	0	1	0.04	0.18	0	1	0.04	0.18	0	1
Disorderly (0/1)	0.12	0.32	0	1	0.07	0.26	0	1	0.08	0.27	0	1
Defiance (0/1)	0.31	0.46	0	1	0.23	0.42	0	1	0.25	0.43	0	1
Reg. Vio. (0/1)	0.10	0.31	0	1	0.10	0.30	0	1	0.09	0.29	0	1
Contraband (0/1)	0.06	0.24	0	1	0.10	0.29	0	1	0.11	0.31	0	1
Drug (0/1)	0.02	0.14	0	1	0.03	0.17	0	1	0.03	0.18	0	1
<i>Count of DIs:</i>												
Total	1.30	2.07	0	7	0.85	1.63	0	7	1.02	1.81	0	7
Violent	0.21	0.63	0	7	0.10	0.42	0	4	0.14	0.49	0	4
Nonviolent	1.28	2.07	0	7	0.84	1.64	0	7	0.97	1.79	0	7
<i>Timing to DI:</i>												
Days until 1 <sup>st</sup>	184	189	0	1939	198	199	0	1918	198	199	0	1638
Days until 2 <sup>nd</sup>	116	147	0	1573	124	159	0	1968	123	156	0	1931
Days until 3 <sup>rd</sup>	97	130	0	1634	102	137	0	1194	105	135	0	1431

Panel C.												
	Black Females (n = 8,996)				White Females (n = 16,449)				Hispanic Females (n = 1,296)			
	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max
Any DI	0.37	0.48	0	1	0.29	0.45	0	1	0.37	0.48	0	1
<i>DIs by type:</i>												
Violent (0/1)	0.10	0.30	0	1	0.04	0.20	0	1	0.07	0.26	0	1
Sex (0/1)	0.02	0.15	0	1	0.02	0.13	0	1	0.03	0.17	0	1
Property (0/1)	0.02	0.12	0	1	0.01	0.11	0	1	0.02	0.13	0	1
Disorderly (0/1)	0.11	0.31	0	1	0.05	0.22	0	1	0.07	0.26	0	1
Defiance (0/1)	0.25	0.43	0	1	0.15	0.36	0	1	0.21	0.41	0	1
Reg. Vio. (0/1)	0.12	0.32	0	1	0.14	0.35	0	1	0.14	0.35	0	1
Contraband (0/1)	0.06	0.23	0	1	0.07	0.25	0	1	0.09	0.28	0	1
Drug (0/1)	0.00	0.06	0	1	0.01	0.08	0	1	0.00	0.07	0	1
<i>Count of DIs:</i>												
Total	0.95	1.80	0	7	0.60	1.34	0	7	0.90	1.74	0	7
Violent	0.18	0.58	0	4	0.06	0.31	0	4	0.12	0.46	0	4
Nonviolent	0.88	1.75	0	7	0.59	1.33	0	7	0.88	1.74	0	7
<i>Timing to DI:</i>												
Days until 1 <sup>st</sup>	169	180	0	1717	170	173	0	1482	173	179	3	1064
Days until 2 <sup>nd</sup>	98	126	0	1153	107	137	0	1380	89	111	0	692
Days until 3 <sup>rd</sup>	83	115	0	1237	82	114	0	873	83	109	0	794

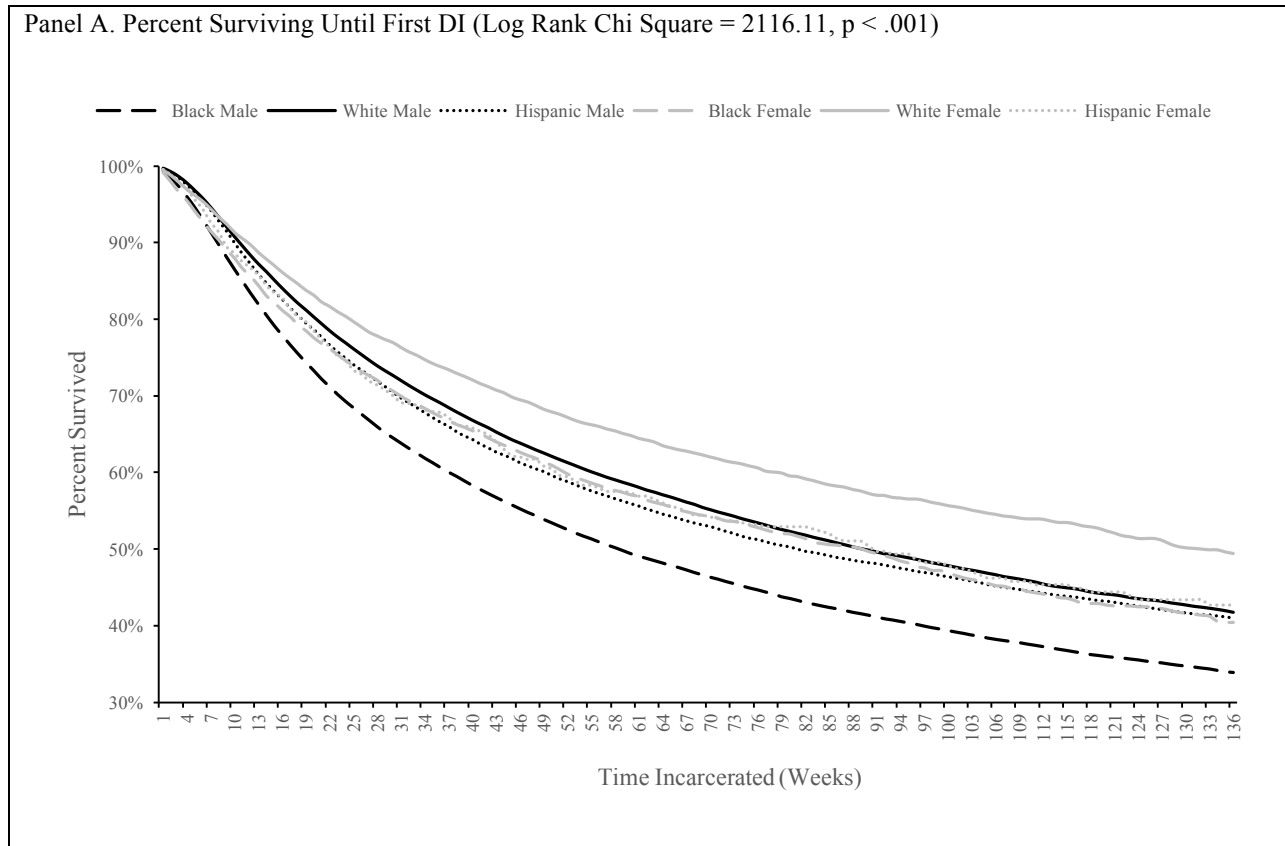
At the bivariate level, males are more likely to receive a formal infraction than females—about 42 percent of males receive at least one infraction compared to about 32 percent of females. Black males (46 percent) and Black and Hispanic females (37 percent) have the highest percentage of disciplinary infractions within their gender groups. Findings show that minor infractions are most common, while serious and violent infractions occur with less frequency. Defiance infractions, which include violations such as disrespect to officials, disobeying orders, and lying to staff, are in fact the most common disciplinary infractions for all inmate subgroups. Violent infractions, which include fighting, battery of another inmate, and assault of an officer for example, occur much less frequently. Only about 8 percent of infractions are violent. 10 percent of Black males, 6 percent of White males, and 8 percent of Hispanic males receive at least one violent infraction, in comparison to 10 percent of Black females, 4 percent of White females, and 7 percent of Hispanic females. The bivariate findings support prior theory, which suggest that females are less likely to engage in violence, and that Black females are more likely to behave (or be treated by prison staff) similarly to males than White females.

Findings also show that males are written up for more prison rule violations than females, and that Black males receive more infractions than any other inmate subgroup. While the average inmate violates about one nonviolent prison rule during their incarceration, the count of violent rule violations incurred by inmates is much lower. An infraction usually occurs within the first six months of incarceration. Subsequent infractions occur within shorter and shorter time spans after the first incident. For example, a second infraction typically occurs within 4 months of the first and a third occurs within 3 months of the second. This trend occurs among males and females of all racial/ethnic backgrounds, but is especially pronounced among females. A third disciplinary infraction for males typically occurs within 100 days of the second, and

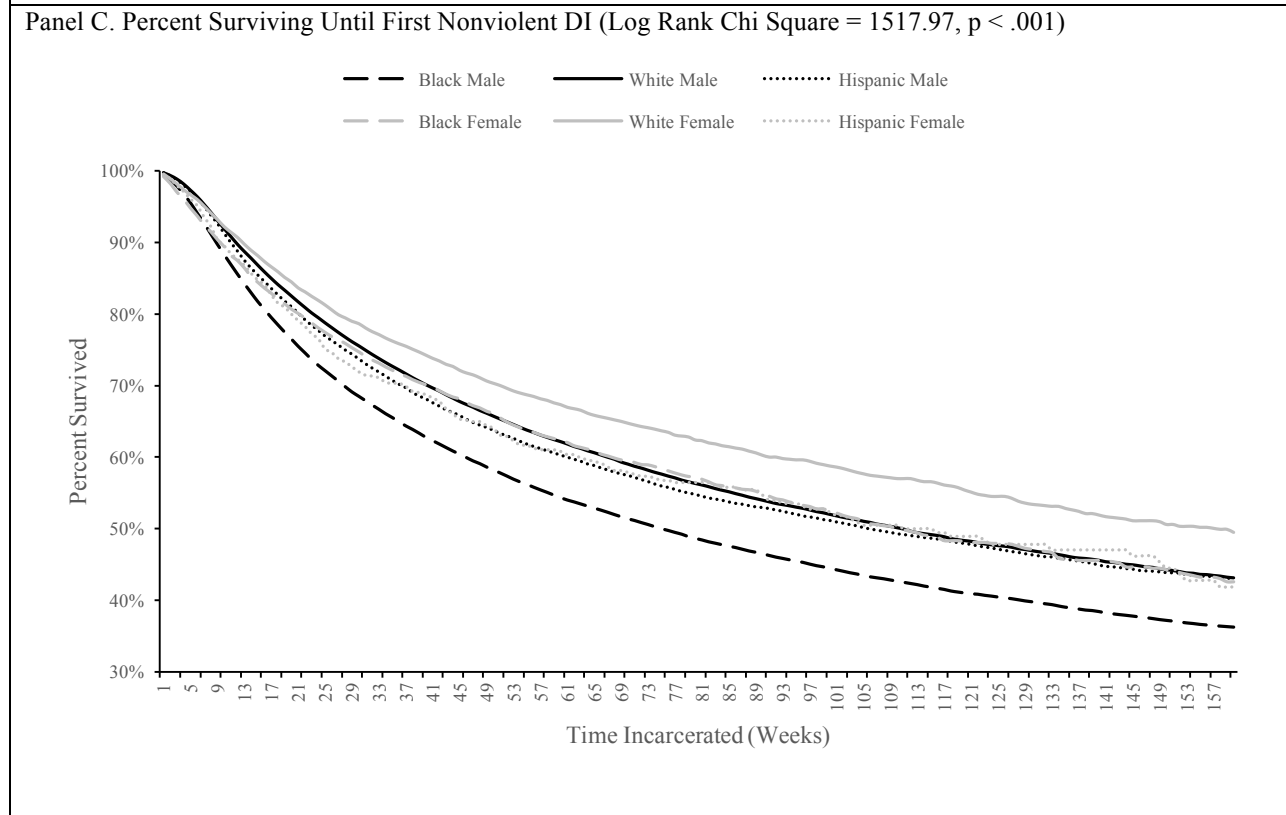
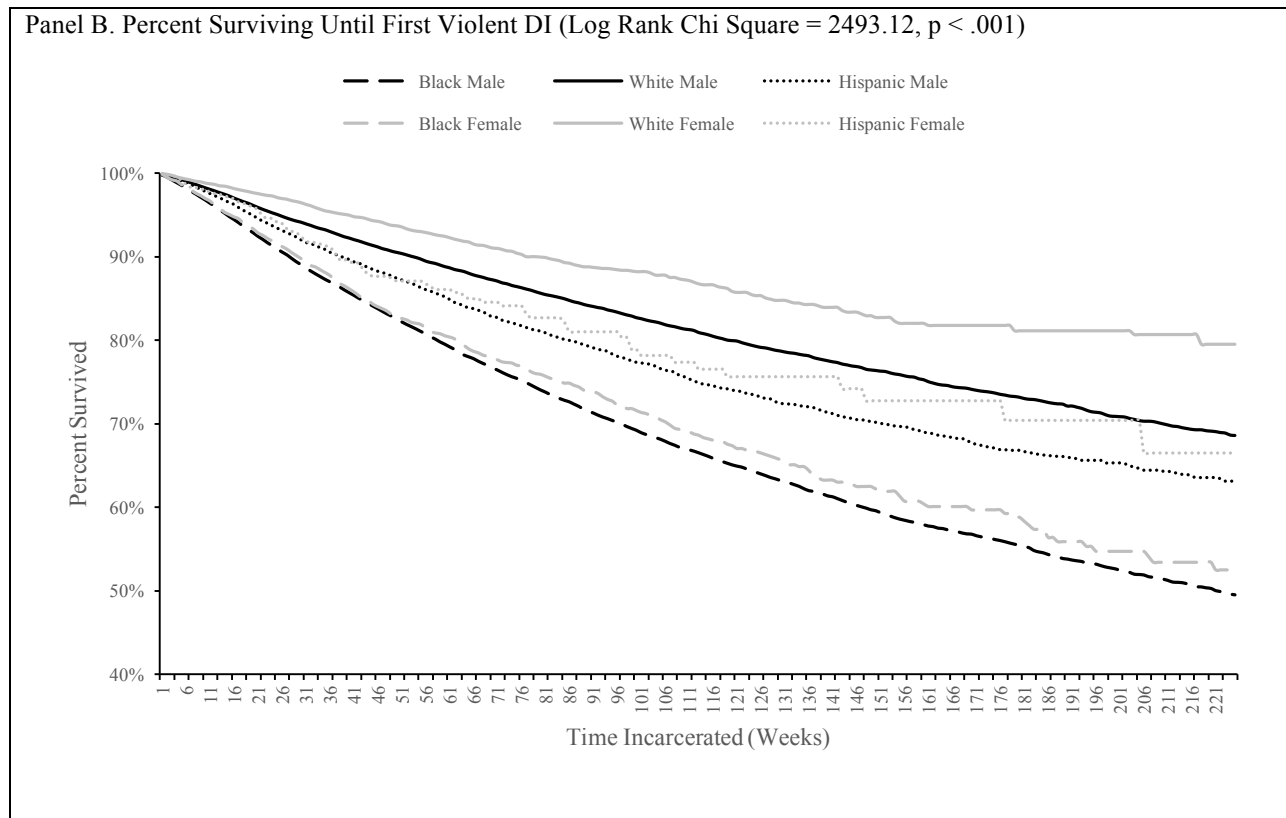


within 82 days for females. This finding is also in line with prior research, that suggests that females may have more trouble adjusting to early periods of incarceration, but that they are overall less likely to offend over the course of their imprisonment.

Next, the analyses turn to a series of life table models to further examine the timing of misconduct. Panel A in figure 2.1 depicts the percent of inmates surviving until a disciplinary infraction of any type, and panel B and panel C focus on survival rates until violent and nonviolent infractions respectively.



**Figure 2.1** Life Tables, Weeks until Disciplinary Infraction



**Figure 2.1** Life Tables, Weeks until Disciplinary Infraction (Continued)

The X-axis in each panel represents time incarcerated, and the Y-axis represents the cumulative proportion of those at risk of incurring a disciplinary infraction for those who have not incurred a disciplinary infraction or have not been released from prison. Each panel presents survival curves to examine the amount of time until the first disciplinary infraction of Black, White, and Hispanic males and females. The statistical difference in the survival curves for the six inmate subgroups is assessed with a log-rank test of survival curve equality (Namboodiri & Suchindran, 1987). A significant test result indicates significant differences in the timing to misconduct by the six inmate subgroups.

Visual examination of the panels shows that the curves differ and log-rank tests confirm that these differences are significant. White males and females tend to offend later during their incarceration than all other inmate subgroups. For example, in panel A, after one year of incarceration, 61 percent of White males and 67 percent of White females have not received a disciplinary infraction, compared to 53 percent of Black males, 59 percent of Hispanic males, 59 percent of Hispanic females, and 60 percent of Black females. Although this trend persists when examining violent infractions in panel B, here, the survival curve for Black females resembles that of Black males more closely. After one year of incarceration 93 percent of White females have not received a violent infraction, in comparison to 82 percent of Black males and Black females. And last, panel C shows that after one year of incarceration, 57 percent of Black males have not incurred a nonviolent infraction, while 70 percent of White females have not incurred a nonviolent infraction. Overall, males, especially Black males, are written up for any disciplinary infraction, violent infractions, and nonviolent infractions sooner in their sentence, especially when compared to White females.

At the bivariate level, and in response to the first research question, it appears that there are differences in the trends of misconduct committed by Black, White, and Hispanic males and females. Females are less likely to be written up for infractions, and tend to accrue less misconduct than males. Black males and females, at the bivariate level, exhibit more misconduct and serious violent infractions, and tend to incur infractions sooner than other inmate groups. White females are identified as being at risk of misconduct later than other inmate subgroups. Because the infractions examined here are official reports, it is possible that they reflect differences in behavior, or differences in prison staff reactions to behavior.

### **Gender and Racial/Ethnic Differences in the Likelihood of Misconduct**

To further explore these differences, the analyses turn next to a series of multilevel logistic regression analyses that examine the main effects of gender and race/ethnicity on the probability of receiving a disciplinary infraction (model 1), a violent infraction (model 2), and a nonviolent infraction (model 3) in table 2.3.

**Table 2.3** Mixed Effects Logistic Regression Models of Disciplinary Infraction Types on Measures of Inmate Characteristics (n = 237,792 inmates, 172 facilities)

	Model 1 Any DI			Model 2 Violent DI			Model 3 Nonviolent DI		
	b	S.E.	O.R.	b	S.E.	O.R.	b	S.E.	O.R.
Male	0.555*	0.28	1.742	0.419	0.23	1.520	0.514*	0.24	1.671
White	-0.222***	0.01	0.801	-0.326***	0.02	0.722	-0.152***	0.01	0.859
Hispanic	-0.128***	0.02	0.880	-0.045	0.04	0.956	-0.111***	0.02	0.895
Age	-0.046***	0.00	0.955	-0.031***	0.00	0.969	-0.041***	0.00	0.960
High School	-0.101***	0.01	0.903	-0.101***	0.02	0.904	-0.082***	0.01	0.921
Married	-0.168***	0.02	0.845	-0.139**	0.05	0.870	-0.146***	0.02	0.864
Religious	-0.069***	0.01	0.934	-0.004	0.03	0.996	-0.066***	0.01	0.936
Prim. Off. Violent	-0.009	0.01	0.991	0.181***	0.03	1.199	-0.058***	0.01	0.944
Prim. Off. Drug	-0.222***	0.01	0.801	-0.139***	0.03	0.870	-0.198***	0.01	0.820
Prim. Off. Sex	0.089**	0.03	1.093	0.065	0.06	1.067	0.092***	0.03	1.096
Prim. Off. Other	-0.017	0.02	0.983	0.055	0.04	1.057	-0.031	0.02	0.970
Habitual Offender	0.275***	0.02	1.317	0.196***	0.04	1.216	0.243***	0.02	1.275
Violent Habitual	0.333***	0.05	1.395	0.242*	0.10	1.274	0.269***	0.05	1.308
Crime to Support Habit	0.080***	0.01	1.083	-0.002	0.03	0.998	0.080***	0.01	1.084
SGL Score	0.085***	0.00	1.089	0.046***	0.01	1.047	0.076***	0.00	1.079
Sentence Length	0.003***	0.00	1.003	0.001***	0.00	1.001	0.002***	0.00	1.002
Prior Prison	0.084***	0.00	1.088	0.101***	0.01	1.106	0.070***	0.00	1.073
Constant	0.851**	0.29		-3.081***	0.23		0.353	0.24	
<i>Random Effect</i>									
Facility Variance	3.656	0.44		0.707	0.10		1.667	0.20	
Log Likelihood	-128348.0			-38914.7			-129648.2		

Notes: Black and primary offense — property serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

Across all three models, significant main effects emerge for race, such that White inmates are significantly less likely to incur a disciplinary infraction (b = -0.222; O.R. = 0.801), a violent disciplinary infraction (b = -0.326; O.R. = 0.722), and a nonviolent disciplinary infraction (b = -0.152; O.R. = 0.859) than Black inmates. Males are significantly more likely to incur an infraction (b = 0.555; O.R. = 1.742) and a nonviolent infraction (b = 0.514; O.R. = 1.671) than females. Several other covariates are significant and in the predicted direction. Younger inmates (b = -0.046, -0.031, -0.041; O.R. = 0.955, 0.969, 0.960), habitual offenders (b = 0.275, 0.196, 0.243; O.R. = 1.317, 1.216, 1.275), inmates with longer sentences (b = 0.003, 0.001, 0.002; O.R. = 1.003, 1.001, 1.002), and inmates who have been previously incarcerated (b = 0.084, 0.101,

0.070; O.R. = 1.088, 1.106, 1.073) are more likely to incur an infraction, a violent infraction, and a nonviolent infraction.

Table 2.4 provides models with two-way interaction terms. Results of table 2.4 reveal a significant interaction between gender and race/ethnicity in the general misconduct (b = 0.082; O.R. = 1.086) and violent misconduct models (b = 0.580, 0.396; O.R. = 1.786, 1.486), which supports the notion that there is racial/ethnic variation within gender in the probability of misconduct and violence.

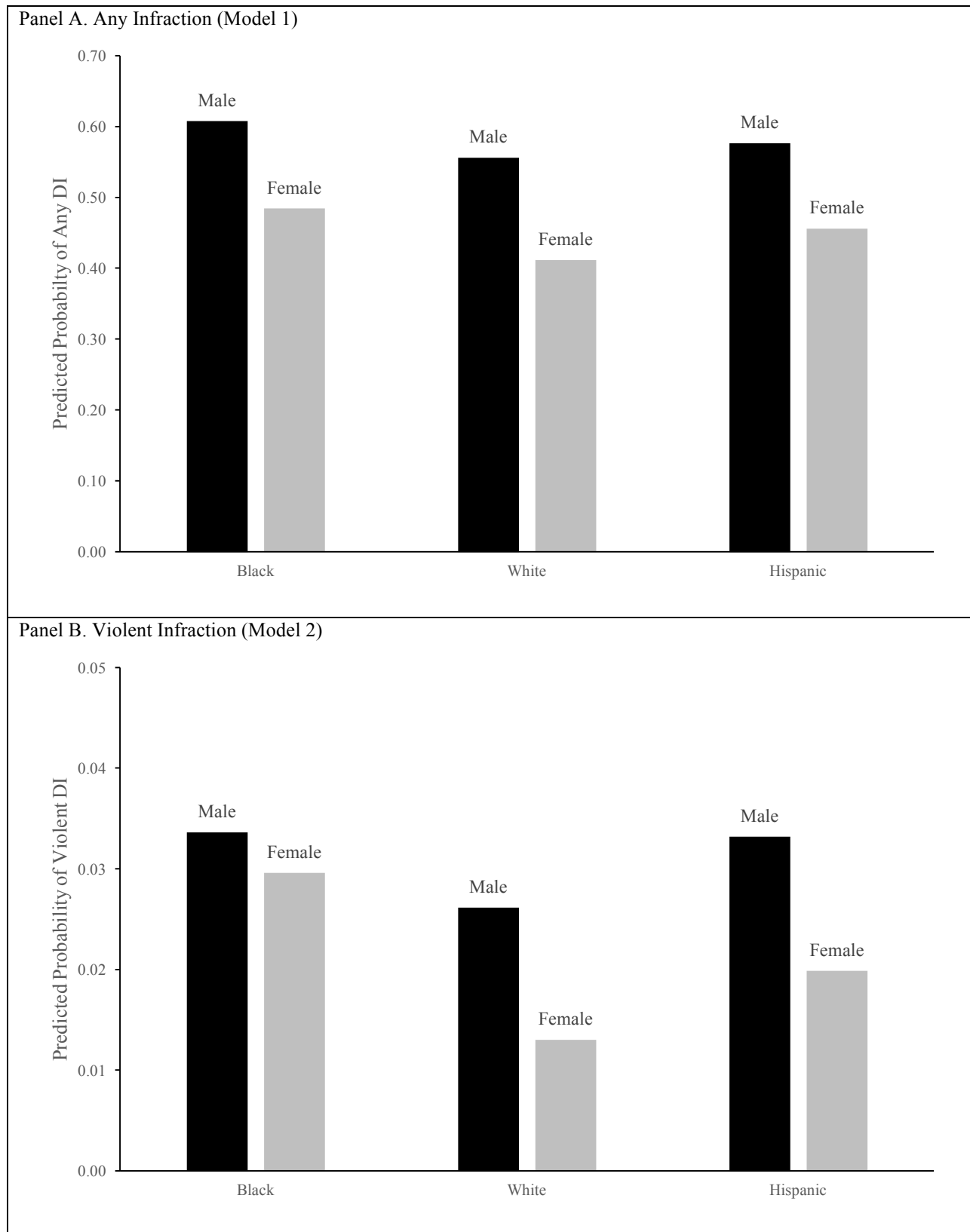
**Table 2.4** Mixed Effects Logistic Regression Models of Disciplinary Infraction Types on Measures of Inmate Characteristics, Interaction Terms (n = 237,792 inmates, 172 facilities)

	Model 1 Any DI			Model 2 Violent DI			Model 3 Nonviolent DI		
	b	S.E.	O.R.	b	S.E.	O.R.	b	S.E.	O.R.
<i>Interactions</i>									
White x Male	0.082*	0.03	1.086	0.580***	0.07	1.786	-0.002	0.03	0.998
Hispanic x Male	-0.015	0.07	0.985	0.396*	0.16	1.486	-0.097	0.07	0.908
<i>Covariates</i>									
Male	0.498	0.29	1.646	0.131	0.23	1.140	0.512***	0.24	1.668
White	-0.295***	0.03	0.745	-0.839***	0.07	0.432	-0.150***	0.03	0.860
Hispanic	-0.114	0.07	0.892	-0.410**	0.15	0.664	-0.021	0.07	0.979
Age	-0.046***	0.00	0.955	-0.032***	0.00	0.969	-0.041***	0.00	0.960
High School	-0.101***	0.01	0.904	-0.098***	0.02	0.907	-0.082***	0.01	0.921
Married	-0.168***	0.02	0.845	-0.125**	0.05	0.882	-0.148***	0.02	0.863
Religious	-0.069***	0.01	0.933	-0.008	0.03	0.992	-0.066***	0.01	0.936
Prim. Off. Violent	-0.009	0.01	0.991	0.182***	0.03	1.199	-0.057***	0.01	0.945
Prim. Off. Drug	-0.220***	0.01	0.802	-0.122***	0.03	0.886	-0.199***	0.01	0.820
Prim. Off. Sex	0.085**	0.03	1.089	0.056	0.06	1.058	0.090**	0.03	1.094
Prim. Off. Other	-0.014	0.02	0.986	0.068	0.04	1.070	-0.030	0.02	0.970
Habitual Offender	0.275***	0.02	1.317	0.198***	0.04	1.219	0.243***	0.02	1.275
Violent Habitual	0.333***	0.05	1.396	0.249**	0.10	1.282	0.268***	0.05	1.307
Support Habit	0.082***	0.01	1.086	0.009	0.03	1.009	0.081***	0.01	1.084
SGL Score	0.085***	0.00	1.089	0.046***	0.01	1.047	0.076***	0.00	1.079
Sentence Length	0.003***	0.00	1.003	0.001***	0.00	1.001	0.002***	0.00	1.002
Prior Prison	0.085***	0.00	1.088	0.102***	0.01	1.107	0.070***	0.00	1.073
Constant	0.903**	0.29		-2.821***	0.23		0.357	0.24	
<i>Random Effect</i>									
Facility Variance	3.655	0.44		0.706	0.10		1.670	0.20	
Log Likelihood	-128081.4			-38788.6			-129382.5		

Notes: Black and primary offense — property serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

To aid interpretation of the interaction terms, figure 2.2 provides a visual representation of the significant interactions terms. The predicted probabilities of misconduct for Black, White, and Hispanic males (black bars) and females (gray bars) are presented in panel A, and the predicted probabilities for violent misconduct are shown in panel B. Across both figures, predicted probabilities are estimate while all other covariates are held at their mean values. Inspection of panel A reveals that males are more likely to be written up for misconduct confirming bivariate findings. Black inmates have the highest predicted probability of misconduct. The gender gap in the probability of misconduct is greater among White than Black and Hispanic inmates. The difference in the predicted probability of misconduct between White males and females is about 30 percent, while the difference for Black males and females and Hispanic males and females is only about 23 percent.

A similar pattern emerges in panel B, and males of all races/ethnicities are more likely to be written up for violence than females. However, the overall predicted probabilities are substantially lower than those of general misconduct. Again, and in line with the bivariate findings, Black males and females have the highest predicted probability of violent misconduct. The gender gap is more pronounced among White and Hispanic inmates than among Black inmates. There is about a 13 percent difference in the probability of violent misconduct between Black males and females, a 49 percent difference between Hispanic males and females, and a 67 percent difference between White males and females. In response to the first research question, and specific to the likelihood of misconduct, between and within gender differences in the patterns of misconduct emerge.



**Figure 2.2** Predicted Probabilities of Disciplinary Infractions by Gender and Race/Ethnicity



### **Variation in Common Predictors of the Likelihood of Misconduct**

Next, the analyses turn to the split sample models which examine whether there is gender and racial/ethnic based variation in the predictors of misconduct. Table 2.5 presents the top five predictors of disciplinary infractions, violent infractions, and nonviolent infractions for Black, White, and Hispanic males and females. The table indicates whether the effect is positive (+) or negative (-). Only significant covariates are ranked, thus if less than five variables attained significance in any given model then only these variables are ranked and included in the table.

Across all infraction types and inmate subgroups, the number of prior prison commitments and age emerge as some of the strongest predictors of formal inmate misconduct. Inmates who have a higher count of previous prison commitments, and who are younger, are more likely to be written up for misconduct generally, and violent and nonviolent misconduct, regardless of gender or race/ethnicity. Overall, the top five predictors vary only slightly between the inmate subgroups and among the three types of infractions examined. For example, a primary drug offense reduced the likelihood of misconduct, violent misconduct, and nonviolent misconduct among the three male inmate subgroups, but did not emerge as a top predictor in any of the female models. Ancillary analyses assessing three-way interactions (not shown) performed on the full sample confirmed these results.

**Table 2.5** Summary of Top 5 Significant Predictors of Disciplinary Infractions by Inmate Subgroups

<i>Any DI</i>					
<i>Black Males</i>		<i>White Males</i>		<i>Hispanic Males</i>	
Prior Prison	+	Prior Prison	+	Prior Prison	+
Age	-	Sentence Length	+	Sentence Length	+
Sentence Length	+	Age	-	Age	-
SGL Score	+	SGL Score	+	SGL Score	+
Prim. Off. Drug	-	Prim. Off. Drug	-	Prim. Off. Drug	-
<i>Black Females</i>		<i>White Females</i>		<i>Hispanic Females</i>	
Sentence Length	+	Sentence Length	+	Prior Prison	+
Prior Prison	+	Prior Prison	+	Age	-
Age	-	Age	-		
Vio. Habitual Offender	+	Prim. Off. Violent	+		
SGL Score	+	SGL Score	+		
<i>Violent DI</i>					
<i>Black Males</i>		<i>White Males</i>		<i>Hispanic Males</i>	
Prior Prison	+	Prior Prison	+	Prior Prison	+
Age	-	Sentence Length	+	Sentence Length	+
Sentence Length	+	Age	-	Age	-
Vio. Habitual Offender	+	SGL Score	+	SGL Score	+
Prim. Off. Drug	-	Vio. Habitual Offender	+	Prim. Off. Drug	-
<i>Black Females</i>		<i>White Females</i>		<i>Hispanic Females</i>	
Prior Prison	+	Prior Prison	+	Prior Prison	+
Age	-	Sentence Length	+	SGL Score	+
Prim. Off. Sex	-	Prim. Off. Violent	+	Age	-
Prim. Off. Violent	+	Vio. Habitual Offender	-	Sentence Length	+
Prim. Off. Other	+	Age	-		
<i>Nonviolent DI</i>					
<i>Black Males</i>		<i>White Males</i>		<i>Hispanic Males</i>	
Prior Prison	+	Prior Prison	+	Prior Prison	+
Age	-	Sentence Length	+	Sentence Length	+
Sentence Length	+	Age	-	Age	-
SGL Score	+	SGL Score	+	SGL Score	+
Prim. Off. Drug	-	Prim. Off. Drug	-	Prim. Off. Drug	-
<i>Black Females</i>		<i>White Females</i>		<i>Hispanic Females</i>	
Sentence Length	+	Sentence Length	+	Prior Prison	+
Prior Prison	+	Prior Prison	+	Age	-
Age	-	Age	-	Vio. Habitual Offender	-
Vio. Habitual Offender	+	Prim. Off. Violent	+		
SGL Score	+	SGL Score	+		

Overall, the findings in regard to the likelihood of misconduct overall, and violence and nonviolent behavior specifically, confirm the bivariate results to a large extent. In terms of the second research question, the predictors of the likelihood of misconduct commonly assessed in the literature appear to vary only little between the inmate subgroups examined, and age and prior incarceration appear as viable predictors across all groups and infraction types.

### **Gender and Racial/Ethnic Differences in the Counts of Misconduct**

Next, the analyses turn to a set of negative binomial regression models which examine the main effect of gender and race/ethnicity on the count of infractions (model 1), violent infractions (model 2), and nonviolent infractions (model 3). The sample is restricted to inmates who have served their entire sentence to prevent right-censoring ( $n = 169,627$ ), and robust standard errors are estimated to account for the clustered nature of the data.

Table 2.6 reveals that unlike the findings from the multilevel logistic models, gender does not predict the count of infractions (any, violent, and nonviolent). Race and ethnicity do, however, retain their main effects so that White ( $b = -0.257, -0.544, -0.237$ ; I.R.R. = 0.774, 0.580, 0.789) and Hispanic ( $b = -0.171, -0.302, -0.174$ ; I.R.R. = 0.843, 0.739, 0.840) inmates are written up for fewer infractions, violent infractions, and nonviolent infractions in comparison to Black and non-Hispanic inmates. Several covariates are significant and in the predicted direction. Younger inmates ( $b = -0.047, -0.067, -0.048$ ; I.R.R. = 0.954, 0.935, 0.953), inmates without a high school education ( $b = -0.111, -0.169, -0.112$ ; I.R.R. = 0.895, 0.844, 0.894), inmates who are habitual ( $b = 0.141, 0.136, 0.126$ ; I.R.R. = 1.151, 1.146, 1.135) and violent offenders ( $b = 0.160, 0.288, 0.161$ ; I.R.R. = 1.173, 1.333, 1.175), and inmates with long sentences ( $b = 0.001, 0.001, 0.001$ ; I.R.R. = 1.001, 1.001, 1.001) incur more infractions, violent infractions, and nonviolent infractions.

**Table 2.6** Negative Binomial Regression Models of Count of Disciplinary Infraction Types on Measures of Inmate Characteristics (n = 169,627)

	Model 1 Count of Any DIs			Model 2 Count of Violent DIs			Model 3 Count of Nonviolent DIs		
	b	R.S.E.	I.R.R.	b	R.S.E.	I.R.R.	b	R.S.E.	I.R.R.
Male	0.131	0.14	1.139	0.031	0.14	1.031	0.154	0.15	1.166
White	-0.257***	0.02	0.774	-0.544***	0.03	0.580	-0.237***	0.02	0.789
Hispanic	-0.171*	0.07	0.843	-0.302***	0.07	0.739	-0.174*	0.07	0.840
Age	-0.047***	0.00	0.954	-0.067***	0.00	0.935	-0.048***	0.00	0.953
High School	-0.111***	0.02	0.895	-0.169***	0.03	0.844	-0.112***	0.02	0.894
Married	-0.195***	0.02	0.823	-0.321***	0.05	0.725	-0.201***	0.02	0.818
Religious	-0.067***	0.01	0.935	-0.088***	0.02	0.916	-0.069***	0.01	0.933
Prim. Off. Violent	0.048	0.02	1.049	0.227***	0.04	1.254	0.025	0.02	1.025
Prim. Off. Drug	-0.246***	0.02	0.782	-0.400***	0.04	0.670	-0.247***	0.02	0.781
Prim. Off. Sex	0.053	0.05	1.054	-0.045	0.06	0.956	0.070	0.05	1.072
Prim. Off. Other	-0.024	0.02	0.977	-0.066*	0.03	0.936	-0.024	0.02	0.976
Habitual Offender	0.141***	0.02	1.151	0.136**	0.04	1.146	0.126***	0.03	1.135
Violent Habitual	0.160**	0.05	1.173	0.288**	0.10	1.333	0.161**	0.05	1.175
Support Habit	-0.017	0.02	0.983	-0.087*	0.04	0.917	-0.018	0.02	0.982
SGL Score	0.045***	0.00	1.046	0.041***	0.01	1.042	0.040***	0.00	1.040
Sentence Length	0.001***	0.00	1.001	0.001***	0.00	1.001	0.001***	0.00	1.001
Prior Prison	0.116***	0.01	1.123	0.202***	0.01	1.224	0.134***	0.01	1.144
Constant	1.238***	0.16		0.051	0.22		1.241***	0.16	
Log Likelihood	-221132.47			-66137.10			-217256.02		
Pseudo R <sup>2</sup>	0.03			0.06			0.03		

Notes: Std. Error adjusted for 172 facility clusters, Black and primary offense — property serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

To examine whether there is variation within gender by race/ethnicity, two-way interactions are explored in table 2.7. Unlike the logistic models, only one significant interaction term emerges in the count models. The effect of gender is impacted by race/ethnicity in the count of violent misconduct (b = 0.444; I.R.R. = 1.559).

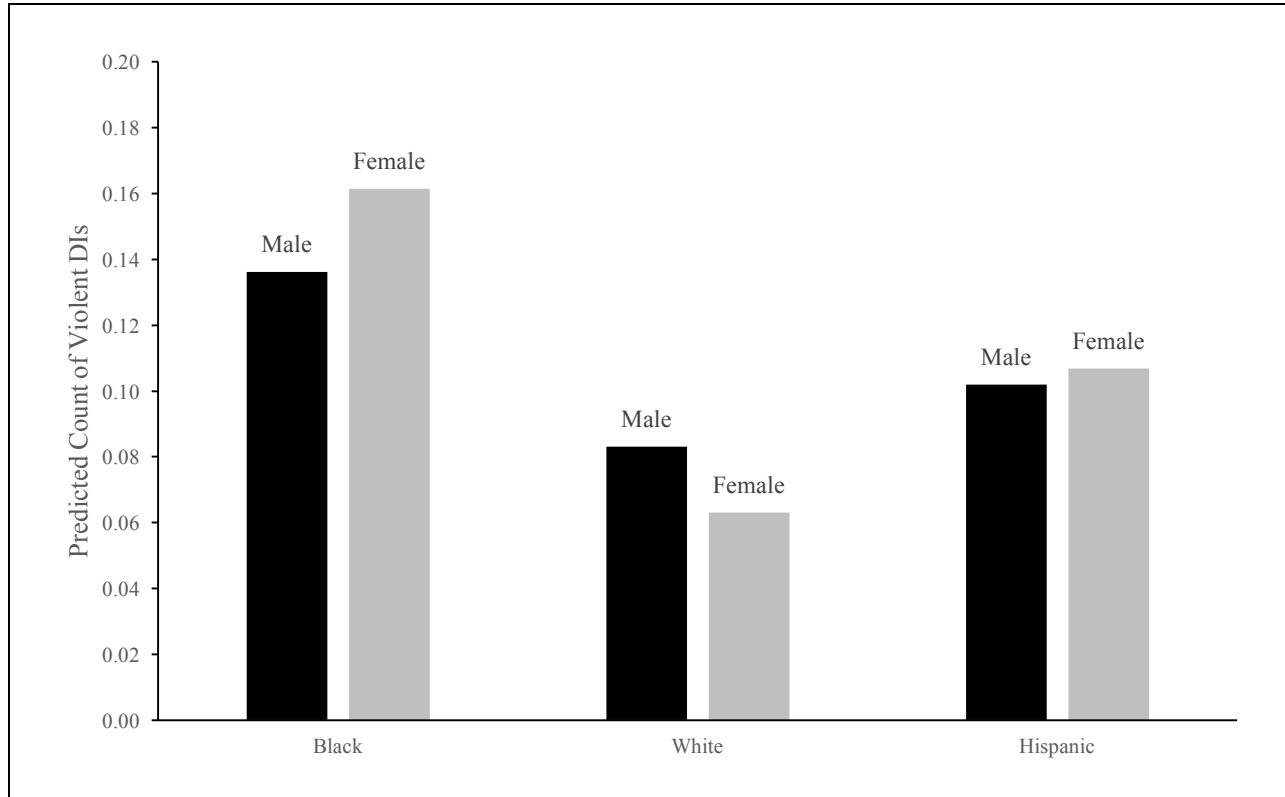
**Table 2.7** Negative Binomial Regression Models of Count of Disciplinary Infraction Types on Measures of Inmate Characteristics, Interaction Terms (n = 169,627)

	Model 1 Any DI			Model 2 Violent DI			Model 3 Nonviolent DI		
	b	R.S.E.	I.R.R.	b	R.S.E.	I.R.R.	b	R.S.E.	I.R.R.
<i>Interactions</i>									
White x Male	0.049	0.05	1.050	0.444***	0.095	1.559	0.010	0.05	1.010
Hispanic x Male	-0.146	0.11	0.864	0.124	0.123	1.132	-0.215	0.12	0.807
<i>Covariates</i>									
Male	0.113	0.13	1.120	-0.170	0.145	0.844	0.162	0.14	1.175
White	-0.300***	0.04	0.741	-0.940***	0.090	0.391	-0.246***	0.04	0.782
Hispanic	-0.034	0.07	0.966	-0.413***	0.094	0.662	0.026	0.09	1.027
Age	-0.047***	0.00	0.954	-0.067***	0.005	0.935	-0.048***	0.00	0.953
High School	-0.111***	0.02	0.895	-0.168***	0.026	0.845	-0.111***	0.02	0.895
Married	-0.195***	0.02	0.823	-0.314***	0.049	0.731	-0.202***	0.02	0.817
Religious	-0.066***	0.01	0.936	-0.091***	0.023	0.913	-0.068***	0.01	0.934
Prim. Off. Violent	0.049	0.02	1.050	0.227***	0.037	1.255	0.026	0.02	1.026
Prim. Off. Drug	-0.245***	0.02	0.783	-0.389***	0.038	0.678	-0.247***	0.02	0.781
Prim. Off. Sex	0.052	0.05	1.053	-0.049	0.062	0.952	0.069	0.05	1.072
Prim. Off. Other	-0.023	0.02	0.977	-0.057	0.034	0.945	-0.024	0.02	0.976
Habitual Offender	0.140***	0.02	1.150	0.140**	0.041	1.150	0.125***	0.03	1.133
Violent Habitual	0.161**	0.05	1.175	0.292**	0.102	1.340	0.163**	0.05	1.177
Support Habit	-0.015	0.02	0.985	-0.077	0.040	0.926	-0.018	0.02	0.983
SGL Score	0.045***	0.00	1.046	0.042***	0.009	1.043	0.040***	0.00	1.040
Sentence Length	0.001***	0.00	1.001	0.001***	0.000	1.001	0.001***	0.00	1.001
Prior Prison	0.116***	0.01	1.123	0.203***	0.013	1.225	0.134***	0.01	1.144
Constant	1.254***	0.15		0.235	0.218		1.234***	0.16	
Log Likelihood	-220704.0			-66001.1			-216837.8		
Pseudo R <sup>2</sup>	0.03			0.06			0.03		

Notes: Std. Error adjusted for 172 facility clusters, Black and primary offense — property serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

Figure 2.3 provides a visual representation of the interaction term. Figure 3 depicts the predicted count of violent infractions for Black, White, and Hispanic males (black bars) and females (gray bars) while all other covariates are held at their mean value. Several findings emerge upon examination of the figure. First, the overall count of violent infractions is very low among all inmate subgroups. Second, Black and Hispanic females have a slightly higher predicted count of violent infractions than Black and Hispanic males, while White females have a lower predicted count than White males. However, due to the overall low count of violent misconduct, these differences are substantively small. In response to the first research question,

and specific to the count of infractions, unique patterns for Black, White, and Hispanic males and females in the number of violent misconduct occur.



**Figure 2.3** Predicted Count of Violent Disciplinary Infractions by Gender and Race/Ethnicity

### **Variation in Common Predictors of Counts of Misconduct**

Last, and to examine whether common predictors of infraction counts differ among gender and racial/ethnic groups, split sample analyses are conducted, and the five strongest covariates are presented in table 2.8.

**Table 2.8** Summary of Top 5 Significant Predictors of Count of Disciplinary Infractions by Inmate Subgroups

<i>Count of DIs</i>					
<i>Black Males</i>		<i>White Males</i>		<i>Hispanic Males</i>	
Age	-	Age	-	Age	-
Prior Prison	+	Prior Prison	+	Prior Prison	+
Prim. Off. Drug	-	SGL Score	+	Prim. Off. Drug	-
SGL Score	+	Sentence Length	+	SGL Score	+
Sentence Length	+	Prim. Off. Drug	-	Prim. Off. Other	-
<i>Black Females</i>		<i>White Females</i>		<i>Hispanic Females</i>	
Age	-	Age	-	Age	-
Prior Prison	+	Sentence Length	+	Prior Prison	+
Sentence Length	+	Prior Prison	+		
SGL Score	+	Prim. Off. Violent	+		
Married	-	SGL Score	+		
<i>Count of Violent DIs</i>					
<i>Black Males</i>		<i>White Males</i>		<i>Hispanic Males</i>	
Prior Prison	+	Age	-	Age	-
Age	-	Prior Prison	+	Prior Prison	+
Prim. Off. Drug	-	SGL Score	+	SGL Score	+
High School	-	Prim. Off. Drug	-	Prim. Off. Drug	-
Married	-	Prim. Off. Violent	+	Married	-
<i>Black Females</i>		<i>White Females</i>		<i>Hispanic Females</i>	
Prior Prison	+	Age	-	SGL Score	+
Age	-	Prior Prison	+	Age	-
Prim. Off. Violent	+	Prim. Off. Violent	+	Prior Prison	+
Prim. Off. Other	+	Vio. Habitual Offender	-	Sentence Length	+
Prim. Off. Sex	-	Sentence Length	+		
<i>Count of Nonviolent DIs</i>					
<i>Black Males</i>		<i>White Males</i>		<i>Hispanic Males</i>	
Age	-	Age	-	Age	-
Prior Prison	+	Prior Prison	+	Prior Prison	+
Prim. Off. Drug	-	SGL Score	+	Prim. Off. Drug	-
SGL Score	+	Prim. Off. Drug	-	SGL Score	+
Sentence Length	+	Sentence Length	+	Sentence Length	+
<i>Black Females</i>		<i>White Females</i>		<i>Hispanic Females</i>	
Age	-	Age	-	Age	-
Prior Prison	+	Sentence Length	+	Prior Prison	+
Sentence Length	+	Prior Prison	+	Vio. Habitual Offender	-
SGL Score	+	Prim. Off. Violent	+		
Married	-	SGL Score	+		

Similar to the findings of the dichotomous misconduct measures, prior prison commitments and age emerge as some of the strongest predictors of counts of infractions across all six inmate subgroups and across all infraction types. Younger inmates and inmates who have a higher count of previous imprisonments incur more infractions, violent infractions, and nonviolent infractions, regardless of their gender and race/ethnicity. While most variables affect all inmate subgroups similarly, some differences in predictors do emerge. For example, marital status emerges as significant for Black and Hispanic males, but is not a top predictor for females when examining violent infractions. Ancillary analyses that examine three-way interactions between gender, race/ethnicity, and the covariates (not shown) confirm these results. Thus, the answer to the second research question is as follows: the common predictors of misconduct vary only little across the six inmate subgroups and the infraction types and counts examined.

## **Conclusion and Discussion**

The burgeoning inmate population has led to a resurgence of scholarly interest in understanding the prison experience. Scholarship on inmate behavior has identified a range of imported characteristics and features of the prison that affect the incarceration experience (Bottoms, 1999; Cao et al., 1997; Gendreau et al., 1997; Goncalves, et al., 2014; Jiang & Fisher-Giorlando, 2002; McCorkle et al., 1995; Siennick et al., 2013; Steiner et al., 2014). However, theories of inmate behavior have been developed around the experiences of males, and scholars have only recently begun to pay attention to potential gender and racial/ethnic differences in the applicability of prison theories. Although there exists a growing consensus among criminologists that the intersection of gender and race/ethnicity should be considered in examinations of offending trends, studies have not done so in the context of prisons.



The goal of this chapter was to advance theory and research on the prison experience by examining two research questions centered on gender and racial/ethnic variation in the nature of inmate misconduct and the ability of commonly assessed variables to predict misconduct across six inmate subgroups. The chapter's research questions were informed by prior prison theory, and unlike previous studies also drew on the multiracial feminism perspective. In response to the first research question, results provide some support for the idea that misconduct trends vary between and within gender. In terms of the second research question, the findings identify several common and unique risk factors for misbehavior, and point to age and the number of prior incarcerations as important correlates of misconduct for all inmate subgroups. Three main findings emerged from these analyses.

First, results of the bivariate analyses and the multivariate interaction models supported the argument that Black, White, and Hispanic males and females differ in the types of misconduct they engage in. Males were overall more likely to engage in misconduct, and in comparison to the other inmate subgroups, Black males and females displayed higher rates of misconduct than White and Hispanic inmates. While Black and Hispanic females showed higher counts of violence than other inmate subgroups, the overall count of violent infractions was low and so these differences were substantively small. The findings are in line with prior studies that have identified differences in the types of misconduct males and females and separately inmates of different racial/ethnic backgrounds engage in (Harer & Steffensmeier, 1996; Poole & Regoli, 1980; Steiner & Wooldredge, 2014).

There are at least two different ways to interpret these findings. It is possible that there are real gender and racial/ethnic differences in inmate behavior, and prior theory and research would suggest that there are. On the other hand, it is also possible that prison administrators

react to misbehaving females differently than they react to males, and the identified variation here may be a product of differential rule enforcement rather than differential behaviors. Similarly, the increased likelihood of Black and Hispanic male and female inmates to incur infractions may be a product of the reaction of prison staff to behaviors committed by these inmate subgroups, and reflect potential implicit biases, rather than substantial behavioral differences. As I discuss below, the findings of this chapter constitute a vital first step and future research can work to further disentangle the causes of gender and racial/ethnic disparities.

Second, the analyses identified gender and racial/ethnic differences in the timing to inmate misconduct. Black males were likely to offend sooner than any other inmate subgroup, while White females overall offended later. When examining violent misconduct, Black female infraction patterns resembled patterns of Black males more closely, in that they were found to offend sooner in their sentence. These findings suggest that, to the extent that the pains of incarceration and initial social isolation indeed is more painful for inmates (Adams, 1992; Houck & Loper, 2002), these heightened pains do not seem to manifest into early formal infractions. This may stem from differences in how prisons respond to male and female misconduct, or it may stem from the different ways males and females adjust to the initial pains of incarceration.

Last, two imported inmate characteristics emerged as stable predictors of various types and counts of misconduct across all inmate subgroups. Specifically, the number of prior imprisonments and age were strong predictors for each inmate subgroup and across all infraction types and counts. This finding lends support to a growing body of literature which identifies inmates with a history of imprisonment as being at a greater risk of violent behavior and order violations (Camp et al., 2002; Gendreau et al., 1997; Harer & Langan, 2001; Wright, 1991), and extends existing research by identifying this effect among different inmate groups. Similarly,

younger individuals are consistently found to be most at risk for rule violating behavior (Adams, 1992; Porporino & Zamble, 1984; Wright & Smith, 1985), and findings here suggest that this is true for Black, White, and Hispanic males and females. Theoretical reasons exist as to why these inmate groups may be at greater risk of misconduct. For example, and in line with defiance theory, inmates who have had numerous incarceration experiences may be less likely to view the corrections system as fair or legitimate, and thus be likely to misbehave (Sherman, 1993). Relatedly, younger inmates may feel alienated by the justice system generally, and perceive the corrections system to be unfair, which in turn delegitimizes prison rules and regulations (Myers, 2003; Sherman, 1993).

### **Implications for Theory and Research**

Several implications stem from these findings. The unique misconduct patterns identified in this chapter suggest that there are theoretical differences in behavior, or in prison officers' reactions to behavior, that are shaped by an inmate's gender and race/ethnicity. Findings also suggest that importation and deprivation theories are useful frameworks for understanding in-prison misconduct. Both males and females, and Black, White, and Hispanic inmates are influenced by their imported features and by characteristics of the prison.

The results of the chapter highlight critical questions about the causes of gender and racial/ethnic disparities in prison rule violations and officer decisions to write up disciplinary reports. The findings also underscore the importance of research that shifts focus to discretion in officer decision making. We know little, for example, about the factors that influence prison officers' decision of whether to write up an inmate for misbehavior. We do know, however, that considerable discretion exists in when they do (Conover, 2000).

It is possible that the effects identified in this chapter are subject to selection bias, and that inmates who are formally written up are inherently different from those who were not charged. A series of processes and decision-points lead of up to the formal misconduct charge. Inmates may self-select out by not violating prison rules, some inmates may violate rules but go undetected, and some inmates may simply not be formally charged by officers. It is possible that each group of inmates (e.g., compliant inmates, undetected rule violators, not charged rule violators) differs and that the group of inmates used in this chapter (e.g., formally charged rule violators) are inherently unique. This is a limitation of the current analysis, but also an opportunity for future research, which can combine self-report and official data to further explore the findings identified in this chapter. Research can for example, examine the demographic differences between inmates who do not offend, inmates whose misconduct goes undetected, not charged rule violators, and formally charged rule violators.

Are there certain inmate features that make prison officers more likely to overlook misbehavior? Or, are corrections officers more likely to write up Black male and female inmates due to associated gender and race stereotypes? Because officers can elicit punishments in response to misconduct, future research should disentangle the intersection of gender and race/ethnicity and officer perceptions of inmates. Relatedly, future research should also examine why Black males and females struggle with adjustment to imprisonment more so than any other inmate subgroup. This chapter identified differential offending patterns, and future studies should build on these findings and determine the mechanisms behind the earlier offending. Are Black inmates watched more closely by corrections officers during the early periods of their incarceration? Or, do the beginning stages of imprisonment present unique and arduous obstacles for Black males and females? Research that can include both self-reported behavior

and officer accounts, as well as qualitative accounts of early incarceration experiences is needed to answer these and related questions.

There are several inmate characteristics that potentially vary between males and females, which provide an additional avenue of inquiry for future research. For example, future studies can examine possible gendered impacts of gang membership on misconduct, and potential variation in officers' perceptions of male and female gang members. Male gang members may be seen as inherently violent, while female gang members may be less threatening as gangs in female facilities typically serve as a familial and social network (Lauderdale & Burman, 2009). The data used in this dissertation do not include inmate gang affiliation, but future research that seeks to better understand behavioral patterns of male and female inmates should focus on the impact gang affiliation may have on officers' perceptions of inmates and a potential gendered impact of gang membership on in-prison misconduct.

Similarly, inmate mental health status, and the gender and racial/ethnic differences in the externalizing behaviors associated with mental health problems, provide an additional avenue of inquiry for future research. While this chapter was unable to account for mental health status, it is certainly plausible that mental health problems increase the risk of misbehavior among inmates, and that there may be gender and racial/ethnic variation in the likelihood of corrections officers to misinterpret symptoms of mental illness for misconduct (Brown, Sellers, Brown, & Jackson, 1999; Houser et al., 2012; Rosenfeld, Phillips, & White, 2006). Finally, parental status has been linked to inmate adjustment (Houck & Loper, 2002). Future studies can build on the findings of this chapter, by examining whether incarcerated mothers differ from incarcerated fathers, if officers treat inmates with children differently, and whether racial/ethnic variation exists within these effects.

Last, facility level differences should be examined closely by future research. This chapter used multilevel modeling strategies to account for the clustering of inmates in facilities and provides motivation for future studies to further disentangle facility specific variables. Scholars argue that the management style of facilities dictate inmate behavior (see e.g., DiIulio, 1987), and there is reason to anticipate that male and female correctional facilities are managed in unique ways, which may influence inmate behavior, or at the same time, direct which inmate behavior is formally written up and which will receive an unofficial reprimand. McClellan (1994) suggests that corrections administrators use different management styles in male and female prisons. Female inmates are subject to higher levels of surveillance and officers are more inclined to write up minor infractions committed by females in an effort to encourage “proper” and “feminine” behavior (Dobash, Dobash, & Gutteridge, 1986; McClellan, 1994). Future studies of gender and racial/ethnic differences should explore differences in management style and other relevant facility level characteristics.

### **Implications for Policy**

A number of policy implications flow from the results of this chapter. This chapter’s findings indicate that previous experiences with incarceration increase the risk of misconduct for males and females, and equally affects Black, White, and Hispanic inmates. This merits further attention by policy analysts concerned with recidivism rates in the community and exacerbated misconduct rates in future incarceration settings. Policy should focus on exploring whether imprisonment constitutes a criminogenic experience, and investigate alternative sanctions that may decrease the risk of potential adverse behavioral patterns during subsequent incarcerations.

Findings also suggest that young inmates, and Black males and females evince higher misconduct rates, are at risk of offending early in their sentence, and incur more violent

infractions. Therefore, prison policy efforts should be geared towards providing equitable opportunities within prisons that can ease adjustment for young inmates, and Black males and females. For example, the maintenance of social ties may be more arduous for Black inmates due to the economic disadvantages that disproportionately affect this segment of society. Alleviating the unique pains of imprisonment felt by this inmate subgroup can help to improve order and safety in prisons. At the same time, the findings of this chapter, which center on official misconduct trends, suggest that prison officers may be more likely to interpret the behavior of Black and Hispanic inmates as misconduct. Policy efforts should work to ensure equal rule enforcement efforts across males and females of different racial/ethnic backgrounds.

**CHAPTER THREE:**  
**GENDER AND RACE DIFFERENCES IN PRISONS' OFFICIAL RESPONSES TO INMATE**  
**MISCONDUCT**

**Introduction**

Maintaining social order is a critical goal of prison administrators. Accordingly, corrections officials use punishments in response to inmate infractions, with the intention of reducing future misconduct. These sanctions encompass an array of outcomes including harsh punishments that can carry consequences for the health and well-being of inmates (Cloward, 1960; Haney, 2003). Although there is a rich body of literature examining the predictors of criminal justice sanctions (e.g., Nagel & Weitzman, 1971; Pope, 1975; Steffensmeier & Demuth, 2006; Steffensmeier, Ulmer, & Kramer, 1998), relatively little is known about the predictors of sanctions inside prison walls. Several studies examine prisons' use of disciplinary confinement (Butler & Steiner, 2017; Chowdhury, 2016; Cochran, Toman, Mears, & Bales, 2017; Olson, 2016), but we do not know whether gender and race/ethnicity influence how a variety of in-prison punishments are used.

Efforts to understand the gender and racial/ethnic disparities in criminal justice sentencing have drawn on focal concerns theory to shed light on judges' decision-making patterns (Albonetti, 1991; Spohn, 2002; Steffensmeier, Kramer, & Streifel, 1993; Ulmer & Johnson, 2004). Females, regardless of race/ethnicity, are generally awarded sentencing leniency because they are viewed as less blameworthy and dangerous than their male counterparts (Steffensmeier



& Demuth, 2006). The chivalry hypothesis suggests that male judges hold stereotypical views of White, middle-class women, and will sentence this offender group leniently to protect them from the “harsh” criminal justice environment (Nagel, 1969; Pollak, 1950; Visher, 1983). The evil woman hypothesis further elaborates that women who break with traditional gender norms—women that behave violently—will not benefit from their gender status and be sentenced similar to their male counterparts (Nagel & Hagan, 1983).

Prison officers in charge of sentencing may draw on parallel attributes, and female inmates may be sentenced leniently compared to males. It is also possible that officers do not ascribe gender stereotypes to female inmates, as their master status has shifted to offender, and so female inmate sentencing patterns may resemble male patterns. There are several parallels between in-prison sentencing and court sentencing that would suggest the gender and racial/ethnic disparities observed outside of prison will emerge in prison. Corrections officers charged with sentencing inmates must—similar to court actors—consider inmates’ blameworthiness and dangerousness, and practical constraints. However, several key differences between prison and court decision-making exist that may alter perceptions of in-prison offenders. Ethnographic scholarship suggests that prison staff treat and conceptualize female misbehavior behind bars in unique ways (McCorkel, 2006). As it currently stands, prison research knows only little about how prisons respond to inmate misconduct, and whether there are salient differences between male and female inmates of different racial/ethnic backgrounds.

Uncovering potential differences is important for at least five reasons. First, if gender and race/ethnicity based discrimination exists in in-prison sentencing, the legitimacy of the corrections system may be undermined (Tyler, 2010). Second, potential findings of disparate sentencing raise concerns about the fairness of the treatment of inmates and policy efforts to

improve the extent to which inmates are treated equally by the prison system (Babcock, 1981; Reisig & Mesko, 2009). Third, if differences exist, this would support studies that show differential treatment based on gender in the larger criminal justice system (Crew, 1991; Daly, 1987; Doerner & Demuth, 2014), and in correctional facilities (McClellan, 1994; McCorkel, 2006; Pollock, 1986). Fourth, uncovering differences provides impetus for future research, which should aim to understand better why any identified variation emerges. Fifth, and not least, if differences exist, it raises important questions for policy, including whether current in-prison punishment trends are effective in improving inmate behavior.

Against this backdrop, the purpose of this chapter is to examine gender and racial/ethnic differences in in-prison sentencing trends. Towards this goal, this chapter develops and empirically examines a set of theoretical arguments centered on potential gender and race/ethnicity effects on trends in in-prison punishments. The analyses use official in-prison sentencing data derived from the Florida Department of Corrections (FDOC) Custody Assessment and Reclassification System (CARS). Multilevel logistic regression analyses assess the main effect of gender and race/ethnicity on the likelihood of receiving the three most common sanctions used in Florida prisons: disciplinary confinement, loss of gain time, and assignment to extra work duty. Interaction effects between gender and race/ethnicity, and gender, race/ethnicity, and age are examined as well. And last, the same set of analyses are estimated using samples restricted to violent and nonviolent offenses.

The chapter proceeds in the following order. It begins with a discussion of sentencing frameworks and focuses specifically on theoretical explanations for gender differences in the criminal justice system. The chapter then turns to research centered on in-prison sentencing, and examines how existing theoretical perspectives can inform trends in in-prison punishment and

account for the potential influence of the intersection of gender and race/ethnicity on prison punishment patterns. Next, I provide an overview of the data and sample, followed by a detailed description of the analytic technique and variables utilized in the analyses. This is followed by an overview of the findings, and the chapter concludes with a discussion of the results' implications for theory, research, and policy.

### **Focal Concerns Theory: Understanding Sentencing Trends**

Gender and racial/ethnic disparities in U.S. sentencing trends have remained substantial over the past decades (Doerner & Demuth, 2010; Doerner & Demuth, 2014; Rossi & Berk, 1997). Although the U.S. Sentencing Commission has stated that a defendant's gender and race are legally irrelevant in sentencing decisions, scholars have found evidence that young, Black males are consistently treated more harshly (Bales & Piquero, 2012; Cochran & Mears, 2015; Mauer, 1990; Mitchell, 2005; Spohn & Holleran, 2000; Steffensmeier et al., 1998; Warren, Chiricos, & Bales, 2012). This demographic group is likely to receive incarcerative- as opposed to community-based outcomes, and is sentenced to lengthier prison stays (Steffensmeier et al., 1998). The disparate treatment of young Black males has been a cause for concern in the scholarly community, as it suggests possible discriminatory patterns in the justice system.

Theoretical frameworks have been advanced to shed light on these sentencing trends (Albonetti, 1991; Steffensmeier et al., 1993). The attributions perspective proposes that judicial decision making is discretionary, and that stereotypes can inform this process (Albonetti, 1991). It argues that judges hold implicit biases that can influence perceptions and certainty of a defendant's future criminality, and in turn increase punishment severity (Albonetti, 1991). The focal concerns framework builds on this work and posits that three focal concerns influence judges' decision making including the blameworthiness of the offender, perceptions of the

offenders' dangerousness to the community, and the practical constraints of the justice system (Steffensmeier et al., 1993, 1995, 1998).

*Blameworthiness* is the offender's degree of culpability and injury inflicted in the commission of the crime, and the associated factors include offense severity, criminal background, prior victimization, and the offender's role in the crime (Steffensmeier et al., 1993, 1995, 1998). Judges also take in to consideration whether the offender poses future *danger to the community* (Steffensmeier et al., 1998), which is linked to the nature of the primary offense, criminal history, and offender socioeconomic and demographic characteristics. Last, *practical constraints* are considered at the system and individual level. Judges consider whether correctional systems have the capacity to hold new offenders, and whether an individual is capable of "doing time", based on mental and physical health conditions and the cost of potential disruption of familial ties (Steffensmeier et al., 1998). Many prosecutors and judges have overloaded court dockets and complete information regarding the three focal concerns is rarely available. Decision makers thus rely on a "perceptual shorthand" which can allow for biases and stereotypes to inform sentencing outcomes (Steffensmeier & Demuth, 2000; 2001).

### **Focal Concerns Perspective and the Effect of Gender on Sentencing**

A common finding in sentencing literature is that female defendants are treated with greater leniency than similarly situated males (Daly & Bordt, 1995; Steffensmeier et al., 1993). According to focal concerns theory, judges make contextual attributions about the culpability and dangerousness of female offenders (Rodriguez, Curry, & Lee, 2006). Judges may view female offenders as less blameworthy, and are more likely to explain their criminal behavior as a symptom of mental illness or associations with criminal males, rather than as a personal flaw (Steffensmeier et al., 1993). These gendered stereotypes may also decrease perceptions of the

dangerousness of women to the community (Albonetti, 1991). Female offenders are viewed as non-recidivists, and so harsh sentences may not be seen as necessary (Daly & Bordt, 1995; Spohn, Gruhl, & Welch, 1987). The perception of the ability of women to “do time” may also be affected by stereotypes, as women are assumed to be less capable of handling the harsh prison environment. The theory also suggests that judges may sentence women more leniently to not disrupt the family, as female offenders are typically more likely to be primary caregivers to minors (Steffensmeier et al., 1993; Glaze & Maruschak, 2008).

Women are overall sentenced leniently relative to males; however, several studies also identify harsher treatment of Black and Hispanic women as compared to White women (Spohn, Welch, & Gruhl, 1985; see however Spohn & Beichner, 2000). The racial stereotypes assigned to Black males are often assigned to Black females as well, although to a more limited extent. Studies find overall harsher treatment of Black female offenders, but at the same time, also indicate that the race-gap is not as pronounced among female offenders (Bales & Piquero, 2012; Daly & Tonry, 1997). Steffensmeier and colleagues (1993) find that females benefit from their gender status and are less disadvantaged by their race/ethnicity in sentencing than males.

### **Female Sentencing Trends: The Chivalry and “Evil Woman” Hypotheses**

Several theoretical models examine reasons behind the gendered sentencing patterns. These perspectives explain why some studies find that women are treated more leniently than men (Albonetti, 1997; Daly, 1987; Nagel & Hagan, 1982; Spohn et al., 1985; Visher, 1983), while others find no difference or an increased punitive sentencing outcome (Crew, 1991; Farnworth & Horan, 1980; Nagel & Hagan, 1983). *The chivalry thesis* proposes that criminal justice actors hold chivalrous, paternalistic, and protective attitudes toward female offenders and so afford them lenient sentencing treatment (Nagel, 1969; Nagel & Weitzman, 1971; Pollak,

1950; Thomas, 1907). Judges can hold implicit biases that women are both physically and mentally weaker than their male counterparts and must be protected from the harsh criminal justice environment. Women, in turn, are more likely to receive community-based sentencing outcomes than similarly situated males. Lenient treatment is also afforded to mothers, as judges aim to keep the family intact, a view based on stereotypical notions of women as the responsibility bearers of child rearing (Daly & Tonry, 1997). Removing mothers, as opposed to fathers, from their children is viewed as more detrimental and so women are less likely to receive incarcerative sentences than comparable males.

At the same time, chivalrous treatment is typically only extended to women with what judges perceive as “traditional” female characteristics—that is, women who are middle class, White, and have a submissive demeanor (Visher, 1983). This means that Black women may be denied leniency, because they disproportionately come from disadvantaged communities, and do not fall under the traditional female gender stereotype (Belknap, 2001). Chivalrous treatment of women in the justice system exist generally (Griffin & Wooldredge, 2006; Spohn & Spears, 1997). However, recent studies find a narrower gender gap than what the perspective would suggest. In addition, the hypothesized race-effect has not received much support in the literature (Griffin & Wooldredge, 2006; Koons-Witt, 2002).

*The evil woman thesis* constitutes a second gender-specific sentencing perspective, which hypothesizes that female offenders who commit crimes that do not conform to “appropriate” female behaviors will be treated harshly in the justice system (Nagel & Hagan, 1983; Rasche, 1975). Women are believed to receive benefits from their gender status, and if stereotypic assumptions associated with this status are violated in the commission of a crime accrued benefits are lost. Judges, in turn, use their sentencing power to reaffirm traditional gender roles by

treating women harshly (Chesney-Lind, 1987), especially those that commit traditional male offenses, such as violent crimes (Nagel & Hagan, 1983; Rasche, 1975). Rodriguez and colleagues (2006), for example do not identify a gender gap in the sentencing of violent crimes, but find a gender gap in the likelihood of incarceration among property and drug offenders. However, and similar to tests of the chivalry hypothesis, alternative findings that either do not align with the evil woman hypothesis (e.g., no gender gap) or find results that are in the exact opposite direction than what would be predicted (e.g., harsher treatment of women) exist as well (Embry & Lyons, 2012; Spohn & Spears, 1997).

### **Gender and Racial/Ethnic Differences in In-Prison Sentencing Patterns**

Models of criminal justice sentencing provide theoretical insights into in-prison sentencing patterns. Females may benefit from their gender status, even in prison. Although male and female prisons are oriented towards the same goal of maintaining order and safety, operate under a paramilitaristic hierarchy, and officers generally are involved in similar duties (Britton, 1997), evidence suggests that imprisoned women still are required to follow male-created roles of femininity (Cain, 2008). Consequently, there are reasons to anticipate that incarcerated females who behave in “proper” feminine ways may still receive lenient treatment. Female inmates also constitute a vulnerable population, and prison staff may take their increased vulnerability into consideration when making sentencing decisions. Incarcerated women are more likely to report mental health problems (James & Glaze, 2006), co-occurring substance abuse and mental health issues (James & Glaze, 2006; Sacks, 2004), are more likely to be the primary care-takers of minors (Glaze & Maruschak, 2008), and stay closely connected to children even during incarceration (Coll, Miller, Fields, & Mathews, 1998). If prison staff are aware of the vulnerability of the female prison population, they may consider these factors when making

sentencing decisions and use punishments that are more lenient.<sup>2</sup> It is possible then that harsh sentences, such as disciplinary confinement, will be used more frequently for male inmates than female inmates due to stereotypical views that the collateral consequences are fewer among males and that males can better handle more severe punishments. Research suggests too, that prison staff respond to male misbehavior formally, while female misconduct is typically handled informally and so results in less harsh punishment (Poole & Regoli, 1983).

### **The Implications of Inmate Status on In-Prison Sentencing Patterns**

However, extant research indicates that corrections officers view female inmates differently than judges view un-sentenced female offenders (Bloom, Owen, & Covington, 2003; McCorkel, 2006; Rasche, 2001). This has the potential to reduce leniency typically afforded to women. McCorkel (2006) argues, for example, that inmates take on a type of “master status”—an “inmate”—which works to diminish any effect of gender or other characteristics on their treatment. Studies of corrections officers’ perceptions indicate that many hold negative attitudes towards female inmates and ascribe labels such as emotional, scheming, and resistant (Bloom et al., 2003; Pollock, 1986; Rasche, 2001). A U.S. Department of Justice report lends support to the idea that female inmates no longer benefit from their gender, as more females than males report receiving one of the harshest forms of in-prison punishments—disciplinary confinement (Beck, 2015). McClellan (1994) similarly finds that female inmates are subjected to higher degrees of supervision and are punished more severely for less serious offenses.

It is important to note too that the prison experience of female inmates is not homogeneous, and that race/ethnicity can affect how women serve time and, notably, how

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<sup>2</sup> Houser and Belenko (2015) however, find that female inmates with co-occurring mental and substance abuse disorders are sentenced more harshly for minor misconduct than females without co-occurring disorders.



different inmate subgroups are perceived by prison staff (Bosworth, 1999; Kruttschnitt & Hussemann, 2008). Studies of race relations in female prisons find that Black inmates perceive more discrimination on part of prison staff than White inmates, and suggest that negative stereotypes of Black women are perpetuated behind bars (Kruttschnitt, 1983; Willingham, 2011). Qualitative accounts find that Black females report that prison staff consider them as being of lesser worth and that they are labeled as promiscuous, drug addicted, and dirty (Johnson, 2003; Willingham, 2011). If female inmates generally are adversely labeled, and if Black females are exposed to added harmful labels, prison officials may punish Black females harsher relative to White females. It is possible that the accrued benefits of a female gender status are lessened in the correctional setting overall, and are diminished even further for Black females. Although still in the early stages, the literature finds that Black female inmates are in fact treated more harshly compared to their White female counterparts (Chowdhury, 2016).<sup>3</sup>

### **“Carrots-and-Sticks” in Male and Female Correctional Facilities**

Males and females may also be sentenced differently due to the unequal distribution of resources in correctional facilities. Prison staff typically use a “carrot-and-stick” approach to maintain order and safety, offering inmates treatment and programming as incentives to good behavior and punishments as deterrents of misconduct (Colvin, 1992). Male facilities typically offer a greater number of treatment and occupational programming, and participation in these has been linked to decreases in the risk of misbehavior (Lahm, 2009; Solinas-Saunders & Stacer, 2012). Many female facilities however, lack such pro-social opportunities (Holsinger, 2014), and historically, educational and rehabilitative programming offered in the correctional setting has

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<sup>3</sup> Wade-Olson (2016) however, finds that the more punitive treatment of Black inmates is ameliorated in facilities that have a higher percentage of minority prison staff.

been limited to a subset of inmates—typically those that are White and male (Hemmens & Stohr, 2014; Walker, 1988).<sup>4</sup> In theory, prison staff must rely more heavily on “sticks” to ensure order and safety among female inmates, especially those that are Black or Hispanic, as there is only a limited amount of “carrots” available. At the same time, there are facility-level differences in the availability of punishments that can cause gender-specific patterns in in-prison sentencing. Restrictive housing cells are typically found in greater numbers within male facilities, making “bed space” in disciplinary confinement a practical concern for prison staff in female facilities.

### **Sentencing Theories’ Applicability to Patterns in In-Prison Sentencing**

Sentencing theories may also be useful for understanding in-prison sentencing because of the parallels between court-room sentencing and in-prison sentencing. Inmates housed in Florida’s correctional facilities must follow a strict set of rules, which include behaviors considered unlawful inside and outside of the prison, such as assault and battery, and more minor misconduct such as missing count and failure to maintain personal hygiene. Failure to comply with these rules can result in a formal disciplinary report, which ensues in a disciplinary hearing that can carry with it several consequences. Florida’s Administrative Code 33-601.307 outlines the formal disciplinary process, and states that a disciplinary hearing team reviews evidence, witness statements, and determines an inmate’s guilt or innocence in response to a formal written disciplinary charge. The inmate is present at the hearing and given the opportunity to enter a guilty/not guilty plea. After the evidence has been reviewed the hearing officer may decide on a fitting penalty. While there are maximum penalties for offenses, hearing officers retain discretion in the ability to deviate below them. A major violation (e.g., assault, riot, or

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<sup>4</sup> The Florida Department of Corrections, however, has established a Female Offender Program Unit to ensure gender equitable access and availability of in-prison treatment and programming opportunities (see e.g., Corrections Equality Act, 2016; Moore, 1999).

contraband) typically carries a maximum punishment of 60 days of disciplinary confinement plus a loss of all gain time, while a minor violation (e.g., being in unauthorized area, disobeying regulations, or misuse of state property) carries a maximum penalty of 15 days of disciplinary confinement and a loss of 30 days of gain time (Florida Administrative Code 33-601.314). Lesser sanctions include loss of gain time and assignment to extra work duty.<sup>5</sup>

### **Similarities and Differences Between In-Prison Sentencing and Court Sentencing**

The disciplinary process mirrors courtroom proceedings, and several parallels exist between court room actors and correction officer tribunals. In-prison sentencing is regulated by an administrative code and resembles court proceedings in its goal of producing fair and impartial sentencing outcomes. Prison misconduct is a common occurrence (Flanagan, 1983; James & Glaze, 2006), and officers may not be able to address all focal concerns that contribute to decision making. Like to court sentencing, the hearing officers rely on legal variables (e.g., offense type and severity, injury to and number of victims) and exercise some discretion in punishment so that extra-legal variables (e.g., gender, race/ethnicity, age) can influence sentencing. Limited prior research suggests that a combination of legal- and extra-legal variables influence decision-making in prison. A disciplinary confinement sentence is influenced by the seriousness of the misconduct (Butler & Steiner, 2017; Cochran et al., 2017; Crouch, 1985; Flanagan, 1982; Lindquist, 1980), and extra-legal variables such as gender, race, and age (Chowdhury, 2016; Lindquist, 1980; Flanagan, 1982; Olson, 2016). This body of research however, is limited by its narrow focus on disciplinary confinement, and the presence of mixed findings (see e.g., Howard et al., 1994).

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<sup>5</sup> All Florida inmates incarcerated after October 1, 1995 are required to serve 85 percent of their sentence (all inmates used in the analyses below). Thus, gain time can only be accrued until the new release date reaches the date equal to 85 percent of the original sentence.

Another similarity to court room sentencing is that corrections officers must consider the practical constraints that accompany punishments at the individual- and system-level. Officers may take in to consideration the ability of an inmate to handle certain punishments. For example, research on restrictive housing (e.g., disciplinary confinement) typically finds that inmates with mental health problems are unable to handle this type of confinement (Arrigo & Bullock, 2008), and officers aware of this may choose to reserve it for inmates more capable of handling this punishment.<sup>6</sup> At the system-level, disciplinary housing cells are not distributed equally across all facilities, and similar to court actors having to consider crowding in prison facilities, in-prison decision-makers must be aware of space in segregation.

Prisons however, are unique and different compared to courts. Focal concerns theory suggests that judges and prosecutors make decisions based on the perceived dangerousness and culpability of an offender, which can include consideration of legal and extra-legal factors. By contrast, in prison, every inmate is already a known offender, and so this might neutralize any effect of extra-legal characteristics, such as gender or race/ethnicity on decision-making processes. In short, inmates have already been labeled dangerous by being inmates, and by violating prison rules have presented continuous rule breaking behavior.

The chapter's findings will have important implications for theory, research, and policy. If females are found to be treated similarly to males in prison, this result would run counter to arguments of prior research that indicates female leniency, and so suggest equitable treatment. However, if findings show that females receive relative leniency, although not a direct test of

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<sup>6</sup> A recent Department of Justice report however, suggests that roughly 46 percent of inmates who reported spending time in restrictive housing also indicate having suffered from mental health problems in the past (Beck, 2015). While theoretically, corrections officers may take into consideration the ability of mentally ill inmates to serve time in disciplinary confinement, it appears that in practice this may not be so.

focal concerns theory, this would provide support for the focal concerns and chivalry models that suggest that females are perceived, even in prison, as less culpable and dangerous. Finally, if the results show that females receive relatively harsher treatment it would suggest support for the evil woman thesis in the correctional setting. Officers may perceive that female inmates engaged in misconduct are violating gender norms and deserve harsher punishments. It could also suggest that female inmates have violated gender stereotypes simply by being inmates. In each instance, research is needed to further understand the explanatory mechanism and policy considerations to determine whether in-prison sanction decisions are fair and effective.

### **This Chapter**

Against this backdrop, the goal of this chapter is to examine official responses to inmate misconduct, and assess whether there are gender and racial/ethnic differences in the use of formal in-prison punishments. This chapter examines the use of three specific punishments: disciplinary confinement, loss of gain time, and assignment to extra work duty. Towards this goal, this chapter asks two research questions.

*Research Question 1:* Are there differences in the types of punishments prison officials use in response to misconduct committed by Black, White, and Hispanic males and females?

The analyses will focus on differences in the most serious in-prison punishment—disciplinary confinement—and then shift focus to differences in more lenient sentences including loss of gain time and extra work duty. Insight from sentencing theories suggests that young Black males will be treated most harsh, and that females overall will be treated more leniently than males.

According to the chivalry thesis, White women will be sentenced most leniently, as they most closely resemble stereotypical gender role expectations. It is anticipated that disciplinary

confinement will be used most frequently among males, and Black inmates, and that more lenient sentences such as loss of gain time will be used more frequently for females and White inmates.

*Research Question 2:* Do gender and racial/ethnic disparities in sentencing occur when the sample is split into violent and nonviolent offenders?

The analyses will explore sentencing differences for inmates guilty of violent infractions and, separately, nonviolent infractions. The “evil woman” hypothesis suggests that women who break “appropriate” gender roles in the commission of a crime, will be sentenced more harshly and no longer benefit from leniency afforded to women. These insights suggest that the gender-gap in punishment severity should be muted when examining violent offenses, and intensified among nonviolent offenses—violent women should be treated more closely to males, while nonviolent women should receive sentencing leniency as compared to nonviolent men.

## **Data and Methods**

The analyses for this chapter use Florida Department of Corrections (FDOC) Custody Assessment and Reclassification (CARS) data and include a large sample of Florida inmates who have incurred at least one disciplinary infraction. The data include information about the infraction and the corresponding in-prison sentence, inmate demographic features, criminal history information, and current sentence characteristics. The sample consists of 92,760 inmates nested in 167 facilities. Each inmate has committed one infraction, and this infraction is the first of their current sentence. Multilevel logistic modeling is used to account for problems associated with the nested nature of the data (Kreft & de Leeuw, 1998). Inmates are the level 1 unit of analysis and facilities are the level 2 unit of analysis.

*Dependent variables.* The focus of this chapter is on in-prison punishments and potential

gender and racial/ethnic disparities. The analyses utilize three dependent variables. In Florida prisons, inmates largely receive one of three sanction types: disciplinary confinement, loss of gain time, and assignment to extra work duty. To examine officers' use of the harshest in-prison sanction the disciplinary confinement variable is coded "1" if inmates received disciplinary confinement, and "0" if they received a more lenient sentence. I am also interested in the use of less harsh sanctions, in comparison to disciplinary confinement, and so two other indicators measure these, including loss of gain time (1 = loss of gain time, 0 = disciplinary confinement) and assignment to extra work duty (1 = extra work duty, 0 = disciplinary confinement). A three-category dependent variable was explored in ancillary analyses (not shown).

*Independent variables.* A dichotomous indicator of gender (0 = female, 1 = male) and three indicators of race/ethnicity, Black (0 = no, 1 = yes), White (0 = no, 1 = yes), and Hispanic (0 = no, 1 = yes), are included. Black serves as the reference category. Scholars have indicated that the type of disciplinary sanctions inmates receive is largely dependent on the type of infraction incurred (Butler & Steiner, 2017; Steiner & Cain, 2017), accordingly, the analyses include 12 dichotomous infraction measures: violent (major and minor), sex, property (major and minor), disorder, defiance (major and minor), regulation violation, contraband (major and minor), and drug. Minor defiance serves as the reference category. Criminal justice sentencing studies often include a count of charges measure, and so the analyses here include a variable that measures the amount of charges associated with each infraction event. These infractions constitute the first infraction of an inmate's current sentence. Other control variables include a continuous measure of age, five dichotomous measures of primary offense type (violent, property, drug, sex, and other), sentencing guidelines score (see chapter 2 for a detailed explanation of this measure), sentence length measured in months, and prior prison

commitments. The analyses also include a measure of the amount of time served in months at the time of the first infraction event.

*Analyses.* Several multilevel regression techniques have been compared during preliminary examination of the data, and the final model is based on a series of multilevel logistic regressions. While a multilevel multinomial logistic regression model presented a parsimonious assessment of the three-sanction outcome measure, the large number of facilities inmates are housed within made presentation of these results less straightforward. However, ancillary analyses (not shown) comparing the models revealed substantively similar results.

Accordingly, the analyses in this chapter employ a series of multilevel logistic regression analyses comparing gender and race/ethnicity effects on the likelihood that inmates receive one of the three sanctions. The chapter starts with a general analysis that compares the likelihood of receiving disciplinary confinement versus other sanctions. I then compare the likelihood of receiving non-disciplinary confinement sanctions (e.g., loss of gain time, assignment to extra work duty) to disciplinary confinement. Next, and to examine whether there is racial/ethnic variation within gender, I include an interaction term between these variables for each model. Because the larger sentencing literature suggests age may influence sentencing (Steffensmeier et al., 1993; 1998), I also include a three-way interaction between gender, race/ethnicity, and age. The last analytic step examines inmates sentenced for violent infractions and, separately, nonviolent infractions to determine whether a gender gap emerges or becomes exacerbated when examining two offense categories separately.

## **Findings**

Descriptive statistics for the full sample are presented in table 3.1. Although this sample is slightly different from that used in chapter 2—only inmates with an infraction are included in



this chapter—the characteristics are relatively similar, and parallel national estimates (Carson & Anderson, 2016). The majority of the sample is male and about 30 years old. Roughly half of the sample is Black, 38 percent is White, and 10 percent is Hispanic. The most common primary offense in the sample is a property offense, and the average sentencing guidelines score is a 6. The average sentence length is 69 months, and inmates in this sample have on average been incarcerated one prior time. The average inmate has served about 7 months at the time of the first infraction. The most common first infraction is a minor defiance, which includes, for example, disobeying orders, failure to comply with orders, and disrespect to officials. Major violent offenses are far less common and constitute around 1 percent of infractions. The average amount of charges associated with the first infraction is one, but ranges up to 8.

Several findings emerge when examining the types of disciplinary sanctions inmates receive. Perhaps most notably, an infraction results in disciplinary confinement 73 percent of the time. This means that out of 92,760 rule-violating inmates, over 67,000 receive the harshest in-prison punishment. Lesser sanctions are used with less frequency, about 9 percent of the sample received a loss of gain time and 18 percent received extra work duty.

**Table 3.1** Descriptive Statistics (n = 92,760)

	Mean	S.D.	Min	Max
Male	0.91	0.28	0	1
Age	30.39	10.06	15	74
Black	0.52	0.50	0	1
White	0.38	0.49	0	1
Hispanic	0.10	0.30	0	1
<i>Primary Offense</i>				
Violent	0.28	0.45	0	1
Property	0.30	0.46	0	1
Drug	0.25	0.43	0	1
Sex	0.04	0.21	0	1
Other	0.13	0.34	0	1
Sentencing Guidelines Score	5.56	2.27	1	10
Sentence Length (Months)	69.08	102.13	12	600
Prior Prison Commitment	0.95	1.52	0	15
Time Served at First Infraction (Months)	6.86	7.43	0	75
<i>First Disciplinary Infraction Type</i>				
Violent-Major	0.01	0.10	0	1
Violent-Minor	0.10	0.30	0	1
Sex	0.03	0.16	0	1
Property-Major	0.01	0.10	0	1
Property-Minor	0.03	0.16	0	1
Disorder	0.12	0.32	0	1
Defiance-Major	0.15	0.36	0	1
Defiance-Minor	0.23	0.42	0	1
Regulation Violation	0.17	0.37	0	1
Contraband-Major	0.04	0.19	0	1
Contraband-Minor	0.09	0.29	0	1
Drug	0.04	0.20	0	1
Total Charges	1.05	0.26	1	8
<i>Disciplinary Sanction</i>				
Disciplinary Confinement	0.73	0.45	0	1
Loss of Gain Time	0.09	0.28	0	1
Extra Work Duty	0.18	0.39	0	1

### **Gender and Racial/Ethnic Differences in the Likelihood of Receiving Disciplinary Confinement**

The analyses turn next to a series of multilevel logistic regression models. Table 3.2 examines the main effect of gender and race/ethnicity on the likelihood of disciplinary confinement in model 1, the interaction effect of gender and race/ethnicity in model 2, and the interaction effect of gender, race/ethnicity, and age, in model 3.

**Table 3.2** Mixed Effects Logistic Regression of Disciplinary Confinement on Measures of Inmate Characteristics (n = 92,760 inmates, 167 facilities)

	Model 1			Model 2			Model 3		
	b	S.E.	O.R.	b	S.E.	O.R.	b	S.E.	O.R.
<i>Interactions</i>									
Male x White	-	-	-	-0.044	0.07	0.957	-0.125	0.22	0.883
Male x Hispanic	-	-	-	-0.125	0.14	0.883	-0.608	0.48	0.545
Male x Age	-	-	-	-	-	-	0.005	0.01	1.005
White x Age	-	-	-	-	-	-	0.000	0.01	1.000
Hispanic x Age	-	-	-	-	-	-	-0.016	0.01	0.984
Male x White x Age	-	-	-	-	-	-	0.002	0.01	1.002
Male x Hispanic x Age	-	-	-	-	-	-	0.016	0.02	1.017
<i>Covariates</i>									
Male	1.152***	0.28	3.163	1.180***	0.28	3.256	1.010**	0.32	2.745
White	-0.007	0.02	0.993	0.032	0.06	1.033	0.045	0.21	1.046
Hispanic	0.082*	0.03	1.086	0.199	0.13	1.220	0.660	0.47	1.934
Age	-0.003*	0.00	0.997	-0.003*	0.00	0.997	-0.008	0.01	0.992
Prim. Off. - Violent	0.023	0.03	1.024	0.023	0.03	1.024	0.021	0.03	1.022
Prim. Off. - Drug	-0.051*	0.03	0.951	-0.051*	0.03	0.950	-0.051*	0.03	0.950
Prim. Off. - Sex	-0.101*	0.05	0.904	-0.101*	0.05	0.904	-0.104*	0.05	0.902
Prim. Off. - Other	0.010	0.03	1.010	0.010	0.03	1.010	0.008	0.03	1.008
SGL Score	0.006	0.01	1.006	0.006	0.01	1.006	0.006	0.01	1.006
Sentence Length	0.000***	0.00	1.000	0.000***	0.00	1.000	0.000***	0.00	1.000
Prior Prison	0.013	0.01	1.013	0.013	0.01	1.013	0.013	0.01	1.013
Time Served	-0.011***	0.00	0.989	-0.011***	0.00	0.989	-0.011***	0.00	0.989
<i>DI Type</i>									
Violent - Major	3.955***	0.24	52.192	3.957***	0.24	52.296	3.957***	0.24	52.291
Violent - Minor	3.039***	0.06	20.876	3.039***	0.06	20.883	3.039***	0.06	20.881
Sex	2.495***	0.10	12.117	2.493***	0.10	12.093	2.488***	0.10	12.043
Property - Major	-0.230**	0.08	0.795	-0.231**	0.08	0.794	-0.228**	0.08	0.796
Property - Minor	-0.338***	0.05	0.713	-0.343***	0.05	0.710	-0.343***	0.05	0.710
Disorder	1.163***	0.03	3.199	1.163***	0.03	3.201	1.163***	0.03	3.200
Defiance - Major	1.453***	0.03	4.277	1.452***	0.03	4.272	1.451***	0.03	4.266
Regulation Violation	-1.486***	0.03	0.226	-1.487***	0.03	0.226	-1.487***	0.03	0.226
Contraband - Major	1.702***	0.06	5.485	1.697***	0.06	5.456	1.698***	0.06	5.465
Contraband - Minor	-0.684***	0.03	0.504	-0.685***	0.03	0.504	-0.683***	0.03	0.505
Drug	2.914***	0.10	18.422	2.921***	0.10	18.551	2.922***	0.10	18.581
Total Charges	1.466***	0.06	4.334	1.466***	0.06	4.332	1.465***	0.06	4.329
Constant	-1.379***	0.27		-1.406***	0.28		-1.225***	0.32	
<i>Random Effect</i>									
Facility Variance	1.382	0.17		1.383	0.17		1.385	0.17	
Log Likelihood	-37102.40			-37020.11			-37016.79		

Notes: Black, primary offense - property, and DI defiance - minor serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

Several findings emerge. First, gender and ethnicity are related to the likelihood of disciplinary confinement. Being male, versus female, increases the odds of receiving disciplinary confinement by a factor of 3 (b = 1.152, O.R. = 3.163). The odds of receiving disciplinary confinement for Hispanic inmates is 1.086 times that of non-Hispanic inmates (b = 0.082, O.R. =

1.086). Second, neither the two-way nor three-way interactions emerge as significant. Although gender and ethnicity are associated with sentencing decisions, there are no within-gender differences based on race/ethnicity and age. Third, legal variables exert the strongest impact on the odds of receiving of disciplinary confinement. The infraction type appears to be the driving force behind the sentence an inmate receives. For example, compared to a minor defiance infraction, a major violent infraction increases the odds of receiving disciplinary confinement by a factor of 52 ( $b = 3.955$ ; O.R. = 52.192).

### **Gender and Racial/Ethnic Differences in the Likelihood of Receiving Less Harsh Sanctions**

To further explore the first research question and assess whether there are gender and racial/ethnic disparities in less harsh sanctions, the analyses turn next to a series of multilevel regression models that predict loss of gain time versus disciplinary confinement.

Model 1 in table 3.3 explores the main effect of gender and race/ethnicity on loss of gain time versus disciplinary confinement. Model 2 examines the two-way interaction between gender and race/ethnicity, and model 3 assesses the three-way interaction between gender, race/ethnicity, and age.

**Table 3.3** Mixed Effects Logistic Regression of Loss of Gain Time vs. Disciplinary Confinement on Measures of Inmate Characteristics (n = 76,815 inmates, 167 facilities)

	Model 1			Model 2			Model 3		
	b	S.E.	O.R.	b	S.E.	O.R.	b	S.E.	O.R.
<i>Interactions</i>									
Male x White	-	-	-	0.039	0.07	1.040	0.102	0.26	1.108
Male x Hispanic	-	-	-	0.259	0.16	1.296	0.754	0.55	2.125
Male x Age	-	-	-	-	-	-	-0.001	0.01	0.999
White x Age	-	-	-	-	-	-	0.003	0.01	1.003
Hispanic x Age	-	-	-	-	-	-	0.018	0.02	1.018
Male x White x Age	-	-	-	-	-	-	-0.002	0.01	0.998
Male x Hispanic x Age	-	-	-	-	-	-	-0.016	0.02	0.984
<i>Covariates</i>									
Male	-1.605***	0.30	0.201	-1.643***	0.30	0.193	-1.626***	0.35	0.197
White	0.058*	0.03	1.059	0.023	0.07	1.023	-0.075	0.24	0.928
Hispanic	-0.033	0.05	0.968	-0.267	0.15	0.766	-0.813	0.52	0.444
Age	0.010***	0.00	1.010	0.010***	0.00	1.010	0.009	0.01	1.009
Prim. Off. - Violent	-0.023	0.04	0.977	-0.021	0.04	0.979	-0.022	0.04	0.979
Prim. Off. - Drug	0.108**	0.03	1.114	0.110**	0.03	1.117	0.110***	0.03	1.116
Prim. Off. - Sex	0.295***	0.07	1.343	0.295***	0.07	1.340	0.294***	0.07	1.341
Prim. Off. - Other	-0.005	0.04	0.995	-0.002	0.04	0.998	-0.004	0.04	0.996
SGL Score	-0.017*	0.01	0.983	-0.017*	0.01	0.983	-0.017*	0.01	0.983
Sentence Length	-0.001***	0.00	0.999	-0.001***	0.00	0.999	-0.001***	0.00	0.999
Prior Prison	-0.011	0.01	0.990	-0.010	0.01	0.990	-0.008	0.01	0.992
Time Served	0.015***	0.00	1.015	0.015***	0.00	1.015	0.015***	0.00	1.015
<i>DI Type</i>									
Violent - Major	-3.542***	0.31	0.029	-3.547***	0.31	0.029	-3.548***	0.31	0.029
Violent - Minor	-3.018***	0.09	0.049	-3.015***	0.09	0.049	-3.015***	0.09	0.049
Sex	-2.059***	0.13	0.128	-2.057***	0.13	0.128	-2.055***	0.13	0.128
Property - Major	0.144	0.11	1.155	0.146	0.11	1.157	0.145	0.11	1.156
Property - Minor	0.450***	0.07	1.568	0.455***	0.07	1.576	0.455***	0.07	1.576
Disorder	-1.061***	0.05	0.346	-1.061***	0.05	0.346	-1.061***	0.05	0.346
Defiance - Major	-1.292***	0.05	0.275	-1.290***	0.05	0.275	-1.290***	0.05	0.275
Regulation Violation	1.210***	0.04	3.352	1.210***	0.04	3.354	1.210***	0.04	3.352
Contraband - Major	-1.287***	0.08	0.276	-1.277***	0.08	0.279	-1.277***	0.08	0.279
Contraband - Minor	0.681***	0.04	1.975	0.681***	0.04	1.977	0.681***	0.04	1.976
Drug	-2.535***	0.12	0.079	-2.534***	0.12	0.079	-2.535***	0.12	0.079
Total Charges	-1.213***	0.08	0.297	-1.212***	0.08	0.297	-1.212***	0.08	0.298
Constant	0.354	0.30		0.389	0.31		0.406	0.35	
<i>Random Effect</i>									
Facility Variance	1.532	0.19		1.531	0.19		1.530	0.19	
Log Likelihood	-20601.67			-20563.07			-20562.15		

Notes: Black, primary offense - property, and DI defiance - minor serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

Findings reveal that gender remains a significant predictor. Males are less likely to receive a loss of gain time relative to disciplinary confinement in comparison to females (b = -0.605; O.R. = 0.201). A moderate race effect also emerges. White inmates are more likely to receive loss of gain time over disciplinary confinement relative to Black inmates (b = 0.058; O.R.

= 1.059). Note, however, that this race effect is substantively small. Across models 2 and 3, no significant interaction effect emerges, indicating that race/ethnicity and age effects do not vary within gender. Again, legal variables exert the strongest effect on sentencing outcomes. For example, the odds of receiving a loss of gain time versus disciplinary confinement for inmates with a regulation violation relative to a minor defiance are three times higher ( $b = 1.210$ ; O.R. = 3.352).

Next, the analyses turn to assignment to extra work duty. Table 3.4 examines the main effect of gender and race/ethnicity (model 1), the interaction of gender and race/ethnicity (model 2), and the interaction of gender, race/ethnicity, and age (model 3) on the likelihood of receiving extra work duty in comparison to disciplinary confinement.

Unlike the previous two models, inmate demographic characteristics including gender, race/ethnicity, and age do not reach significance in the extra work models. The interaction models also reveal no race/ethnicity and age variation within gender. Again, legal variables exert the strongest effect. For example, the odds of receiving extra work duty versus disciplinary confinement for inmates with a regulation violation are four times higher than for inmates with a minor defiance ( $b = 1.490$ ; O.R. = 4.437), and those with a major violent infraction are significantly less likely to receive extra work duty relative to a minor defiance infraction ( $b = -4.369$ ; O.R. = 0.013).

**Table 3.4** Mixed Effects Logistic Regression of Extra Work Duty vs. Disciplinary Confinement on Measures of Inmate Characteristics (n = 83,404 inmates, 167 facilities)

	Model 1			Model 2			Model 3		
	b	S.E.	O.R.	b	S.E.	O.R.	b	S.E.	O.R.
<i>Interactions</i>									
Male x White	-	-	-	0.047	0.09	1.048	-0.326	0.30	0.722
Male x Hispanic	-	-	-	-0.025	0.20	0.975	0.511	0.66	1.666
Male x Age	-	-	-	-	-	-	-0.003	0.01	0.997
White x Age	-	-	-	-	-	-	-0.015	0.01	0.985
Hispanic x Age	-	-	-	-	-	-	0.016	0.02	1.016
Male x White x Age	-	-	-	-	-	-	0.012	0.01	1.012
Male x Hispanic x Age	-	-	-	-	-	-	-0.019	0.02	0.982
<i>Covariates</i>									
Male	-0.498	0.39	0.608	-0.503	0.39	0.605	-0.402	0.46	0.669
White	0.014	0.02	1.015	-0.027	0.09	0.973	0.448	0.29	1.566
Hispanic	-0.079	0.04	0.924	-0.052	0.19	0.949	-0.515	0.64	0.598
Age	-0.001	0.00	0.999	-0.002	0.00	0.998	0.004	0.01	1.004
Prim. Off. - Violent	-0.024	0.03	0.976	-0.024	0.03	0.977	-0.022	0.03	0.979
Prim. Off. - Drug	-0.004	0.03	0.996	-0.003	0.03	0.997	-0.003	0.03	0.997
Prim. Off. - Sex	0.010	0.06	1.010	0.014	0.06	1.014	0.014	0.06	1.014
Prim. Off. - Other	-0.033	0.04	0.968	-0.033	0.04	0.967	-0.029	0.04	0.971
SGL Score	-0.004	0.01	0.996	-0.004	0.01	0.996	-0.004	0.01	0.996
Sentence Length	-0.000*	0.00	1.000	-0.000*	0.00	1.000	-0.000*	0.00	1.000
Prior Prison	-0.010	0.01	0.990	-0.009	0.01	0.991	-0.013	0.01	0.987
Time Served	0.007***	0.00	1.007	0.007***	0.00	1.007	0.007***	0.00	1.007
<i>DI Type</i>									
Violent - Major	-4.369***	0.34	0.013	-4.367***	0.34	0.013	-4.369***	0.34	0.013
Violent - Minor	-3.057***	0.07	0.047	-3.059***	0.07	0.047	-3.061***	0.07	0.047
Sex	-2.833***	0.14	0.059	-2.830***	0.14	0.059	-2.830***	0.14	0.059
Property - Major	0.253**	0.09	1.288	0.253**	0.09	1.288	0.250**	0.09	1.284
Property - Minor	0.267***	0.06	1.307	0.272***	0.06	1.313	0.270***	0.06	1.310
Disorder	-1.188***	0.04	0.305	-1.189***	0.04	0.305	-1.189***	0.04	0.305
Defiance - Major	-1.516***	0.04	0.220	-1.516***	0.04	0.220	-1.516***	0.04	0.220
Regulation Violation	1.490***	0.03	4.437	1.490***	0.03	4.437	1.490***	0.03	4.439
Contraband - Major	-1.844***	0.08	0.158	-1.842***	0.08	0.159	-1.843***	0.08	0.158
Contraband - Minor	0.697***	0.04	2.009	0.697***	0.04	2.008	0.695***	0.04	2.004
Drug	-3.148***	0.13	0.043	-3.162***	0.13	0.042	-3.165***	0.13	0.042
Total Charges	-1.772***	0.08	0.170	-1.772***	0.08	0.170	-1.771***	0.08	0.170
Constant	0.460	0.39		0.463	0.39		0.297	0.45	
<i>Random Effect</i>									
Facility Variance	2.559	0.33		2.568	0.33		2.568	0.33	
Log Likelihood	-27029.87			-26960.99			-26957.72		

Notes: Black, primary offense - property, and DI defiance - minor serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

In response to the first research question, which asks whether gender and racial/ethnic differences emerge in in-prison sentencing, the multilevel models provide evidence of disparities across gender, and some racial/ethnic differences. Legal variables, especially those concerning the type of infraction, drive in-prison sentencing outcomes. In line with focal concerns and

chivalry arguments, males are sentenced more harshly than females. The findings regarding race/ethnicity are less consistent, but point to moderate leniency afforded to White inmates. There appears to be relatively little variation within gender across race/ethnicity and age as none of the interaction terms gain significance. Females are treated leniently relative to males regardless of race/ethnicity and age.

### **The Likelihood of Receiving Disciplinary Confinement for Violent and Nonviolent Offenses**

To answer the second research question, do gender and racial/ethnic disparities occur when the sample is split into violent and nonviolent offenders, the analyses turn next to separate models predicting disciplinary confinement. Only models with significant gender or race/ethnicity main effects, and those with significant interactions are presented below. Table 3.5 provides findings for violent inmates in model 1, for nonviolent inmates in model 2, and the interaction between gender, race/ethnicity, and age for nonviolent inmates is depicted in model 3.

Among violent inmates, significant gender and race effects emerge. The odds of receiving disciplinary confinement for violent males are nearly six times higher relative to violent females ( $b = 1.775$ ; O.R. = 5.902), and violent White inmates are less likely to receive disciplinary confinement relative to violent Black inmates ( $b = -0.305$ , O.R. = 0.737). Models 2 and 3 examine nonviolent inmates, and significant main effects of race and gender emerge. The odds of receiving disciplinary confinement for nonviolent males are three times greater relative to nonviolent females ( $b = 1.042$ , O.R. = 2.834), and nonviolent White inmates are less likely to receive disciplinary confinement than nonviolent Black inmates ( $b = -0.195$ ; O.R. = 0.823). A significant interaction between gender and age emerges ( $b = 0.017$ ; O.R. = 1.017). Age is a salient factor in sentencing decisions made for females, but matters relatively little for males.

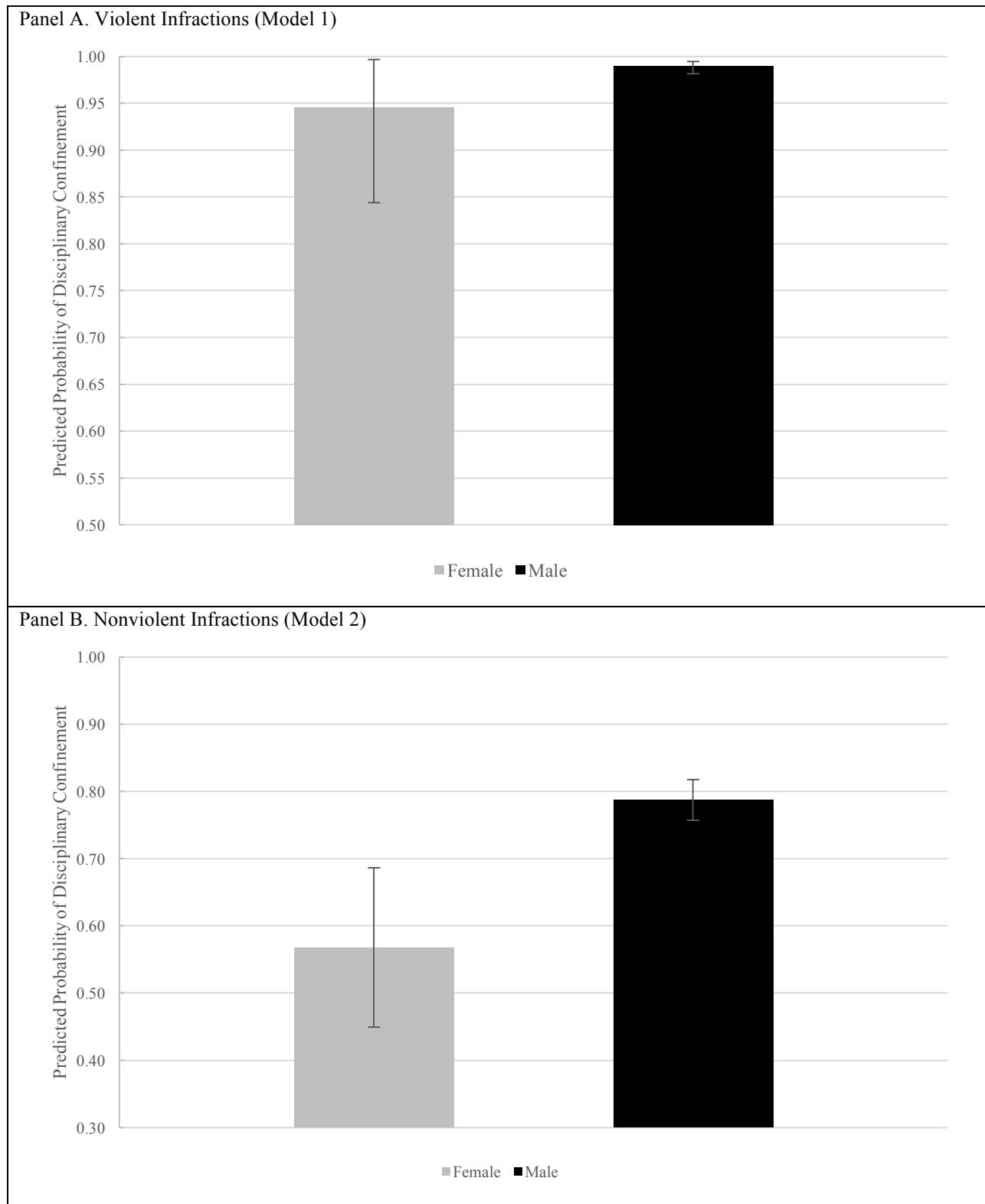


**Table 3.5** Mixed Effects Logistic Regression of Disciplinary Confinement on Measures of Inmate Characteristics (Violent and Nonviolent Inmates)

	Model 1 Violent			Model 2 Nonviolent			Model 3 Nonviolent		
	b	S.E.	O.R.	b	S.E.	O.R.	b	S.E.	O.R.
<i>Interactions</i>									
Male x White	-	-	-	-	-	-	0.169	0.20	1.184
Male x Hispanic	-	-	-	-	-	-	-0.385	0.44	0.680
Male x Age	-	-	-	-	-	-	0.017**	0.00	1.017
White x Age	-	-	-	-	-	-	0.008	0.01	1.008
Hispanic x Age	-	-	-	-	-	-	-0.015	0.01	0.986
Male x White x Age	-	-	-	-	-	-	-0.006	0.01	0.994
Male x Hispanic x Age	-	-	-	-	-	-	0.014	0.01	1.014
<i>Covariates</i>									
Male	1.775**	0.55	5.902	1.042***	0.26	2.834	0.520	0.30	1.683
White	-0.305**	0.12	0.737	-0.195***	0.02	0.823	-0.414*	0.20	0.661
Hispanic	0.295	0.23	1.344	-0.016	0.03	0.984	0.398	0.43	1.489
Age	0.002	0.01	1.002	-0.001	0.00	0.999	-0.017***	0.00	0.983
Prim. Off. - Violent	-0.022	0.14	0.978	0.066**	0.02	1.068	0.062*	0.02	1.064
Prim. Off. - Drug	0.121	0.16	1.129	-0.060**	0.02	0.941	-0.060**	0.02	0.942
Prim. Off. - Sex	-0.003	0.33	0.997	-0.042	0.04	0.958	-0.046	0.04	0.955
Prim. Off. - Other	-0.324	0.17	0.723	0.035	0.03	1.036	0.034	0.03	1.035
SGL Score	-0.019	0.03	0.982	0.002	0.00	1.002	0.003	0.00	1.003
Sentence Length	0.004**	0.00	1.004	0.000***	0.00	1.000	0.000***	0.00	1.000
Prior Prison	-0.057	0.05	0.945	0.021**	0.01	1.021	0.020**	0.01	1.021
Time Served	-0.009	0.01	0.991	-0.010***	0.00	0.990	-0.010***	0.00	0.990
Total Charges	0.557	0.32	1.745	1.456***	0.06	4.290	1.455***	0.06	4.282
Constant	2.247**	0.68		-1.140***	0.26		-0.643*	0.30	
<i>Random Effect</i>									
Facility Variance	2.269	0.57		1.201	0.15		1.207	0.15	
Log Likelihood	-1467.78			-43563.62			-43457.43		
N (inmates)	10,028			82,566			82,566		
N (facilities)	157			167			167		

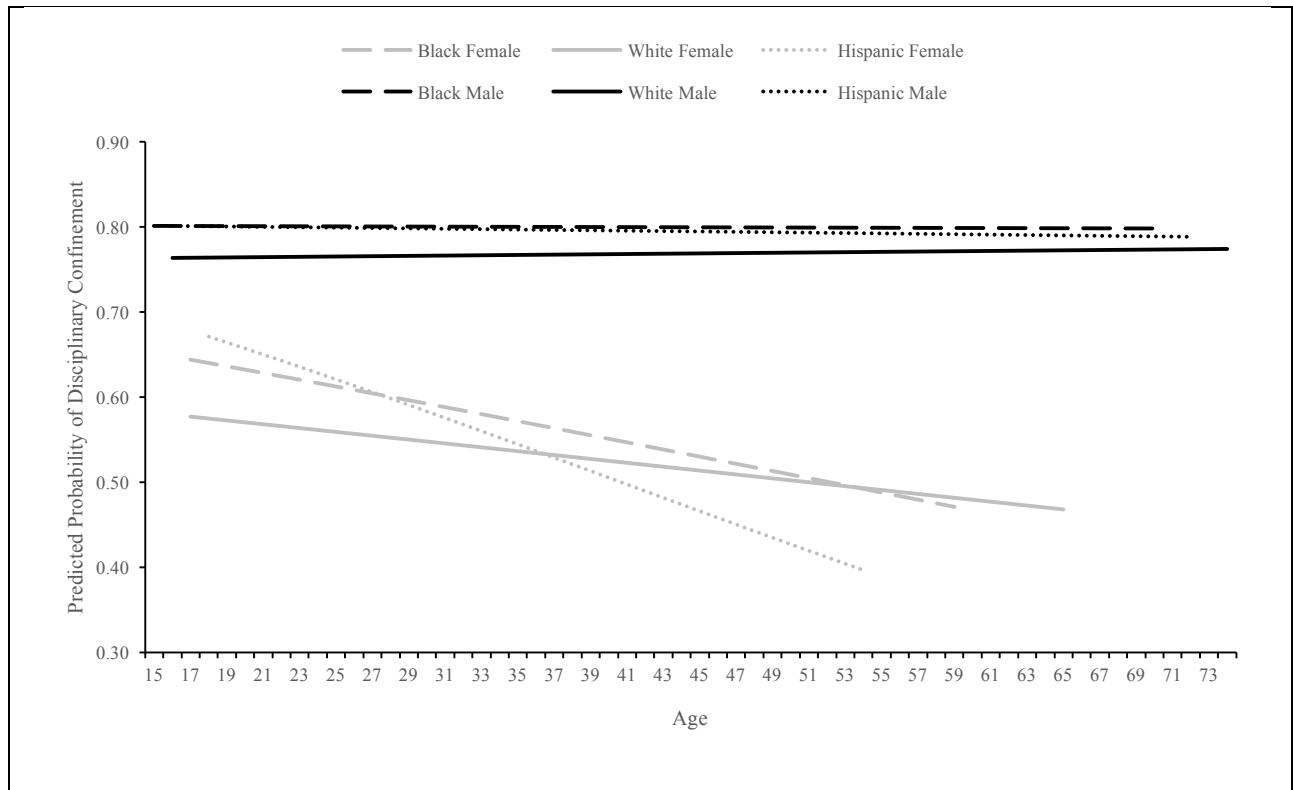
Notes: Black and primary offense - property serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

Figure 3.1 depicts the predicted probabilities, and 95 percent confidence intervals, of disciplinary confinement for violent (panel A) and nonviolent (panel B) males and females, while all other covariates are held at their mean value. Estimates are based on models 1 and 2 of table 5. A gender gap, which affords leniency for female inmates, emerges across both panels, but in line with the “evil woman” hypothesis is more pronounced among nonviolent inmates (panel B). More specifically, the gender difference in the predicted probability of receiving disciplinary confinement for violent inmates, shown in panel A, is only about 4 percent. This gap increases to a difference of about 32 percent for nonviolent inmates.



**Figure 3.1** Predicted Probabilities by Disciplinary Infraction Type and Gender, with 95% C.I.s

Last, and to examine the interaction term of model 3, figure 3.2 plots the predicted probabilities of receiving disciplinary confinement across gender, race/ethnicity, and age for nonviolent inmates while all covariates are held at their mean value.



**Figure 3.2** Predicted Probability by Gender, Race/Ethnicity, and Age for Nonviolent Infractions (Model 3)

Figure 3.2 reveals that the predicted probability of receiving disciplinary confinement is relatively high for all nonviolent inmates. Across all ages, nonviolent males are more likely to receive disciplinary confinement than nonviolent females. As suggested by the significant interaction term, older females receive relative lenient treatment. For example, the predicted probability of receiving disciplinary confinement for a nonviolent young Hispanic female is 0.67, which decreases to 0.40 for older Hispanic females. By comparison, the predicted probability for Hispanic males only decreases from 0.80 to 0.78 from the youngest age to the oldest. In response

to the second research question, the treatment of female inmates written up for a violent rule violation mirrors more closely the treatment of violent males. Nonviolent females are afforded relative leniency in comparison to their nonviolent male counterparts. However, there were no significant racial/ethnic effects within gender.

In sum, the findings indicate that females are afforded relative sentencing leniency, and that there appears to be little variation within gender along race/ethnicity and age lines. The lenient treatment of females remains consistent when examining violent and nonviolent offenses separately. Gender-specific sentencing theories suggest that a gender gap should be less apparent when examining violent misconduct, as this behavior goes against traditional gender “appropriate” behavior, than nonviolent misconduct (Nagel & Hagan, 1983; Rasche, 1975). Findings of this chapter lend support to this notion.

## **Discussion and Conclusion**

Gender and racial/ethnic disparities have been consistently identified in criminal justice sentencing trends (Bales & Piquero, 2012; Daly & Bordt, 1995; Doerner & Demuth, 2014; Nagel & Hagan, 1983; Spohn et al., 1987; Steffensmeier et al., 2016). Focal concerns theory argues that judges and prosecutors rely on perceptions of offender blameworthiness and dangerousness when making sentencing decisions, which often result in harsh treatment of young Black males (Steffensmeier et al., 1993; 1995; 1998). Sentencing, however, does not stop after an individual enters a correctional facility. Inmate behavior is strictly regulated, and failure to comply with prison rules can result in punishments. This chapter presented theoretical arguments informed by focal concerns, chivalry, and evil woman sentencing frameworks, and proposed that punishment trends behind prison walls will parallel those that occur in the criminal justice system.

Accordingly, the goal of this chapter was to determine whether gender and racial/ethnic disparities emerged in in-prison sentencing and answer two research questions. In terms of this first research question, there appeared to be differences in the types of punishment prison officials use in response to misconduct committed by males and females, but there was only limited variation within gender by race/ethnicity. At the same time, hypotheses derived from gender-specific sentencing theories, such as the evil woman perspective, appeared to hold behind prison walls. In response to the second research question, violent females were treated more similar to violent males, than nonviolent females compared to nonviolent males. There did not appear to be any variation within gender by race/ethnicity. Overall, four main findings emerged.

First, the overwhelming majority of inmates who committed an infraction were sentenced to disciplinary confinement. Virtually all prison violations in Florida carry a maximum penalty of disciplinary confinement (see Florida Administrative Code 33-601.314), and officers are inclined to use this penalty in nearly every instance. It is not against the administrative code to sentence an inmate guilty of even a very minor infraction—things like possessing unauthorized clothing and insufficient work—to disciplinary confinement. In an attempt to maintain a safe and orderly prison environment, it appears that correctional staff rely heavily on removing offenders from the general population within both male and female prisons.

Second, the leniency afforded to females in in-prison sentencing parallels criminal justice sentencing trends. Specifically, females received disciplinary confinement with less frequency and were more likely to receive a loss of gain time instead of disciplinary confinement. In line with gender-specific sentencing theories, the leniency gender-gap was more pertinent among nonviolent than violent inmates. Theoretical arguments suggest that female inmates who break

with gender “appropriate” behavior by acting violently are sentenced more similarly to males, and the analyses in this chapter supported such a pattern.

Third, several racial/ethnic differences emerged. Hispanic inmates were more likely to receive disciplinary confinement than non-Hispanic inmates, Black inmates were less likely to receive a loss of gain time over disciplinary confinement, and both violent and nonviolent Black inmates were more likely to receive disciplinary confinement than White inmates. All race/ethnicity effects however, were substantively modest in size. There also appeared to be little variation within gender by race/ethnicity and age, which runs contrary to suggestions of focal concerns theory. The exception was that among nonviolent female inmates age appeared to act as a protective factor against harsher punishments. Older females, regardless of race/ethnicity, were less likely to receive disciplinary confinement than younger females. The lack of an intersectional finding is in line with prior research that focuses on the use of solitary confinement (Butler & Steiner, 2017; Cochran et al., 2017; see however Chowdhury, 2016<sup>7</sup>) and extends this body of work by confirming this finding in the use of other in-prison punishments.

Fourth, and not least, the findings of this chapter highlight the importance of legal factors. The type of infraction was the strongest predictor of the type of sentence an inmate received. This parallels the results of previous studies of in-prison sentencing, which find that infraction type matters when sentencing inmates to disciplinary confinement (Butler & Steiner, 2017; Cochran et al., 2017) and when removing good time (Steiner & Cain, 2017).

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<sup>7</sup> Chowdhury (2016) finds a significant gender and race interaction in the likelihood of receiving disciplinary confinement. However, the study does not include controls for legal variables, such as the type of infraction, which have been identified as confounders of in-prison sentencing.

## **Implications for Theory and Research**

Results of this chapter highlight critical implications for theory and research. Although focal concerns theory was only partially supported, gender-specific sentencing theories appeared to hold behind bars. Extra-legal variables affected sentencing in prison to the extent that women were afforded leniency, but this leniency was lessened in sentencing of violent females. There appeared to be only modest variation within race/ethnicity, which may indicate that the perceived blameworthiness and dangerousness of Black and Hispanic offenders operates differently behind bars than what focal concerns theory would suggest. It is, for example, possible that corrections officers view Black and Hispanic inmates relatively similar to White inmates due to their inmate status. Alternatively, inmates' race/ethnicity may not play a role in in-prison sentencing at all and prison staff may rely on different characteristics to inform sentencing decisions.

There are several theoretically important considerations for future research, which may affect in-prison sentencing decisions and gender and racial/ethnic variation, but which were unavailable in the dataset used in this chapter. For example, in-prison gang affiliation constitutes a common concern for prison administrators, and it is plausible that inmates who are known gang members may be more likely to be formally charged with misconduct and sentenced to disciplinary confinement (see e.g., Huebner, 2003; Pyrooz, 2016). At the same time, it is possible that there is gender and racial/ethnic variation in how gang members are perceived by corrections officers, and that this may impact the formal and informal treatment of inmates. Similarly, inmates with mental illness have been identified as being at a greater risk of spending time in restrictive housing (Beck, 2015). More research is needed that can better disentangle the relationship between mental health status, inmate misconduct, and officers' reactions to and treatment of mentally ill inmates. Thus, future data collection efforts may benefit from a focus on gang affiliation and mental health.

The findings of this study also provide incentive for future research to explore the views of officers who make up the tribunals in charge of sentencing inmates. Future research should determine whether the gender disparities identified here are due to stereotypical views of female blameworthiness and dangerousness held by prison decision makers, practical constraints, differences between male and female prisons, or whether they are inherent to how officers are trained to deal with male and female inmates. It is possible, as suggested by Britton (1997) that officers are instructed to view work in male and female prisons as inherently different, even though institutions claim that training is gender-neutral. To this end, qualitative and mixed-methods surveys, which build on the findings of this chapter and that can discern officer views of male and female rule-violating inmates are needed.

Because legal factors appeared to be the driving force behind in-prison punishment, it is possible that disparities emerge during the earlier phase of sentencing. Corrections officers largely have discretion in deciding which type of violation an inmate is written up for (Liebling, 2000), and so the actual sentence may be given out when an officer writes up an inmate. This may account for the modest race/ethnicity effect identified in this chapter, and so the findings here do not necessarily speak against the existence of racial tension in the prison. Indeed, prior research suggests that there is a considerable amount of racial tension both among inmates and between inmates and prison staff (Jacobs, 1979; Richmond & Johnson, 2009; Walker, 2016). The results uncovered in chapter 2—higher rates of formal misconduct among male and Black and Hispanic inmates—raise some concern, as it is possible the discriminatory race/ethnicity effects begin at this earlier stage. Thus, while there was only a modest effect of race/ethnicity on sentencing, it is possible that race/ethnicity operates indirectly through the type of infraction an officer chooses to write an inmate up for.



Prior studies have also indicated that prison characteristics and level 2 factors not available in the dataset used in this chapter, can influence inmate behavior and adjustment (Steiner & Wooldredge, 2008; Wooldredge, Griffin, & Pratt, 2001). Informed by this body of research and the findings of this chapter, scholars should explore aspects such as the gender and racial/ethnic make-up of the corrections force relative to the make-up of the prison population, as there is evidence to suggest that this may influence treatment of inmates (Wade-Olson, 2006). This may be a difficult task as the population of inmates and staff are in constant flux, so capturing these prison-level factors across time can be problematic.

Not least, future research should examine whether the various forms of in-prison punishment assessed here have implications for future in-prison misconduct and recidivism once an inmate is released from prison. Prison staff and administrators use punishments with the primary goal of maintaining order and safety within their facility. However, only little is known about the effectiveness of various punishments used by prison staff. Preliminary evidence suggests that disciplinary confinement, for example, is not a viable deterrent of future in-prison misconduct (Labrecque, 2015; Lucas & Jones, 2017; Morris, 2016). More research is needed that confirms these results, and also examines the use of other in-prison punishments that may provide more useful alternatives to establishing order and safety in the prison environment.

### **Implications for Policy**

Last, several policy implications merit further discussion. The most commonly used punishment in Florida prisons is what is arguably the harshest form of punishment, disciplinary confinement. Florida's Administrative Code 33-601.314 (Rules of Prohibited Conduct and Penalties for Infractions) includes 104 prohibited behaviors, all of which carry *at least* a 10-day disciplinary confinement sentence. It is possible that corrections officers rely most heavily on

disciplinary confinement, because other sanctioning options (e.g., loss of gain time, assignment to extra work duty, privilege suspension, etc.) do not provide viable alternatives. For example, Florida's 85 percent law leaves officers with only a certain amount of gain time that can be taken away, which may make this sanction ineffective due to its limited capacity to impact inmates. At the same time, there are only a limited amount of work assignments in any given prison facility and this can restrict the availability of this punishment. This has implications for prison policy makers, who should consider implementing viable alternatives to disciplinary confinement.

The implications for prison order, safety and the wellbeing of inmates of such widespread use of disciplinary confinement are also relatively unknown. This leaves open the question of whether this type of penalty is more adverse for inmates, especially those guilty of minor infractions, than it is beneficial in promoting order and safety within the facility. Policy makers concerned with improving the prison environment should revisit such administrative policies to determine whether the use of harsh penalties like disciplinary confinement is necessary in most instance of misbehaviors. If disciplinary confinement might be determined as ineffective, this provides additional impetus for policy makers to seek alternative sanctions and make these more readily available.

Finally, most inmates who serve time in prison will eventually return to their communities. Trends in reentry indicate that at least 95 percent of inmates incarcerated in state prisons will be released (Hughes & Wilson, 2002). Prison administrators must consider the costs and benefits of the in-prison punishments commonly used within their facilities, and should develop policies, and punishments, that better serve the inmate population and ensure fair and equitable treatment, and the larger community to which most inmates will return.

**CHAPTER FOUR:**  
**ASSESSING THE EFFECTIVENESS OF IN-PRISON PUNISHMENTS FOR**  
**FEMALES AND MALES**

**Introduction**

Reducing inmate violence is a critical mechanism to maintaining prison social order. Correctional officers use in-prison sanctions, at least in part, to punish inmate misbehavior and deter inmates from future misconduct.<sup>8</sup> Although only a handful of studies examine the impact of in-prison punishments on future misconduct, the literature assessing the effect of criminal justice sanctions on behavioral outcomes is voluminous and helps to inform in-prison research (Bales & Piquero, 2012; Lipsey & Cullen, 2007; MacKenzie, 2006; Petersilia, Turner, & Peterson, 1986; Smith & Akers, 1993; Spohn & Holleran, 2002). This scholarship suggests that harsher sanctions, such as imprisonment, work no better than more lenient community-based punishments at reducing criminal behavior (Nagin, Cullen & Jonson, 2009; Petersilia, Turner, Kahn, & Peterson, 1985; Spohn & Holleran, 2002). There also appears to be only little variation in the deterrent effect of harsh punishments for men and women (Bales & Piquero, 2012; Mears,

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<sup>8</sup> It is possible too that corrections officers use in-prison sanctions for many other reasons. For example, disciplinary confinement may be used to temporarily incapacitate rowdy inmates. Retribution may provide another motivation for officers to sanction inmates with harsh punishments. This may be the case if the misconduct was aimed at a corrections officer (e.g., lying to staff, disobeying orders, assault of staff, etc.). Finally, while sanctions such as disciplinary confinement may be intended as a specific deterrent, it is also possible that officers use punishments to deter the general inmate population from misbehavior. The literature discussed in this chapter thus, serves as only one lens through which in-prison punishment may be understood.

Cochran, & Bales, 2012; see however, Pelissier et al., 2003), and only some research finds racial/ethnic differences in the ability of punishments to deter crime (Dejong, 1997; Wood & May, 2003; see however, Crank & Brezina, 2013).

The effectiveness of in-prison punishments is largely unknown. Researchers who have explored the consequences of in-prison sanctions—typically just focusing on disciplinary confinement—find little evidence of a deterrent effect, and instead reveal unintended harms to mental health (Arrigo & Bullock, 2008; Labrecque, 2015; Lucas & Jones, 2017; Haney, 2003; Morris, 2016). There is also theoretical reason to anticipate that in-prison punishments either have no effect at all, or spur on future deviance. Inmates may not be responsive to in-prison sanctions. The risk of severe punishments may be an ineffective method for reducing crime (Mears & Reisig, 2006). Sanctions may also not be perceived as fair, because officers may rely exclusively on harsh punishments. Punishments, in turn, lose legitimacy and may not act as a deterrent of inmate misbehavior (Sherman, 1993; Tyler, 1990). Female inmates, typically housed in facilities with fewer programming options (Holsinger, 2014), may be skeptical of in-prison sanctions. And Black and Hispanic inmates, who may be subjected to racial/ethnic discrimination by the justice system generally and the corrections system specifically, may view punishments as lacking legitimacy and so may not be deterred by in-prison sanctions (Jacob, 1971; Rocque, 2011; Weitzer & Tuch, 1999). It is also possible that sanctions exacerbate the pains of imprisonment and increase the likelihood of maladaptive behaviors (Sykes, 1958). The effect of added pains of imprisonment may also differ in their effect on males and females.

The relative dearth of research on in-prison sanctions and their impacts on in-prison behavior is a critical oversight for at least four reasons (Frost & Monteiro, 2016; Mears, 2016; Shames, Wilcox, & Subramanian, 2015; Steiner & Cain, 2016). First, the primary goal of prison

systems is to maintain safety and order, and in-prison sanctions stand as the leading mechanism through which prisons might do so (DiIulio, 1990). Yet, there are only few empirical assessments of how effectively punishments work. Second, research indicates that punishments like disciplinary confinement incur considerable adverse impacts (Arrigo & Bullock, 2008; Haney, 2003; Kapoor & Trestman, 2016). Thus, it is critical to know how potential harms compare to any appreciable benefits, such as reduced violence or order violations. Third, we have only limited to no understanding of the conditions under which in-prison sanctions are more or less effective, including whether punishments exert variable impacts on male versus female inmates. Prior theory and research anticipate these and other differences. Fourth, and not least, we know little about the relative effectiveness across in-prison sanctions, including differences in the effects of disciplinary confinement, loss of gain time, and extended work duty.

Accordingly, the goal of this chapter is to address these research gaps by providing a systematic assessment of the effect of in-prison punishments on future misconduct. This chapter will examine the effect of the first in-prison punishment, focusing on the consequences of Florida's three most common sanctions: disciplinary confinement, loss of gain time, and assignment to extra work duty. It is theorized that coercive sanctions serve not as a deterrent, but rather as an added pain of imprisonment, which likely increases future misconduct, including violent behavior and order violations. This chapter also discusses the possibility that women, and Black and Hispanic inmates, are irresponsive to sanctions that increase the strains of severed social connectedness and those that exacerbate strains associated with unattended mental health and substance abuse problems. Towards this goal, this chapter uses data on in-prison sentencing from the Florida Department of Corrections (FDOC) Custody Assessment and Reclassification System (CARS), and examines a series of multilevel logistic and survival analyses.

The chapter proceeds in the following order. I begin with a brief overview of the theories behind the effect of criminal justice sanctions on future behavior, including deterrence and defiance perspectives. Based on insight of these theories, I then provide a discussion of the anticipated effects of in-prison punishments on future behavior, and examine potential theoretical reasons as to why gender and racial/ethnic differences might emerge in these effects. Next, I provide an overview of this chapter's research questions, followed by a description of the data and analytic techniques. The chapter concludes with an overview of the findings, and a discussion of theoretical, research, and policy implications of the results.

### **Deterrence, Defiance, and Criminal Justice Sanctions**

Much of our punishment policies are informed by the simple idea that individuals who receive tougher sanctions will be less likely to commit future crimes (Garland, 2001; Lynch, 1999; Tonry, 2009). This logic stems from deterrence theory, which assumes that humans are rational actors and suggests that criminal sanctions work to reduce crime by increasing individuals' perceived costs of breaking the law (Beccaria, 1764; Bentham, 1789; Cullen, Jonson, & Nagin, 2011; Nagin, 2013; Stafford & Warr, 1993; Tittle, 1969). However, recent assessments of punishment policies suggest limited support for deterrence principles. For example, imprisonment, which can be conceptualized as one of the most severe sanctions available, generally does not deter crime as would be anticipated, and can even have a criminogenic effect (Cullen et al., 2011; Nagin et al., 2009; Spohn & Holleran, 2002).

In contrast to deterrence theory, defiance theory argues that in some instances, tough punishments may have the opposite impact—they may increase the likelihood of future crime (Piquero & Bouffard, 2003; Sherman, 1993). The logic of defiance theory suggests that sanctions do not deter crime if viewed as unfair. Perceptions of fairness can decrease if the

sanctioning agent behaves disrespectfully to the individual being sanctioned (Sherman, 1993). A punishment will also not act as a deterrent if it is viewed as arbitrary, discriminatory, or excessive (Sherman, 1993). Empirical assessments of defiance theory support the tenets of the perspective, and sanctions perceived as unfair tend to diminish deterrent effects (Augustyn & Ward, 2015; Bouffard & Piquero, 2010; Sherman, 2014).

In short, a growing body of research finds mixed evidence for how typical sanctions, like imprisonment, impact future behavior. Limited research exists that focuses on formal punishments that occur *inside* prisons. Below, I construct an argument that a parallel body of research is needed that examines the extent to which in-prison punishments work effectively to reduce future violence and misconduct. Empirical studies are needed to test whether sanctions like placing inmates in disciplinary confinement decrease or increase the likelihood of future infractions during incarceration and whether these effects vary across gender, race, and ethnicity.

### **The Deterrent Effect of In-Prison Punishments**

A growing body of literature examines the best practices for maintaining a safe and orderly prison (Colvin, 1992; DiIulio, 1990; Reisig & Mesko, 2009). To this end, deterrence theory suggests that there are benefits to in-prison punishments, because they increase perceptions of the costs of misconduct relative to any benefits (Grasmick & Bryjak, 1980; Mears & Reisig, 2006; Nagin, 2013; Nagin & Pogarsky, 2001). Administrative control models of prison management also suggest that in-prison punishments will deter misbehavior, and prisons that enforce institutional rules should have lower rates of misconduct (DiIulio, 1990; Reisig & Mesko, 2009). Prison officials too believe that in-prison sanctions, especially those that move inmates from general population into segregation are the best way to deter inmates from misbehaving (Hammel, 2017; Mears & Reisig, 2006). In sum, deterrence theory and

administrative control models suggest that in prison punishments provide a useful mechanism to maintaining order and safety in the prison environment.

### **The Legitimacy Problem of In-Prison Punishments**

Theory and limited prior research suggest that in-prison punishments do not serve their deterrent purpose. In-prison sanctions may not be a deterrent due to limited legitimacy caused by a breakdown in institutional effectiveness, strained inmate-staff relationships, and an uneven balance between remunerative and coercive control tactics (Crewe, 2011; Huebner, 2003; Smith & Schweitzer, 2014; Steiner & Meade, 2014; Useem & Kimball, 1989; Wooldredge & Steiner, 2016). Inmates who are disproportionately exposed to negligent or abusive correctional officers may come to view in-prison sanctions as lacking legitimacy and as unfair (Christie, 2017; Dickson, 2016; Noonan, Rohloff, & Ginder, 2015), resulting in reduced effectiveness of the punishments. The punitive shift in prison policies, which have moved away from a goal of rehabilitation and towards a simple control objective, coupled with the financial standings of many prisons can result in fewer correctional programming and treatment opportunities available to inmates (Smith & Schweitzer, 2014; Steiner & Meade, 2014). This means that prison staff must rely more heavily on punishments to control inmate behavior. Such an uneven balance can negatively affect misconduct by decreasing views of legitimacy.

In-prison punishments may also not have a deterrent effect because the threat of harsh punishments may be an ineffective method for reducing inmate misconduct (Mears & Reisig, 2006). If individuals are aware of the consequences of crime on the outside, inmates on the inside have already indicated that a threat of a sanction—incarceration—does not deter them from criminal behavior. National recidivism statistics indicate too that most inmates will reoffend after release (Durose, Snyder, & Cooper, 2015). In turn, imprisonment either does not



act as a turning-point away from crime (Pettit & Western, 2004; Sampson & Laub, 1993), or the threat and exercise of punishment is simply not enough to deter from misbehavior.

### **In-Prison Punishments as Added Pains of Imprisonment**

The deprivation hypothesis suggests that pains of imprisonment such as the loss of liberty and autonomy increase inmate misconduct (Sykes, 1958; Sykes & Messinger, 1960). Alongside the traditional burdens of imprisonment, in-prison sanctions can cause and exacerbate other sources of pains, including those that affect mental health and social ties. There is some evidence to suggest, for example, that disciplinary confinement can aggravate mental illness, and even be the cause of depression, post-traumatic stress disorder, and anxiety (Arrigo & Bullock, 2008; Grassian, 2007; Haney, 2003; Jackson, 2001). These findings are especially concerning in light of research indicating that inmates with self-reported mental health problems are also more likely to report misconduct (James & Glaze, 2006). Misinterpreting behavioral problems as misconduct, or inducing mental health problems through in-prison punishments, may not constitute a viable method to reducing inmate misconduct.

Existing empirical research also indicates that in-prison sanctions typically do not emerge as effective ways to reduce inmate misconduct (Beijersbergen et al., 2015; Huebner, 2003). For example, Huebner's (2003) analysis of male inmates finds that coercive control techniques such as losing work assignments and other privileges in response to rule violations does not deter misconduct. Disciplinary confinement sanctions have also not been linked to a decrease in future inmate misconduct (Labrecque, 2015; Lucas & Jones, 2017; Morris, 2016). However, to date the body of literature concerning the effectiveness of in-prison punishments is inconclusive.

## **The Effectiveness of In-Prison Punishments for Males and Females**

There are theoretically important gender and racial/ethnic differences in how prison is experienced that may have implications for the deterrent effect of in-prison punishment. For example, there may be some variation among males and females in their willingness to change antisocial behaviors in response to punishment once they enter prison. Power control theory argues that family mechanisms, based on patriarchal positions of authority, instill risk-averse traits in females (Hagan et al., 1985; 1987). Prison staff and administrators often assume that female inmates are not “properly” socialized, and so take it upon themselves to instill notions of “femininity” (Giallombardo, 1966a; McCorkel, 2006). This may mean that women who were not amenable to threats of punishment prior to imprisonment, may become so during incarceration where “proper” feminine behavior, like risk-averseness, is instilled and rewarded.

The ratio of remunerative and coercive control tactics is not equally dispersed among male and female correctional facilities. Typically, female prisons lack treatment and programming opportunities, and prison staff often mismatch inmates’ needs with programming assignments (Holsinger, 2014; Holtfreter & Morash, 2003; Marcus-Mendoza, Klein-Saffran, & Lutze, 1998). This uneven balance can lead to an overreliance on punishments to control inmate behavior and can leave mental or physical needs unattended. In turn, female inmates’ views of legitimacy of their treatment in the prison context may be attenuated, which may render punishments as ineffective in curbing misconduct (Bosworth, 1996; Tyler, 1990).

### **Management Differences and Gendered Effects of In-Prison Punishments**

Prior research highlights some of the important complexities surrounding gender differences in incarceration experiences and, specifically, with prison management strategies and effectiveness. Wooldredge and Steiner (2016) suggest that correctional officers working in

female prisons rely more heavily on referent power than coercive power. The level of respect female inmates may hold for prison staff potentially increases the perceived legitimacy of in-prison punishments. That is, the unique management strategies that characterize female facilities may increase the legitimacy of prison staff in the eyes of female inmates, which may make them more likely to perceive prison treatment as fair and equitable.

At the same time, views of legitimacy may be lower among Black and Hispanic inmates than White inmates, because the correctional system relies on implicitly racially biased policies and practices which can make the system appear unfair by design (Bobo & Thompson, 2006; Hemmens & Stohr, 2014). Furthermore, Hemmens and Marquart (2000) find that among males, Black inmates are more likely to report that prison guards use excessive levels of force. Studies also show that race plays an important role in correctional officers' decisions to use coercive tactics to gain compliance, and Black inmates are typically exposed to higher levels of such tactics (Marquart, 1986). Disproportionate use of excessive force and coercive tactics can attenuate minority inmates' perceptions of legitimacy of in-prison sanctions, and these may become ineffective in reducing inmate misconduct.

### **Gender Differences in the Pains of Imprisonment**

There is reason to anticipate gender and racial/ethnic differences based on the deprivation model of inmate behavior. The pains of imprisonment differ by gender, and any added pains may similarly differ in their effect on males and females. Rates of mental illness and substance abuse, for example, are not evenly dispersed among the inmate population. A Bureau of Justice Statistics report shows that 73 percent of female inmates compared to 55 percent of males have mental health problems (James & Glaze, 2006). The larger proportion of female inmates with mental health problems may mean that there will be a larger portion of females who will have

mental health issues mistaken for behavioral problems by prison staff. It is also likely then that a larger proportion of female inmates with mental health problems will be subjected to in-prison punishments, which can exacerbate these problems and lead to criminogenic outcomes (Arrigo & Bullock, 2008; Haney, 2003; James & Glaze, 2006). In short, the behavior of a larger proportion of female inmates may be mistaken for misbehavior, and so a greater portion of women with mental health problems will be punished instead of treated, which in turn may exacerbate the criminogenic effect of in-prison sanctions.

Maintaining social ties may be more important for female inmates and Black and Hispanic inmates, who are more likely to be primary caretakers of minors (Glaze & Maruschak, 2010). An estimated 62 percent of women in prison are mothers to minor children, compared to half of incarcerated males, and more than half of Black and Hispanic inmates and about 46 percent of White inmates are parents (Glaze & Maruschak, 2010). In addition, there exist fewer female facilities across the nation, and correctional facilities tend to be in rural locations. This means that women, and Black and Hispanic individuals, will be more likely to be housed further away from their families (Holsinger, 2014; Hemmens & Stohr, 2014). Removal of social ties through in-prison punishments (e.g., placement in to disciplinary confinement, loss of gain time) can exacerbate the pain of being disconnected from important bonds within the family, and disproportionately affect women and Black and Hispanic inmates. This may render the effect of in-prison punishments as especially unsuccessful for these inmate subgroups.

The results of this chapter will have critical implications for theory, research, and policy. The findings may show that the use of severe sanctions is linked to decreased likelihoods of misconduct in the future, which may suggest that, despite potential harms, harsh in-prison punishments may have appreciable impacts on improving prison safety. They may have a

specific deterrent effect. The results may also suggest that harsh in-prison punishments act as a deterrent among males but not females, which would call in to question gender-neutral in-prison sanctioning policies. If the analyses do not find such an effect, it suggests a failure happens, that specific deterrence may not happen and that current sanctioning practices may be otherwise ineffective. If the findings suggest that it increases misconduct, still a failure occurs. It would also suggest, arguably, support for defiance theory. Finally, if the results show that harsh punishments increase misconduct among females, or Black and Hispanic inmates, it would suggest that the correctional setting may be biased toward these inmate subgroups. Because any potential results have implications for prison order and safety, research is needed that examines whether in-prison punishments have any appreciable benefits and reduce inmate misconduct.

### **This Chapter**

The goal of this chapter is to assess whether commonly used in-prison sanctions affect the likelihood and timing to future misconduct and to examine whether this effect varies between males and females and within gender by race/ethnicity. The analyses presented below are a direct answer to a call for research that examines the effectiveness of in-prison sanctions (Butler & Steiner, 2017; Weisburd & Chayet, 1989). This chapter asks two research questions.

*Research Question 1:* Do harsh in-prison sanctions reduce inmate misconduct more than lenient sanctions?

The analyses will focus on the likelihood and timing to misconduct that occurs after the first sanction has been received. Insights from defiance theories suggests that harsh sanctions, such as disciplinary confinement, will be no more of a deterrent than more lenient sanctions, such as

losses of gain time. On the other hand, prison literature suggests that assignment to extra work duty may have a deterrent effect, as it can be conceptualized as remunerative control.

*Research Question 2:* Does the effect of in-prison sanctions on future misconduct vary by gender, and within gender does it vary by race/ethnicity?

The analyses will center on the interactive effects of gender, race/ethnicity, and punishment type on the likelihood and timing to future misconduct. This research question is informed by the power-control hypothesis, defiance theory, and the deprivation perspective of inmate adjustment. Insights from these perspectives suggest that females, and Black and Hispanic inmates, will be less deterred by harsh sanctions, and that punishments may take on a criminogenic effect.

## **Data and Methods**

The analyses for this chapter use data from the Florida Department of Corrections (FDOC) Custody Assessment and Reclassification System (CARS), and include a sample of inmates incarcerated between July 1, 2005 and December 30, 2011, who have received an in-prison punishment in response to their first disciplinary infraction. The data include longitudinal information on inmates' demographic profile, criminal history, official in-prison disciplinary record, and the corresponding administrative response. To examine the effect of in-prison punishments on future misconduct and to account for the nested nature of the data, multilevel logistic regression and survival analyses are used. The logistic regression models are restricted to inmates who have served their entire sentence, and include 77,890 inmates, nested in 167

facilities. Survival analyses account for right-hand censoring and so the sample is not restricted to inmates who have served their entire sentence (n = 88,522).<sup>9</sup>

*Dependent variables.* The focus of this chapter is on misconduct that occurs after an inmate has received a punishment for the first infraction. Six dependent variables are utilized to measure the ensuing misconduct. Three are dichotomous indicators of subsequent infractions, separated into general misconduct (vs. no future misconduct), violent misconduct (vs. nonviolent), and nonviolent misconduct (vs. violent). The second set of dependent variables measure the number of days between the first in-prison sanctioning event and the next instance of misconduct, violent misconduct, and nonviolent misconduct.

*Independent variables.* The analyses use a dichotomous indicator of gender (0 = female, 1 = male), and three indicators measuring race/ethnicity, including Black (reference), White, and Hispanic. Three measures of in-prison punishment that are associated with an inmate's first instance of misconduct constitute the other key independent variables. The first is an indicator of disciplinary confinement, and inmates are coded "1" if they received disciplinary confinement, and "0" if they received a lesser sanction. To examine the effect of more lenient sentences on future misconduct, the analyses include a measure of loss of gain time (vs. disciplinary confinement) and assignment to extra work duty (vs. disciplinary confinement).

Prior prison research indicates that past misconduct influences the likelihood of future misconduct (Drury & DeLisi, 2010), so the analyses include eight dichotomous indicators of the first infraction type, including violent, sex, property, disorder, defiance (reference), regulation violation, contraband, and drug. The total number of charges associated with the first type of

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<sup>9</sup> While the survival analyses tables presented below indicate a sample size of 77,890, the analyses account for the total number of observations (n = 88,522) to include inmates who are still incarcerated.

infraction are also included. Other covariates include educational attainment (0 = less than high school, 1 = high school degree or more), marital status (0 = single, 1 = married), and religiosity (0 = not religious, 1 = religious). Five dichotomous measures indicate inmates' primary offense type: violent, property (reference), drug, sex, and other. The analyses also include information on whether inmates are designated habitual offenders or violent habitual offenders by the court, and whether the primary offense was committed to support a substance habit. The sentencing guidelines score is also included. Chapter 2 provides a detailed discussion of these variables. A measure of inmates' sentence length in months, the time served at the time of the first infraction measured in months, and the count of prior prison commitments are included.

*Analyses.* A series of multilevel logistic regression and survival analyses are used to assess the likelihood of, and timing to, subsequent misconduct. The dichotomous dependent variables are examined in the logistic models and the time variables constitute the outcome of the survival analyses. To account for the nested nature of the data and the associated statistical problems (e.g., underestimated standard errors), multilevel analyses are used where facilities are the level 2 unit of analysis and inmates are the level 1 unit of analysis (Kreft & de Leeuw, 1998). The multilevel survival analyses use a Weibull distribution, which is commonly used in the case of censored survival data and is especially useful in this case, where the number of days until a second disciplinary infraction occurs is examined and where there is right censoring (Austin, 2017; Farewell, 1982; Mudholkar, Srivastava, & Kollia, 1996; StataCorp, 2015). Within each model, the main effect of gender, race/ethnicity, and sanction type, the two-way interaction between gender and sanction type, and the three-way interaction between gender, race/ethnicity, and sanction type are explored. This allows the analyses to examine whether there is an effect of in-prison punishment on future misconduct, whether this effect varies by gender, and whether it



varies within gender by race/ethnicity. To conserve space, only significant interactions are presented below. If the interaction models did not reach significance, only the main effect of gender, race/ethnicity, and type of sanctions are displayed.

## **Findings**

Descriptive statistics for the full sample are presented in table 4.1. About 91 percent of the sample is male. The average age is about 30 years. The majority of the sample is Black, 38 percent are White, and 10 percent are Hispanic. About a third of the sample reports at least a high school education, 6 percent are married, and 83 percent are religious. The most common primary offense is a property offense. 8 percent of the sample is a court designated habitual offender, 1 percent are violent habitual offenders, and 19 percent committed a crime to support a substance habit. The average sentence length is 66 months, inmates have been incarcerated on average one prior time, and the typical inmate in this sample committed their first infraction after 6 months of incarceration. The most common first disciplinary infraction type is a defiance infraction, and as was identified in chapter 3 disciplinary confinement is the most commonly used in-prison sanction in response to the first infraction. More lenient sanctions are used with less frequency. 12 percent of the sample received a loss of gain time and 19 percent were assigned to extra work duty.

Over two thirds of inmates incurred a second infraction after receiving a punishment for their first. Most second infractions are nonviolent, and about 11 percent are violent. Across the sample, a second infraction is likely to occur within 192 days or approximately 6 months of receiving the first in-prison punishment. A violent infraction occurs on average, about two weeks earlier than a nonviolent infraction.

**Table 4.1** Descriptive Statistics (n = 77,890)

	Mean	SD	Min	Max
Male	0.91	0.29	0	1
Age	29.96	10.09	14	76
Black	0.52	0.50	0	1
White	0.38	0.49	0	1
Hispanic	0.10	0.30	0	1
High School	0.28	0.45	0	1
Married	0.06	0.24	0	1
Religious	0.83	0.37	0	1
<i>Primary Offense</i>				
Violent	0.28	0.45	0	1
Property	0.30	0.46	0	1
Drug	0.25	0.43	0	1
Sex	0.04	0.20	0	1
Other	0.13	0.34	0	1
Habitual Offender	0.08	0.27	0	1
Violent Habitual Offender	0.01	0.10	0	1
Crime to Support Habit	0.19	0.39	0	1
Sentencing Guidelines Score	5.53	2.27	1	10
Sentence Length (Months)	65.59	99.15	12	600
Prior Prison	0.87	1.48	0	15
Time Served at First Infraction	6.40	6.64	0	72
<i>First Disciplinary Infraction Type</i>				
Violent	0.11	0.31	0	1
Sex	0.02	0.15	0	1
Property	0.04	0.20	0	1
Disorder	0.12	0.32	0	1
Defiance	0.37	0.48	0	1
Regulation Violation	0.18	0.38	0	1
Contraband	0.12	0.32	0	1
Drug	0.04	0.20	0	1
Total Charges	1.05	0.25	1	10
<i>Sanction Type for First Infraction</i>				
Disciplinary Confinement	0.67	0.47	0	1
Loss in Gain Time	0.12	0.32	0	1
Extra Work	0.19	0.39	0	1
<i>Second Disciplinary Infraction Type</i>				
Any	0.66	0.47	0	1
Violent	0.11	0.32	0	1
Nonviolent	0.89	0.32	0	1
<i>Days until Second Infraction</i>				
Any	192	270	1	2280
Violent	180	256	1	2206
Nonviolent	194	272	1	2280

## The Effect of Disciplinary Confinement on Future In-Prison Misconduct

The analyses turn next to a series of multilevel logistic regression and survival analyses.

Table 4.2 explores the effect of disciplinary confinement on the likelihood of a subsequent infraction (model 1), a violent infraction (model 2, 2a), and a nonviolent infraction (model 3, 3a).

**Table 4.2** Mixed Effects Logistic Regression of Types of Second Disciplinary Infraction on Measures of First Disciplinary Confinement Sanction (vs. Lesser Sanction) and Inmate Characteristics (n = 77,890 inmates nested in 167 facilities)

	Model 1 Any DI			Model 2 Violent DI			Model 2a Violent DI		
	b	SE	OR	b	SE	OR	b	SE	OR
<i>Interactions</i>									
DC x Male	-	-	-	-	-	-	0.219*	0.11	1.245
<i>Covariates</i>									
DC	0.019	0.02	1.019	0.130***	0.04	1.138	-0.066	0.10	0.937
Male	0.170	0.14	1.186	-0.086	0.16	0.918	-0.206	0.17	0.814
White	-0.206***	0.02	0.814	-0.244***	0.03	0.784	-0.245***	0.03	0.783
Hispanic	-0.159***	0.03	0.853	-0.016	0.05	0.984	-0.016	0.05	0.984
Age	-0.040***	0.00	0.961	-0.011***	0.00	0.989	-0.011***	0.00	0.989
High School	-0.105***	0.02	0.901	-0.015	0.03	0.985	-0.016	0.03	0.984
Married	-0.159***	0.03	0.853	-0.111	0.07	0.895	-0.112	0.07	0.894
Religious	-0.058*	0.02	0.944	-0.062	0.04	0.940	-0.062	0.04	0.940
Prim. Off. - Violent	-0.022	0.02	0.978	0.145***	0.04	1.156	0.145***	0.04	1.156
Prim. Off. - Drug	-0.251***	0.02	0.778	-0.165***	0.04	0.848	-0.166***	0.04	0.847
Prim. Off. - Sex	0.066	0.05	1.068	0.129	0.08	1.137	0.129	0.08	1.138
Prim. Off. - Other	-0.033	0.03	0.968	0.033	0.05	1.034	0.033	0.05	1.034
Habitual Offender	0.298***	0.04	1.347	0.161**	0.06	1.175	0.161**	0.06	1.175
Violent Habitual	0.351**	0.10	1.421	0.259*	0.12	1.295	0.260*	0.12	1.297
Support Habit	0.011	0.02	1.011	-0.049	0.04	0.952	-0.050	0.04	0.952
SGL Score	0.087***	0.00	1.091	0.032***	0.01	1.033	0.033***	0.01	1.033
Sentence length	0.009***	0.00	1.009	0.001***	0.00	1.001	0.001***	0.00	1.001
Prior Prison	0.119***	0.01	1.126	0.075***	0.01	1.078	0.075***	0.01	1.078
Time Served	-0.056***	0.00	0.946	-0.020***	0.00	0.980	-0.020***	0.00	0.980
<i>First DI by Type</i>									
Violent	0.011	0.03	1.011	0.337***	0.04	1.401	0.338***	0.04	1.402
Sex	0.173**	0.06	1.188	-0.259**	0.10	0.772	-0.263**	0.10	0.769
Property	-0.020	0.04	0.980	0.003	0.07	1.003	0.006	0.07	1.007
Disorder	0.129***	0.03	1.138	0.144**	0.04	1.154	0.144**	0.04	1.154
Reg. Violation	-0.135***	0.03	0.873	-0.272***	0.05	0.762	-0.271***	0.05	0.763
Contraband	-0.016	0.03	0.984	-0.146**	0.05	0.864	-0.147**	0.05	0.863
Drug	-0.052	0.04	0.949	-0.231**	0.09	0.794	-0.235**	0.09	0.791
Total Charges	0.510***	0.04	1.665	0.934***	0.04	2.545	0.934***	0.04	2.546
Constant	0.611***	0.15		-3.578***	0.18		-3.473***	0.19	
<i>Random Effect</i>									
Facility Variance	0.265	0.04		0.196	0.34		0.198	0.04	
Log likelihood	-42844.0			-19213.0			-19210.9		

Notes: Black, prim. off. - property, and DI defiance serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

**Table 4.2** Mixed Effects Logistic Regression of Types of Second Disciplinary Infraction on Measures of First Disciplinary Confinement Sanction (vs. Lesser Sanction) and Inmate Characteristics (n = 77,890 inmates nested in 167 facilities) (Continued)

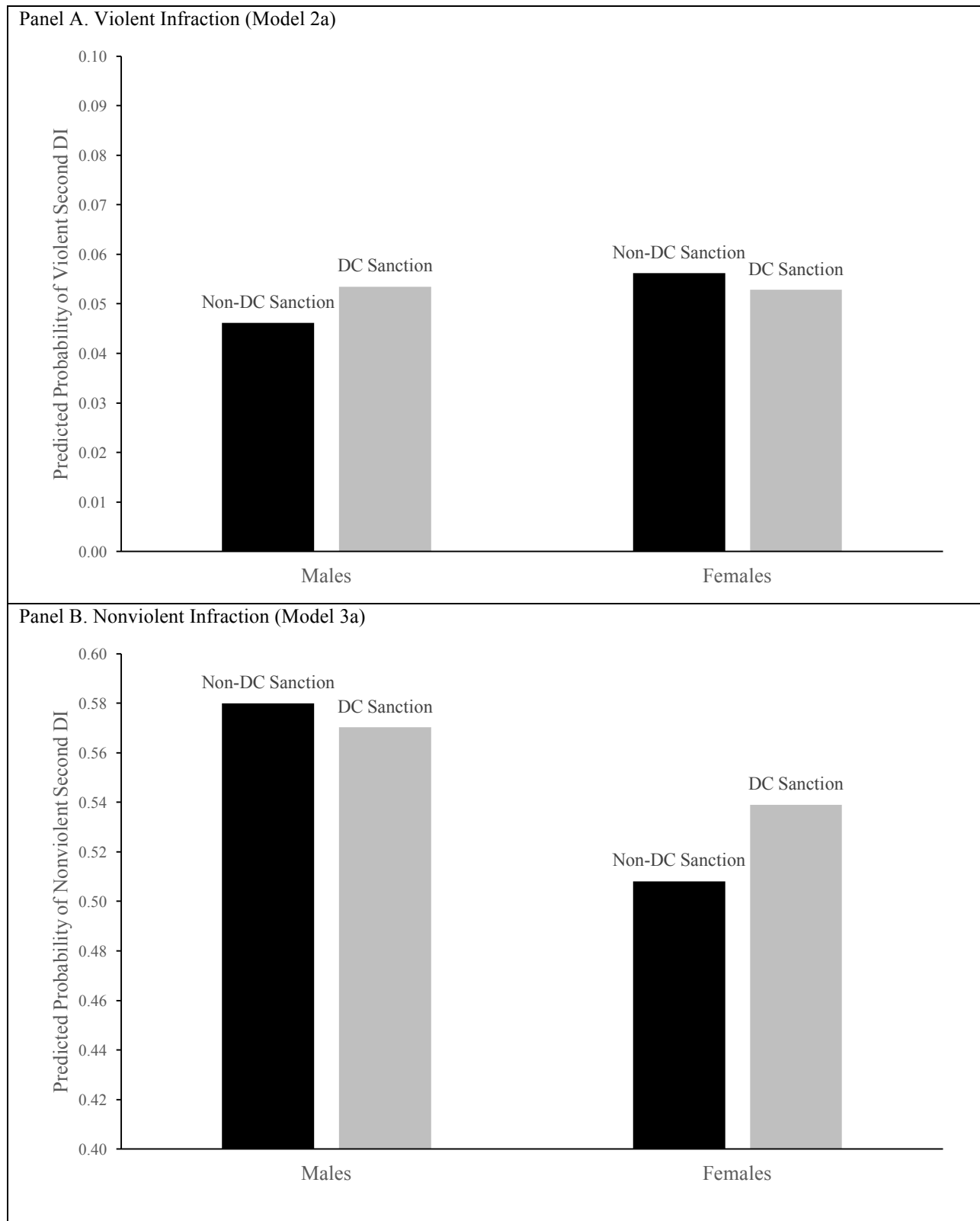
	Model 3 Nonviolent DI			Model 3a Nonviolent DI		
	b	SE	OR	b	SE	OR
<i>Interactions</i>						
DC x Male	-	-	-	-0.163**	0.06	0.849
<i>Covariates</i>						
DC	-0.022	0.02	0.978	0.124*	0.05	1.132
Male	0.206	0.16	1.229	0.290*	0.13	1.336
White	-0.105***	0.02	0.900	-0.105***	0.02	0.901
Hispanic	-0.123***	0.02	0.884	-0.122***	0.03	0.885
Age	-0.035***	0.00	0.966	-0.035***	0.00	0.966
High School	-0.086***	0.02	0.917	-0.086***	0.02	0.918
Married	-0.124***	0.03	0.884	-0.123***	0.03	0.884
Religious	-0.024	0.02	0.977	-0.024	0.02	0.977
Prim. Off. - Violent	-0.078**	0.02	0.925	-0.078***	0.02	0.925
Prim. Off. - Drug	-0.196***	0.02	0.822	-0.195***	0.02	0.823
Prim. Off. - Sex	0.097*	0.05	1.102	0.096*	0.05	1.101
Prim. Off. - Other	-0.044	0.02	0.957	-0.044	0.03	0.957
Habitual Offender	0.262***	0.04	1.299	0.262***	0.03	1.300
Violent Habitual	0.187*	0.10	1.205	0.186*	0.08	1.204
Support Habit	0.028	0.02	1.028	0.028	0.02	1.029
SGL Score	0.085***	0.00	1.089	0.085***	0.00	1.089
Sentence length	0.004***	0.00	1.004	0.004***	0.00	1.004
Prior Prison	0.098***	0.01	1.103	0.098***	0.01	1.103
Time Served	-0.041***	0.00	0.960	-0.041***	0.00	0.960
<i>First DI by Type</i>						
Violent	-0.138***	0.02	0.871	-0.140***	0.03	0.870
Sex	0.229***	0.07	1.257	0.230***	0.06	1.258
Property	-0.003	0.04	0.997	-0.005	0.04	0.995
Disorder	0.060*	0.03	1.062	0.060*	0.03	1.062
Reg. Violation	-0.063**	0.02	0.939	-0.064**	0.02	0.938
Contraband	0.027	0.03	1.028	0.028	0.03	1.028
Drug	0.000	0.04	1.000	0.003	0.04	1.003
Total Charges	-0.157***	0.03	0.855	-0.157***	0.03	0.855
Constant	0.914***	0.34		0.841***	0.14	
<i>Random Effect</i>						
Facility Variance	0.211	0.03		0.213	0.03	
Log likelihood	-48340.8			-48336.8		

Notes: Black, prim. off. - property, and DI defiance serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

Several trends emerge across the models in table 4.2. I find no general impact of disciplinary confinement on future infractions. However, the odds of receiving a future violent infractions for inmates who received disciplinary confinement are higher than for inmates who

received a lesser sanction ( $b = 0.130$ , O.R. = 1.138). A significant two-way interaction between gender and disciplinary confinement emerges in the violent ( $b = 0.219$ ; O.R. = 1.245) and nonviolent ( $b = -0.163$ ; O.R. = 0.849) models, suggesting that the effect of disciplinary confinement is more salient for males in the context of future violent misconduct and for females in the context of nonviolent misconduct. While the sanction effect varies by gender, it does not vary within gender by race/ethnicity (three-way interactions, thus, are not shown). Several covariates emerge as significant and are in the predicted direction. White inmates ( $b = -0.206$ ; O.R. = 0.814) are less likely to incur a second infraction. Younger inmates ( $b = -0.040, -0.011, -0.035$ ; O.R. = 0.961, 0.989, 0.966) and inmates who have previously been incarcerated ( $b = 0.119, 0.075, 0.098$ ; O.R. = 1.126, 1.078, 1.103) are more likely to incur a second infraction, and a violent and nonviolent infraction.

Figure 4.1 plots the interactions identified in table 3 for violent misconduct (panel A; model 2a) and nonviolent misconduct (panel B; model 3a) for males and females who received a non-disciplinary confinement sanction for their first infraction and for those who received disciplinary confinement. All other covariates are held at their mean value. Panel A reveals that males sanctioned with disciplinary confinement have a predicted probability of engaging in subsequent violent misconduct that is 15 percent greater than for males punished with a lesser sanction. The effect of disciplinary confinement on future violence is nearly negligible in the female sample. Panel B examines nonviolent misconduct. Males who receive a non-disciplinary confinement sanction have a predicted probability of incurring a second nonviolent infraction that is relatively similar to males who received disciplinary confinement. By contrast, female inmates punished with a lesser sanction have a 6 percent lower likelihood of engaging in nonviolent misconduct than those punished with disciplinary confinement.



**Figure 4.1** Predicted Probabilities of Second Disciplinary Infraction by Gender and Type of In-Prison Punishment (Disciplinary Confinement versus Non-Disciplinary Confinement Sanction)

To further explore the effect of disciplinary confinement on future misconduct, table 4.3 explores its effect on the timing to a second infraction (model 1, 1a), a second violent infraction (model 2), and a second nonviolent infraction (model 3, 3a). Three-way interactions between gender, race/ethnicity, and disciplinary confinement, and two-way interactions between gender and disciplinary confinement are explored alongside the main effects of disciplinary confinement, gender, and race/ethnicity. Only significant interactions are shown.

Findings reveal that disciplinary confinement does not have a significant main effect on general misconduct or nonviolent misconduct. However, receiving disciplinary confinement increases the hazard of future violent misconduct ( $b = 0.116$ ; H.R. = 1.123). The significant interaction between disciplinary confinement and gender indicates that the sanction effect on timing to general and nonviolent misconduct appears more prominent when examining female inmates ( $b = -0.111, -0.135$ ; H.R. = 0.895, 0.874). These findings point to a sanction effect that varies across gender, but not within gender by race/ethnicity.

**Table 4.3** Mixed Effects Survival Analysis of Time until Second Disciplinary Infraction on Measures of First Disciplinary Confinement Sanction (vs. Lesser Sanction) and Inmate Characteristics (n = 77,890 inmates nested in 167 facilities)

	Model 1 Any Second DI			Model 1a Any Second DI			Model 2 Violent Second DI		
	b	SE	HR	b	SE	HR	b	SE	HR
<i>Interactions</i>									
DC x Male	-	-	-	-0.111**	0.04	0.895	-	-	-
<i>Covariates</i>									
DC	0.006	0.01	1.006	0.107**	0.03	1.113	0.116**	0.03	1.123
Male	0.102	0.12	1.107	0.160	0.12	1.173	-0.066	0.20	0.936
White	-0.155***	0.01	0.857	-0.154***	0.01	0.857	-0.339***	0.03	0.712
Hispanic	-0.121***	0.02	0.886	-0.120***	0.02	0.887	-0.106*	0.05	0.900
Age	-0.026***	0.00	0.974	-0.026***	0.00	0.974	-0.022***	0.00	0.978
High School	-0.051***	0.01	0.951	-0.050***	0.01	0.951	-0.032	0.03	0.968
Married	-0.107***	0.02	0.899	-0.106***	0.02	0.899	-0.158*	0.07	0.854
Religious	-0.036**	0.01	0.965	-0.036**	0.01	0.965	-0.086*	0.03	0.918
Prim. Off. - Violent	-0.020	0.01	0.980	-0.020	0.01	0.980	0.128***	0.04	1.137
Prim. Off. - Drug	-0.184***	0.01	0.832	-0.183***	0.01	0.832	-0.248***	0.04	0.780
Prim. Off. - Sex	-0.048*	0.02	0.953	-0.048*	0.02	0.953	0.022	0.07	1.022
Prim. Off. - Other	-0.061***	0.02	0.941	-0.061***	0.02	0.941	-0.011	0.05	0.989
Habitual Offender	0.166***	0.02	1.181	0.167***	0.02	1.181	0.213***	0.05	1.237
Violent Habitual	0.171***	0.04	1.186	0.170***	0.04	1.186	0.322**	0.11	1.379
Support Habit	-0.008	0.01	0.992	-0.007	0.01	0.993	-0.058	0.04	0.944
SGL Score	0.022***	0.00	1.022	0.022***	0.00	1.022	0.014	0.01	1.014
Sentence length	0.001***	0.00	1.001	0.001***	0.00	1.001	0.001***	0.00	1.001
Prior Prison	-0.007	0.00	0.993	-0.007	0.00	0.993	0.016	0.01	1.016
Time Served	-0.045***	0.00	0.956	-0.045***	0.00	0.956	-0.051***	0.00	0.950
<i>First DI by Type</i>									
Violent	-0.088***	0.02	0.916	-0.088***	0.02	0.915	0.170***	0.04	1.185
Sex	0.053	0.03	1.054	0.053	0.03	1.055	-0.233*	0.10	0.792
Property	-0.039	0.02	0.962	-0.040	0.02	0.960	-0.047	0.07	0.954
Disorder	0.040**	0.01	1.041	0.040**	0.01	1.041	0.128**	0.04	1.137
Reg. Violation	-0.084***	0.01	0.919	-0.085***	0.01	0.919	-0.306***	0.05	0.736
Contraband	-0.037*	0.02	0.964	-0.036*	0.02	0.964	-0.191***	0.05	0.826
Drug	-0.057*	0.02	0.944	-0.056*	0.02	0.946	-0.274**	0.08	0.760
Total Charges	0.195***	0.02	1.215	0.195***	0.02	1.215	0.722***	0.02	2.059
Constant	-4.116***	0.12		-4.169***	0.12		-7.103***	0.22	
<i>Random Effect</i>									
Facility Variance	0.214	0.03		0.215	0.03		0.394	0.07	
Log likelihood	-120011.2			-120006.4			-24856.7		

Notes: HR = Hazard Ratio; Black, prim. off. - property, and DI defiance serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05



**Table 4.3** Mixed Effects Survival Analysis of Time until Second Disciplinary Infraction on Measures of First Disciplinary Confinement Sanction (vs. Lesser Sanction) and Inmate Characteristics (n = 77,890 inmates nested in 167 facilities) (Continued)

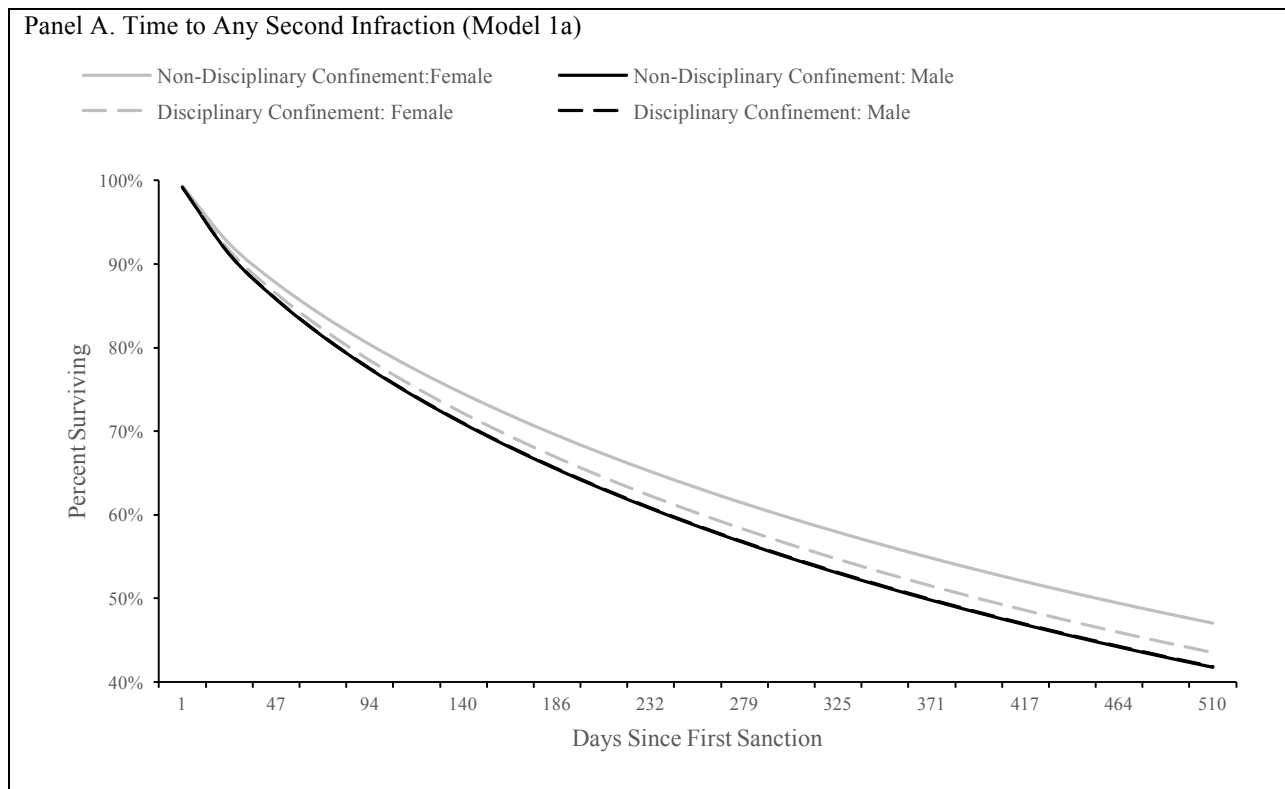
	Model 3			Model 3a		
	Nonviolent Second DI			Nonviolent Second DI		
	b	SE	HR	b	SE	HR
<i>Interactions</i>						
DC x Male	-	-	-	-0.135***	0.04	0.874
<i>Covariates</i>						
DC	-0.008	0.01	0.992	0.115**	0.04	1.122
Male	0.110	0.12	1.117	0.180	0.12	1.198
White	-0.133***	0.01	0.875	-0.132***	0.01	0.876
Hispanic	-0.122***	0.02	0.885	-0.122***	0.02	0.885
Age	-0.027***	0.00	0.974	-0.027***	0.00	0.974
High School	-0.053***	0.01	0.949	-0.052***	0.01	0.949
Married	-0.101***	0.02	0.904	-0.101***	0.02	0.904
Religious	-0.029*	0.01	0.971	-0.029*	0.01	0.972
Prim. Off. - Violent	-0.040**	0.01	0.961	-0.040**	0.01	0.961
Prim. Off. - Drug	-0.179***	0.01	0.836	-0.179***	0.01	0.836
Prim. Off. - Sex	-0.054*	0.02	0.947	-0.054*	0.02	0.947
Prim. Off. - Other	-0.067***	0.02	0.935	-0.067***	0.02	0.935
Habitual Offender	0.162***	0.02	1.176	0.162***	0.02	1.176
Violent Habitual	0.151***	0.04	1.163	0.151***	0.04	1.163
Support Habit	-0.001	0.01	0.999	0.000	0.01	1.000
SGL Score	0.023***	0.00	1.023	0.023***	0.00	1.023
Sentence length	0.001***	0.00	1.001	0.001***	0.00	1.001
Prior Prison	-0.008*	0.00	0.992	-0.008*	0.00	0.992
Time Served	-0.045***	0.00	0.956	-0.045***	0.00	0.956
<i>First DI by Type</i>						
Violent	-0.137***	0.02	0.872	-0.138***	0.02	0.871
Sex	0.087**	0.03	1.091	0.088**	0.03	1.092
Property	-0.035	0.02	0.966	-0.036	0.02	0.964
Disorder	0.029	0.02	1.029	0.029	0.02	1.029
Reg. Violation	-0.064***	0.01	0.938	-0.065***	0.01	0.938
Contraband	-0.019	0.02	0.981	-0.019	0.02	0.981
Drug	-0.038	0.03	0.963	-0.036	0.03	0.965
Total Charges	0.038	0.02	1.038	0.038	0.02	1.038
Constant	-4.020***	0.12		-4.083***	0.12	
<i>Random Effect</i>						
Facility Variance	0.194	0.03		0.195	0.03	
Log likelihood	-112401.0			-112394.8		

Notes: HR = Hazard Ratio; Black, prim. off. - property, and DI defiance serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

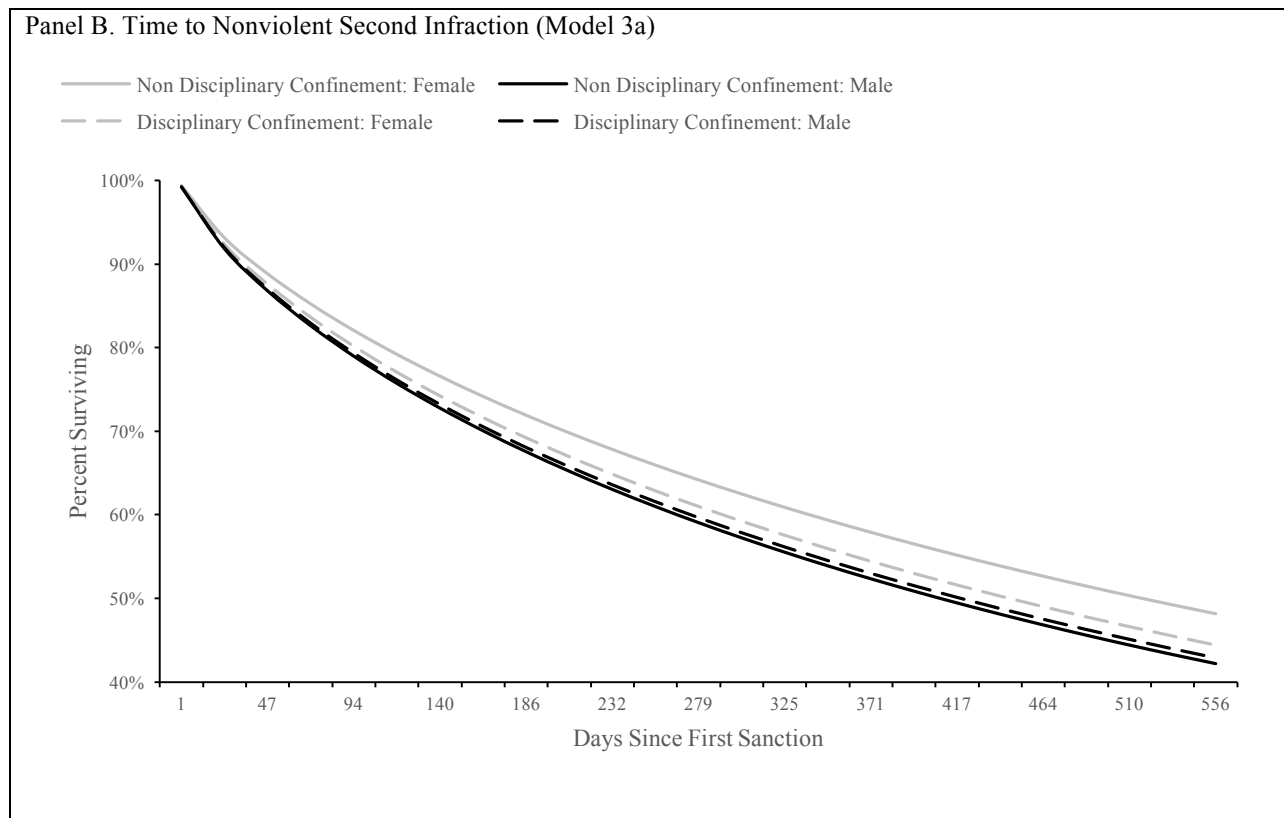
Figure 4.2 plots the interaction effects that emerge in models 1a and 3a in table 4.3. In each plot, the X-axis represents the number of days incarcerated since the first in-prison punishment, and the Y-axis represents the cumulative proportion of those at risk of incurring a

second infraction for those who have not incurred a second infraction or have not been released from prison. The survival curves examine the amount of time until a second infraction (general in panel A and nonviolent in panel B) occurs for males (black lines) and females (gray lines) punished with disciplinary confinement (dashed lines) and a lesser sanction (solid lines).

Inspection of figure 4.2 reveals that across both panels female inmates who received disciplinary confinement are at a greater risk of incurring a second infraction sooner than female inmates punished with a lesser sanction. Male inmates are relatively unaffected by the sanction as the survival curves across both panels are relatively similar to one another.



**Figure 4.2** Time to Second Disciplinary Infraction for Inmates Punished with Disciplinary Confinement or Lesser Sanction



**Figure 4.2** Time to Second Disciplinary Infraction for Inmates Punished with Disciplinary Confinement or Lesser Sanction (Continued)

Taken as a whole, and in response to the first research question, the logistic and survival analyses examining disciplinary confinement versus a lesser sanction indicate that harsh sanctions do not decrease misconduct, and can increase the odds of future infractions. Inmates punished with disciplinary confinement have a higher likelihood of engaging in future violence, and will do so sooner than inmates punished with a lesser sanction. In response to the second research question, some gender differences emerge, but no significant race/ethnicity variation exists. Females punished with disciplinary confinement may be placed at greater risk of committing a second infraction sooner than females who were punished with a lesser sanction.

Male inmates appear to be relatively unaffected by the type of sanction they receive with the exception of violent misconduct, the likelihood of which is increased for males punished with disciplinary confinement. A deterrent effect of disciplinary confinement does not emerge.

### **The Effect of More Lenient Sentences on Future In-Prison Misconduct**

To further explore the chapter's research questions, the analyses turn next to more lenient sanctions. Table 4.4 examines the effect of loss of gain time, in comparison to disciplinary confinement, on the likelihood of subsequent misconduct (model 1), violent misconduct (model 2, 2a), and nonviolent misconduct (model 3, 3a).

There is no main effect of loss of gain time on general misconduct. Inmates who received a loss of gain time in comparison to disciplinary confinement have lower odds of future violence ( $b = -0.132$ ; O.R. = 0.876). Significant two-way interactions emerge as well. Specifically, the effect of loss of gain time appears more salient in the context of males and future violent misconduct ( $b = -0.386$ ; O.R. = 0.680), and in the context of females and nonviolent misconduct ( $b = 0.249$ ; O.R. = 1.283). Several other covariates emerge as significant across the loss of gain time models and are in the predicted direction. Younger inmates ( $b = -0.039, -0.010, -0.033$ ; O.R. = 0.962, 0.990, 0.967), violent habitual offenders ( $b = 0.444, 0.352, 0.189$ ; O.R. = 1.559, 1.422, 1.208), and inmates previously incarcerated ( $b = 0.119, 0.078, 0.094$ ; O.R. = 1.127, 1.082, 1.208) are more likely to incur a second infraction, a violent second infraction, and a nonviolent second infraction.

**Table 4.4** Mixed Effects Logistic Regression of Types of Second Disciplinary Infraction on Measures of First Loss in Gain Time Sanction (vs. Disciplinary Confinement Sanction) and Inmate Characteristics (n = 59,430 inmates nested in 167 facilities)

	Model 1 Any Second DI			Model 2 Violent Second DI			Model 2a Violent Second DI		
	b	SE	OR	b	SE	OR	b	SE	OR
<i>Interactions</i>									
GT x Male	-	-	-	-	-	-	-0.386**	0.14	0.680
<i>Covariates</i>									
GT	-0.004	0.03	0.996	-0.132*	0.06	0.876	0.167	0.12	1.182
Male	0.276	0.17	1.318	-0.106	0.16	0.900	-0.005	0.16	0.995
White	-0.206***	0.02	0.814	-0.262***	0.04	0.769	-0.264***	0.04	0.768
Hispanic	-0.167***	0.03	0.847	-0.007	0.05	0.993	-0.007	0.05	0.993
Age	-0.039***	0.00	0.962	-0.010***	0.00	0.990	-0.010***	0.00	0.990
High School	-0.100***	0.02	0.905	0.012	0.04	1.012	0.011	0.04	1.011
Married	-0.167***	0.04	0.846	-0.116	0.08	0.890	-0.118	0.08	0.889
Religious	-0.071**	0.03	0.932	-0.098*	0.04	0.906	-0.098*	0.04	0.906
Prim. Off. - Violent	-0.025	0.03	0.976	0.167***	0.04	1.182	0.167***	0.04	1.182
Prim. Off. - Drug	-0.255***	0.03	0.775	-0.186***	0.05	0.831	-0.187***	0.05	0.830
Prim. Off. - Sex	0.071	0.06	1.073	0.199*	0.08	1.221	0.200*	0.08	1.222
Prim. Off. - Other	-0.038	0.03	0.962	0.058	0.06	1.059	0.058	0.06	1.059
Habitual Offender	0.258***	0.04	1.294	0.124*	0.06	1.132	0.123*	0.06	1.131
Violent Habitual	0.444***	0.11	1.559	0.352**	0.12	1.422	0.354**	0.12	1.425
Support Habit	0.027	0.02	1.028	-0.045	0.04	0.956	-0.047	0.04	0.954
SGL Score	0.085***	0.01	1.089	0.025**	0.01	1.026	0.025**	0.01	1.026
Sentence length	0.008***	0.00	1.008	0.001***	0.00	1.001	0.001***	0.00	1.001
Prior Prison	0.119***	0.01	1.127	0.078***	0.01	1.082	0.079***	0.01	1.082
Time Served	-0.054***	0.00	0.947	-0.020***	0.00	0.981	-0.020***	0.00	0.981
<i>First DI by Type</i>									
Violent	0.005	0.03	1.005	0.345***	0.04	1.413	0.346***	0.04	1.413
Sex	0.150*	0.06	1.162	-0.278**	0.10	0.758	-0.282**	0.10	0.754
Property	0.020	0.05	1.020	0.008	0.09	1.008	0.012	0.09	1.012
Disorder	0.121***	0.03	1.129	0.145**	0.05	1.156	0.146**	0.05	1.157
Reg. Violation	-0.107**	0.03	0.898	-0.259***	0.07	0.772	-0.259***	0.07	0.772
Contraband	-0.001	0.03	0.999	-0.147*	0.06	0.864	-0.145*	0.06	0.865
Drug	-0.019	0.05	0.981	-0.247**	0.09	0.781	-0.251**	0.09	0.778
Total Charges	0.375***	0.04	1.455	0.860***	0.04	2.363	0.861***	0.04	2.365
Constant	0.630***	0.17		-3.317***	0.19		-3.408***	0.19	
<i>Random Effect</i>									
Facility Variance	0.363	0.05		0.180	0.03		0.181	0.04	
Log likelihood	-32564.5			-15116.3			-15112.4		

Notes: Black, prim. off. - property, and DI defiance serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

**Table 4.4** Mixed Effects Logistic Regression of Types of Second Disciplinary Infraction on Measures of First Loss in Gain Time Sanction (vs. Disciplinary Confinement Sanction) and Inmate Characteristics (n = 59,430 inmates nested in 167 facilities)  
(Continued)

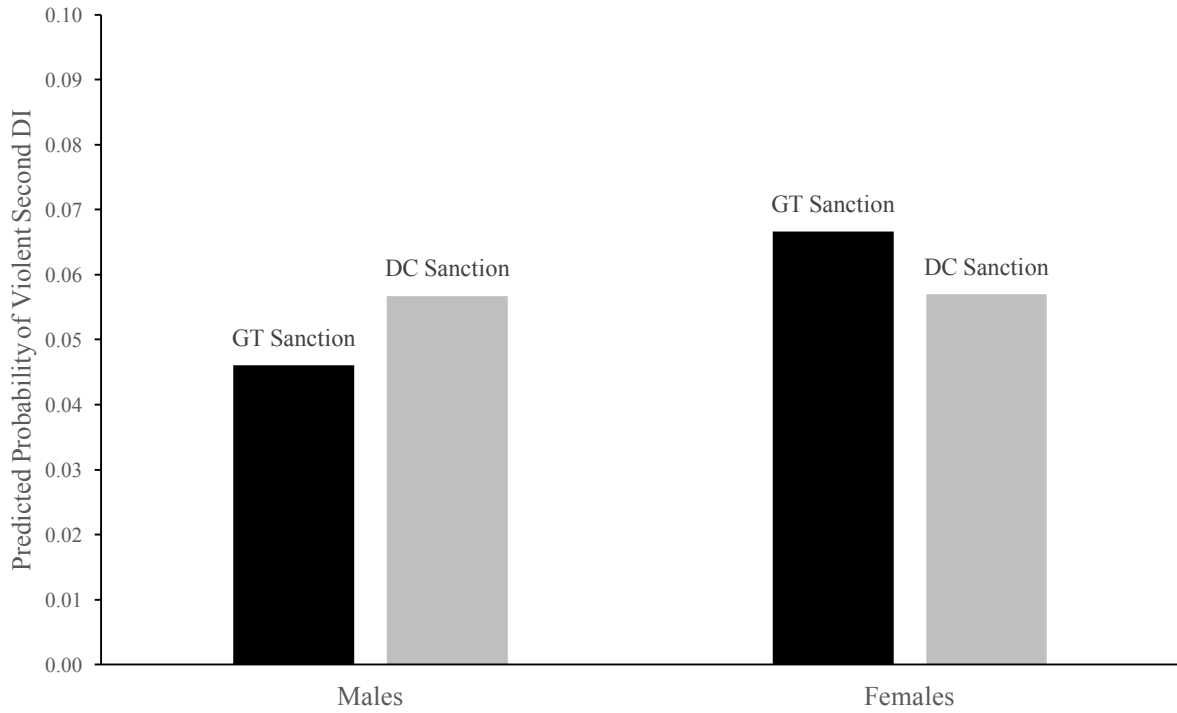
	Model 3			Model 3a		
	Nonviolent Second DI			Nonviolent Second DI		
	b	SE	OR	b	SE	OR
<i>Interactions</i>						
GT x Male	-	-	-	0.249**	0.07	1.283
<i>Covariates</i>						
GT	0.034	0.03	1.035	-0.163*	0.07	0.850
Male	0.294	0.15	1.342	0.221	0.15	1.247
White	-0.096***	0.02	0.908	-0.096***	0.02	0.909
Hispanic	-0.130***	0.03	0.878	-0.129***	0.03	0.879
Age	-0.033***	0.00	0.967	-0.033***	0.00	0.967
High School	-0.090***	0.02	0.914	-0.089***	0.02	0.915
Married	-0.128***	0.04	0.879	-0.128***	0.04	0.880
Religious	-0.020	0.02	0.980	-0.020	0.02	0.980
Prim. Off. - Violent	-0.085**	0.03	0.919	-0.085**	0.03	0.919
Prim. Off. - Drug	-0.192***	0.02	0.825	-0.192***	0.02	0.826
Prim. Off. - Sex	0.072	0.05	1.075	0.070	0.05	1.073
Prim. Off. - Other	-0.055	0.03	0.946	-0.055	0.03	0.946
Habitual Offender	0.232***	0.04	1.261	0.232***	0.04	1.261
Violent Habitual	0.189*	0.09	1.208	0.188*	0.09	1.207
Support Habit	0.041	0.02	1.042	0.043	0.02	1.044
SGL Score	0.083***	0.01	1.086	0.083***	0.01	1.086
Sentence length	0.004***	0.00	1.004	0.004***	0.00	1.004
Prior Prison	0.094***	0.01	1.099	0.094***	0.01	1.099
Time Served	-0.039***	0.00	0.961	-0.039***	0.00	0.961
<i>First DI by Type</i>						
Violent	-0.136***	0.03	0.873	-0.138***	0.03	0.871
Sex	0.220***	0.06	1.246	0.222***	0.06	1.249
Property	0.031	0.05	1.032	0.029	0.05	1.029
Disorder	0.055	0.03	1.057	0.055	0.03	1.056
Reg. Violation	-0.041	0.03	0.960	-0.042	0.03	0.959
Contraband	0.043	0.03	1.044	0.042	0.03	1.043
Drug	0.027	0.04	1.027	0.030	0.04	1.031
Total Charges	-0.203***	0.03	0.816	-0.203***	0.03	0.816
Constant	0.793***	0.16		0.858***	0.16	
<i>Random Effect</i>						
Facility Variance	0.289	0.04		0.291	0.04	
Log likelihood	-36830.4			-36824.3		

Notes: Black, prim. off. - property, and DI defiance serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

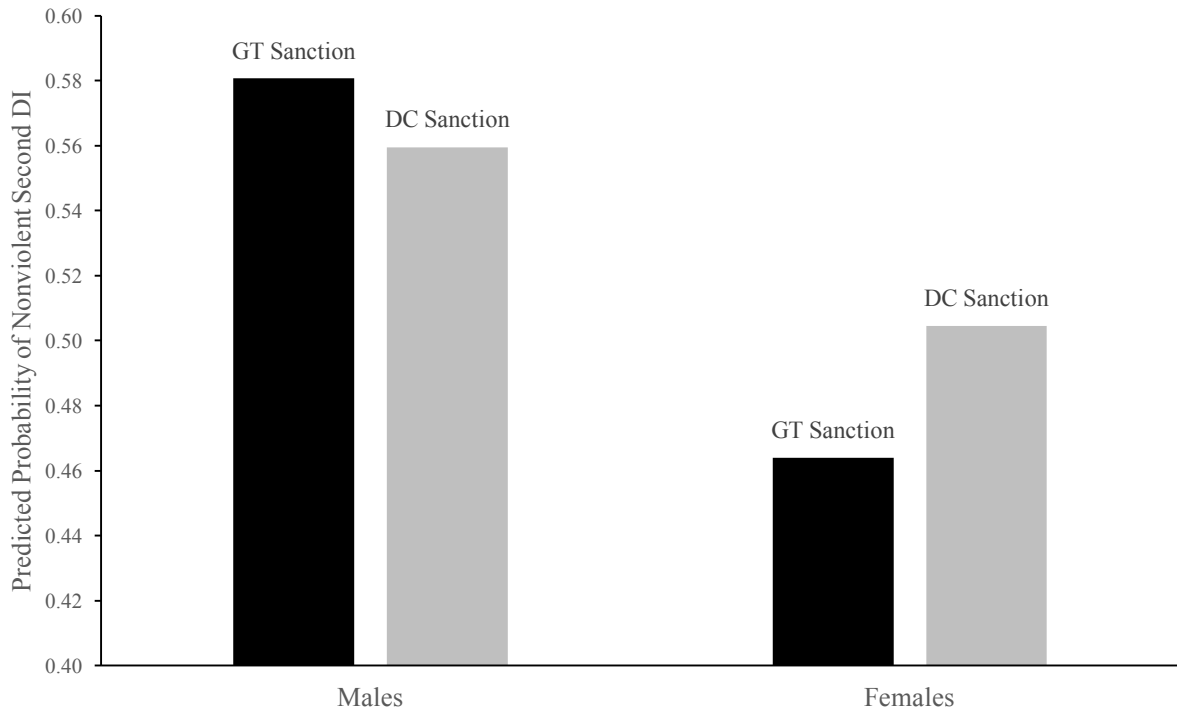
To further explore the significant interactions, figure 4.3 plots the predicted probability of receiving a violent second infraction (panel A) and a nonviolent second infraction (panel B) for males and females who received a loss of gain time or disciplinary confinement in response to their first infraction, while all other covariates are held at their mean value.

Panel A shows that the predicted probability of incurring a subsequent violent infraction for males is higher among those who received disciplinary confinement than those who received a loss of gain time. The predicted probability of a violent infraction for males who received a loss of gain time is 0.05 and 0.06 for those who received disciplinary confinement. The predicted probability of violence for females who received disciplinary confinement is 0.06 and 0.07 for those who received a loss of gain time. These differences are notably small. Inspection of panel B reveals that the predicted probability of nonviolent misconduct for males punished with loss of gain time is 3 points higher than for those punished with disciplinary confinement, while females punished with loss of gain time have a predicted probability that is 4 points lower than those punished with disciplinary confinement.

Panel A. Violent Infraction (Model 2a)



Panel B. Nonviolent Infraction (Model 3a)



**Figure 4.3** Predicted Probability of Second Disciplinary Infraction by Gender and Type of In-Prison Punishment (Loss of Gain Time versus Disciplinary Confinement)



To further explore the relationship between loss of gain time and future misconduct, the timing to subsequent infractions is examined in table 4.5. Model 1/1a assesses misconduct, model 2/2a focuses on violent infractions, and model 3/3a examines nonviolent infractions.

**Table 4.5** Mixed Effects Survival Analysis of Time until Second Disciplinary Infraction on Measures of First Loss in Gain Time Sanction (vs. Disciplinary Confinement Sanction) and Inmate Characteristics (n = 59,430 inmates nested in 167 facilities)

	Model 1 Any Second DI			Model 1a Any Second DI			Model 2 Violent Second DI		
	b	SE	HR	b	SE	HR	b	SE	HR
<i>Interactions</i>									
GT x Male	-	-	-	0.122**	0.05	1.129	-	-	-
<i>Covariates</i>									
GT	-0.025	0.02	0.975	-0.126**	0.04	0.882	-0.144*	0.06	0.866
Male	0.160	0.14	1.173	0.125	0.14	1.133	-0.089	0.20	0.915
White	-0.152***	0.01	0.859	-0.151***	0.01	0.860	-0.351***	0.04	0.704
Hispanic	-0.135***	0.02	0.874	-0.134***	0.02	0.874	-0.109*	0.05	0.897
Age	-0.025***	0.00	0.975	-0.025***	0.00	0.975	-0.021***	0.00	0.980
High School	-0.047***	0.01	0.954	-0.047***	0.01	0.954	-0.009	0.04	0.991
Married	-0.113***	0.02	0.894	-0.112***	0.02	0.894	-0.163*	0.07	0.850
Religious	-0.041**	0.01	0.960	-0.041**	0.01	0.960	-0.116**	0.04	0.890
Prim. Off. - Violent	-0.021	0.01	0.980	-0.021	0.01	0.980	0.150***	0.04	1.162
Prim. Off. - Drug	-0.186***	0.01	0.830	-0.185***	0.01	0.831	-0.266***	0.05	0.766
Prim. Off. - Sex	-0.049	0.03	0.952	-0.050	0.03	0.952	0.098	0.08	1.103
Prim. Off. - Other	-0.068***	0.02	0.934	-0.068***	0.02	0.934	0.008	0.05	1.008
Habitual Offender	0.141***	0.02	1.152	0.141***	0.02	1.152	0.167**	0.06	1.181
Violent Habitual	0.179***	0.04	1.196	0.179***	0.04	1.196	0.392***	0.11	1.480
Support Habit	-0.009	0.01	0.991	-0.009	0.01	0.991	-0.055	0.04	0.947
SGL Score	0.018***	0.00	1.019	0.018***	0.00	1.019	0.007	0.01	1.007
Sentence length	0.001***	0.00	1.001	0.001***	0.00	1.001	0.001***	0.00	1.001
Prior Prison	-0.007	0.00	0.993	-0.007	0.00	0.993	0.020	0.01	1.020
Time Served	-0.046***	0.00	0.955	-0.046***	0.00	0.955	-0.051***	0.00	0.950
<i>First DI by Type</i>									
Violent	-0.085***	0.02	0.918	-0.086***	0.02	0.918	0.181***	0.04	1.198
Sex	0.048	0.03	1.049	0.049	0.03	1.050	-0.253*	0.10	0.777
Property	0.007	0.03	1.007	0.005	0.03	1.005	0.004	0.08	1.004
Disorder	0.040*	0.02	1.041	0.040*	0.02	1.041	0.126**	0.05	1.134
Reg. Violation	-0.059**	0.02	0.943	-0.059**	0.02	0.943	-0.271***	0.06	0.762
Contraband	-0.029	0.02	0.971	-0.029	0.02	0.971	-0.188**	0.06	0.829
Drug	-0.039	0.02	0.962	-0.037	0.02	0.963	-0.283**	0.08	0.753
Total Charges	0.152***	0.02	1.164	0.152***	0.02	1.164	0.674***	0.03	1.962
Constant	-4.266***	0.14		-4.235***	0.14		-6.975***	0.22	
<i>Random Effect</i>									
Facility Variance	0.283	0.04		0.283	0.04		0.368	0.07	
Log likelihood	-90786.3			-90872.9			-19497.1		

Notes: HR = Hazard Ratio, Black, prim. off. - property, and DI defiance serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

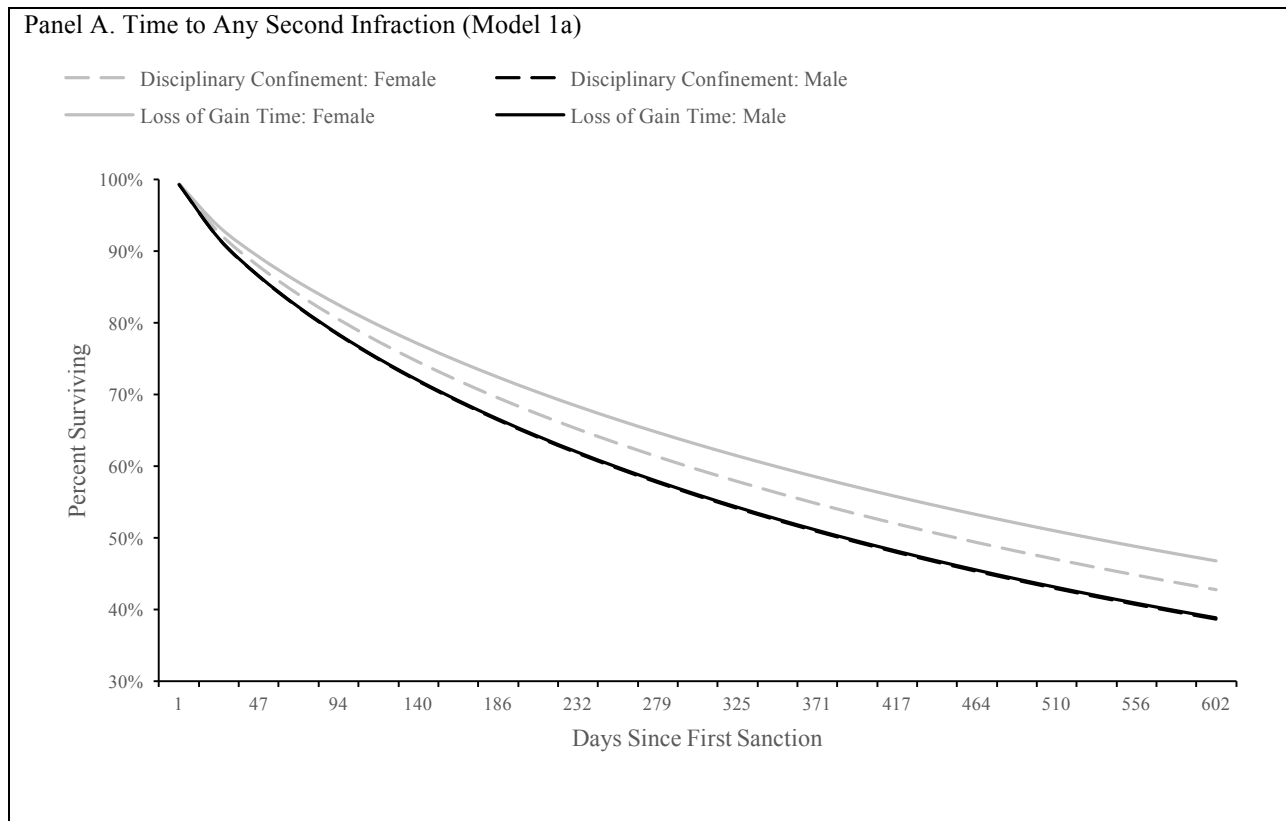
**Table 4.5** Mixed Effects Survival Analysis of Time until Second Disciplinary Infraction on Measures of First Loss in Gain Time Sanction (vs. Disciplinary Confinement Sanction) and Inmate Characteristics (n = 59,430 inmates nested in 167 facilities) (Continued)

	Model 2a Violent Second DI			Model 3 Nonviolent Second DI			Model 3a Nonviolent Second DI		
	b	SE	HR	b	SE	HR	b	SE	HR
<i>Interactions</i>									
GT x Male	-0.264*	0.13	0.768	-	-	-	0.168**	0.05	1.183
<i>Covariates</i>									
GT	0.060	0.12	1.061	-0.010	0.02	0.990	-0.150**	0.05	0.861
Male	-0.022	0.20	0.983	0.159	0.14	1.173	0.111	0.14	1.118
White	-0.352***	0.04	0.700	-0.127***	0.01	0.880	-0.127***	0.01	0.881
Hispanic	-0.109*	0.05	0.896	-0.138***	0.02	0.871	-0.137***	0.02	0.872
Age	-0.021***	0.00	0.980	-0.026***	0.00	0.974	-0.026***	0.00	0.974
High School	-0.010	0.04	0.988	-0.052***	0.01	0.949	-0.052***	0.01	0.950
Married	-0.164*	0.07	0.847	-0.107***	0.02	0.898	-0.106***	0.02	0.899
Religious	-0.116**	0.04	0.890	-0.031*	0.01	0.970	-0.030*	0.01	0.970
Prim. Off. - Violent	0.150***	0.04	1.157	-0.043**	0.02	0.958	-0.043**	0.02	0.958
Prim. Off. - Drug	-0.268***	0.05	0.760	-0.179***	0.02	0.836	-0.179***	0.02	0.836
Prim. Off. - Sex	0.100	0.08	1.095	-0.064*	0.03	0.938	-0.065*	0.03	0.937
Prim. Off. - Other	0.008	0.05	1.004	-0.078***	0.02	0.925	-0.078***	0.02	0.925
Habitual Offender	0.167**	0.06	1.181	0.139***	0.02	1.149	0.139***	0.02	1.149
Violent Habitual	0.393***	0.11	1.494	0.149**	0.04	1.161	0.149**	0.04	1.161
Support Habit	-0.056	0.04	0.947	-0.003	0.01	0.997	-0.002	0.01	0.998
SGL Score	0.007	0.01	1.007	0.020***	0.00	1.020	0.020***	0.00	1.020
Sentence length	0.001***	0.00	1.001	0.001***	0.00	1.001	0.001***	0.00	1.001
Prior Prison	0.020	0.01	1.032	-0.009	0.00	0.991	-0.009	0.00	0.991
Time Served	-0.051***	0.00	0.950	-0.045***	0.00	0.956	-0.045***	0.00	0.956
<i>First DI by Type</i>									
Violent	0.181***	0.04	1.200	-0.133***	0.02	0.876	-0.134***	0.02	0.875
Sex	-0.256**	0.10	0.777	0.084**	0.03	1.088	0.085**	0.03	1.089
Property	0.007	0.08	1.006	0.010	0.03	1.010	0.009	0.03	1.009
Disorder	0.126**	0.05	1.136	0.031	0.02	1.031	0.030	0.02	1.031
Reg. Violation	-0.272***	0.06	0.761	-0.040*	0.02	0.961	-0.040*	0.02	0.961
Contraband	-0.187**	0.06	0.830	-0.010	0.02	0.990	-0.010	0.02	0.990
Drug	-0.286**	0.08	0.754	-0.018	0.03	0.983	-0.016	0.03	0.984
Total Charges	0.674***	0.03	1.959	-0.002	0.02	0.998	-0.002	0.02	0.998
Constant	-7.034***	0.23		-4.181***	0.14		-4.137***	0.14	
<i>Random Effect</i>									
Facility Variance	0.368	0.07		0.260	0.03		0.261	0.03	
Log likelihood	-19495.1			-84938.6			-84932.8		

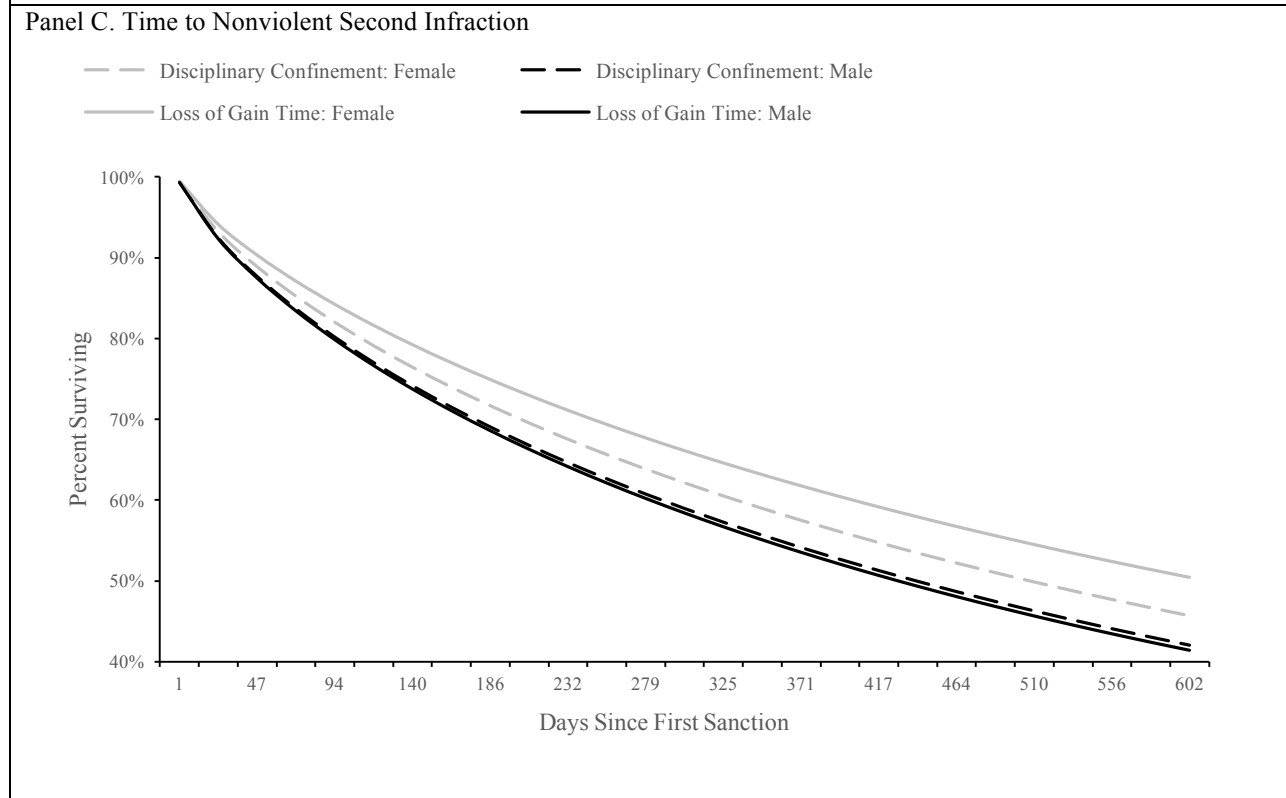
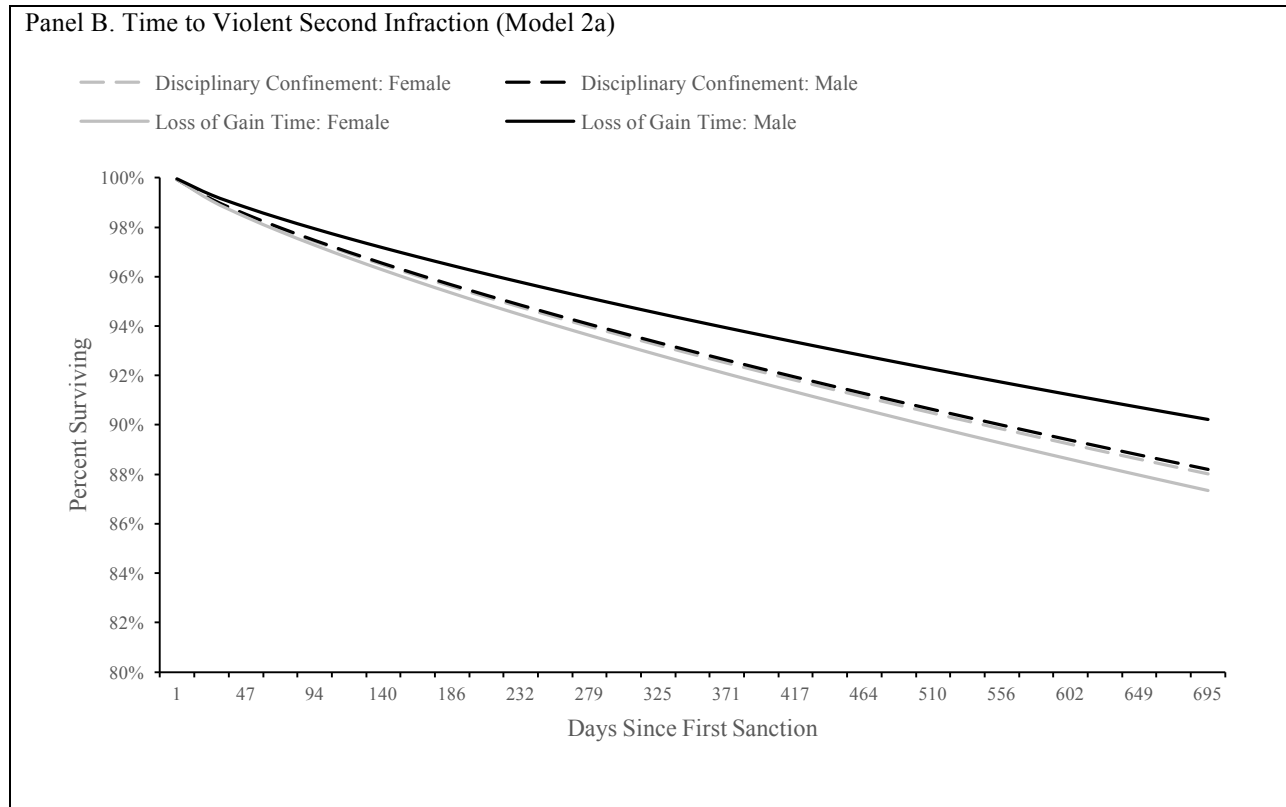
Notes: HR = Hazard Ratio, Black, prim. off. - property, and DI defiance serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

Table 4.5 finds that inmates who received a loss of gain time have a decreased hazard of future violent misconduct compared to those who received disciplinary confinement (b = -0.144; H.R. = 0.866). Several significant two-way interactions between gender and in-prison sanctions

emerge. The effect of loss of gain time on timing to general ( $b = 0.122$ ; H.R. = 1.129), violent ( $b = -0.264$ ; H.R. = 0.768), and nonviolent infractions ( $b = 0.168$ ; H.R. = 1.183) is gendered. To explore these two-way interactions, figure 4.4 plots the survival curves for males (black lines) and females (gray lines) punished with disciplinary confinement (dashed line) and loss of gain time (solid line).



**Figure 4.4** Time to Second Disciplinary Infraction for Inmates Punished with Loss of Gain Time or Disciplinary Confinement



**Figure 4.4** Time to Second Disciplinary Infraction for Inmates Punished with Loss of Gain Time or Disciplinary Confinement (Continued)

The X-axis in both panels represents the amount of days incarcerated since the first sanctioning event, and the Y-axis represents the cumulative proportion of those at risk of incurring a second infraction for those who have not incurred a second infraction or have not been released from prison. Panel A depicts the survival curves for any misconduct type, violent infractions in panel B, and nonviolent infractions in panel C. Inspection of figure 4.4 reveals a pattern that is similar to that identified in figure 4.2. Females who receive disciplinary confinement incur a second infraction (panel A), and a second nonviolent infraction (panel C), sooner than females who received a loss of gain time. Males punished with disciplinary confinement engage in violence sooner than those punished with a loss of gain time (panel B).

In sum, and in response to the research questions, findings stemming from the loss of gain time logistic and survival models indicate that this lesser sanction decreases the likelihood of future violence for males and future nonviolent infractions for females. A loss of gain time, however, appears to increase the odds of female violent behavior, and male nonviolent behavior. In addition, females punished with a loss of gain time offend later than those punished with disciplinary confinement. Males punished with loss of gain time incur a second violent infraction later than males punished with disciplinary confinement. However, the identified effects across all models are modest in size, and there does not appear to be variation within gender.

Last, the analyses examine inmates who received extra work duty versus disciplinary confinement. Model 1 of table 4.6 examines the likelihood of incurring future misconduct, model 2 focuses on violent infractions, and model 3 examines nonviolent infractions.

**Table 4.6** Mixed Effects Logistic Regression of Types of Second Disciplinary Infraction on Measures of First Extra Work Duty Sanction (vs. Disciplinary Confinement Sanction) and Inmate Characteristics (n = 64,450 inmates nested in 167 facilities)

	Model 1 Any Second DI			Model 2 Violent Second DI			Model 3 Nonviolent Second DI		
	b	SE	OR	b	SE	OR	b	SE	OR
<i>Covariates</i>									
EW	0.003	0.03	1.003	-0.115*	0.05	0.892	0.035	0.03	1.036
Male	0.214	0.16	1.239	-0.046	0.17	0.955	0.229	0.15	1.257
White	-0.207***	0.02	0.813	-0.209***	0.04	0.811	-0.112***	0.02	0.894
Hispanic	-0.172***	0.03	0.842	-0.024	0.05	0.976	-0.130***	0.03	0.878
Age	-0.038***	0.00	0.962	-0.008***	0.00	0.992	-0.034***	0.00	0.967
High School	-0.093***	0.02	0.911	-0.004	0.04	0.996	-0.080***	0.02	0.923
Married	-0.152***	0.04	0.859	-0.142	0.07	0.868	-0.109**	0.04	0.897
Religious	-0.048	0.03	0.953	-0.079*	0.04	0.924	-0.008	0.02	0.992
Prim. Off. - Violent	-0.042	0.03	0.959	0.159***	0.04	1.173	-0.099***	0.02	0.906
Prim. Off. - Drug	-0.251***	0.02	0.778	-0.154**	0.05	0.857	-0.196***	0.02	0.822
Prim. Off. - Sex	0.051	0.06	1.052	0.149	0.08	1.160	0.067	0.05	1.069
Prim. Off. - Other	-0.039	0.03	0.962	0.065	0.05	1.068	-0.057*	0.03	0.945
Habitual Offender	0.287***	0.04	1.333	0.121*	0.06	1.128	0.260***	0.03	1.297
Violent Habitual	0.376**	0.11	1.456	0.231	0.13	1.259	0.207*	0.09	1.230
Support Habit	0.011	0.02	1.011	-0.057	0.04	0.945	0.029	0.02	1.030
SGL Score	0.090***	0.01	1.094	0.033***	0.01	1.033	0.085***	0.00	1.089
Sentence length	0.008***	0.00	1.008	0.001***	0.00	1.001	0.004***	0.00	1.004
Prior Prison	0.114***	0.01	1.121	0.070***	0.01	1.072	0.093***	0.01	1.098
Time Served	-0.055***	0.00	0.946	-0.022***	0.00	0.979	-0.040***	0.00	0.961
<i>First DI by Type</i>									
Violent	0.013	0.03	1.014	0.359***	0.04	1.432	-0.139***	0.03	0.870
Sex	0.156*	0.06	1.169	-0.221*	0.10	0.802	0.204***	0.06	1.227
Property	-0.013	0.05	0.987	-0.004	0.08	0.996	0.000	0.05	1.000
Disorder	0.119***	0.03	1.126	0.159**	0.05	1.172	0.047	0.03	1.048
Reg. Violation	-0.149***	0.03	0.861	-0.259***	0.06	0.772	-0.080**	0.03	0.923
Contraband	-0.024	0.03	0.976	-0.121*	0.06	0.886	0.016	0.03	1.016
Drug	-0.026	0.05	0.974	-0.246**	0.09	0.782	0.023	0.04	1.024
Total Charges	0.442***	0.04	1.556	0.886***	0.04	2.426	-0.172***	0.03	0.842
Constant	0.601***	0.17		-3.516***	0.20		0.843***	0.15	
<i>Random Effect</i>									
Facility Variance	0.328	0.04		0.205	0.04		0.260	0.04	
Log likelihood	-35231.2			-16249.2			-39936.5		

Notes: Black, prim. off. - property, and DI defiance serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

Unlike the previous models, no significant two- or three-way interactions emerge in the extra work duty models. This means that the effect of being assigned to extra work duty may not vary between gender, or within gender by race/ethnicity. A significant main effect of extra work duty does emerge. Extra work duty, in comparison to disciplinary confinement, decreases the

odds of future violence ( $b = -0.115$ ; O.R. = 0.892). Several other covariates emerge as significant and are in the expected direction. Younger inmates ( $b = -0.036, -0.008, -0.034$ ; O.R. = 0.962, 0.992, 0.967), those previously incarcerated ( $b = 0.114, 0.070, 0.093$ ; O.R. = 1.211, 1.072, 1.098), and who have served less time at their first misconduct event ( $b = -0.055, -0.022, -0.040$ ; O.R. = 0.946, 0.979, 0.961), are more likely to be reported for a second infraction, a second violent infraction, and a second nonviolent infraction.

Table 4.7 assesses the effect of extra work duty on the timing to misconduct (model 1), violent infractions (model 2), and nonviolent infractions (model 3). Again, no significant two- or three-way interactions emerge. It appears then that the effect of receiving extra work duty on the timing of future misconduct does not vary between males and females, or between Black, White, and Hispanic males and females. However, being assigned to extra work duty versus disciplinary confinement increases the hazard of incurring a general infraction ( $b = 0.035$ ; H.R. = 1.036) and a nonviolent infraction ( $b = 0.046$ ; H.R. = 1.048), but the effect is substantively small.

**Table 4.7** Mixed Effects Survival Analysis of Time until Second Disciplinary Infraction on Measures of First Extra Work Duty Sanction (vs. Disciplinary Confinement Sanction) and Inmate Characteristics (n = 64,450 inmates nested in 167 facilities)

	Model 1 Any Second DI			Model 2 Violent Second DI			Model 3 Nonviolent Second DI		
	b	SE	HR	b	SE	HR	b	SE	HR
<i>Covariates</i>									
EW	0.035*	0.01	1.036	-0.063	0.05	0.939	0.047**	0.02	1.048
Male	0.108	0.14	1.114	-0.048	0.22	0.953	0.111	0.13	1.117
White	-0.159***	0.01	0.853	-0.310***	0.03	0.734	-0.141***	0.01	0.869
Hispanic	-0.132***	0.02	0.876	-0.121*	0.05	0.886	-0.133***	0.02	0.875
Age	-0.025***	0.00	0.975	-0.019***	0.00	0.981	-0.026***	0.00	0.974
High School	-0.042***	0.01	0.959	-0.019	0.03	0.982	-0.045***	0.01	0.956
Married	-0.105***	0.02	0.900	-0.186**	0.07	0.830	-0.096***	0.02	0.908
Religious	-0.031*	0.01	0.969	-0.096**	0.04	0.909	-0.022	0.01	0.978
Prim. Off. - Violent	-0.032*	0.01	0.968	0.134**	0.04	1.144	-0.054***	0.01	0.947
Prim. Off. - Drug	-0.188***	0.01	0.828	-0.247***	0.04	0.781	-0.184***	0.02	0.832
Prim. Off. - Sex	-0.065**	0.03	0.937	0.049	0.08	1.050	-0.076**	0.03	0.927
Prim. Off. - Other	-0.067***	0.02	0.935	0.010	0.05	1.010	-0.076***	0.02	0.927
Habitual Offender	0.148***	0.02	1.159	0.166**	0.06	1.181	0.146***	0.02	1.158
Violent Habitual	0.160***	0.04	1.173	0.279*	0.12	1.322	0.144**	0.04	1.155
Support Habit	-0.014	0.01	0.986	-0.068	0.04	0.934	-0.007	0.01	0.993
SGL Score	0.020***	0.00	1.020	0.013	0.01	1.013	0.021***	0.00	1.022
Sentence length	0.001***	0.00	1.001	0.001***	0.00	1.001	0.001***	0.00	1.001
Prior Prison	-0.010*	0.00	0.990	0.011	0.01	1.011	-0.011*	0.00	0.989
Time Served	-0.045***	0.00	0.956	-0.052***	0.00	0.949	-0.045***	0.00	0.956
<i>First DI by Type</i>									
Violent	-0.081***	0.02	0.922	0.200***	0.04	1.221	-0.132***	0.02	0.877
Sex	0.050	0.03	1.051	-0.193*	0.10	0.824	0.079*	0.03	1.083
Property	-0.021	0.03	0.979	-0.027	0.08	0.973	-0.018	0.03	0.982
Disorder	0.045**	0.02	1.046	0.152**	0.04	1.164	0.031	0.02	1.032
Reg. Violation	-0.079***	0.02	0.924	-0.281***	0.06	0.755	-0.061**	0.02	0.941
Contraband	-0.036*	0.02	0.964	-0.164**	0.05	0.849	-0.021	0.02	0.979
Drug	-0.037	0.02	0.964	-0.277**	0.08	0.758	-0.016	0.03	0.985
Total Charges	0.173***	0.02	1.189	0.688***	0.03	1.989	0.021	0.02	1.021
Constant	-4.203***	0.14		-7.090***	0.24		-4.113***	0.13	
<i>Random Effect</i>									
Facility Variance	0.259	0.03		0.409	0.07		0.236	0.03	
Log likelihood	-99141.7			-21018.8			-92739.0		

Notes: HR = Hazard Ratio; Black, prim. off. - property, and DI defiance serve as reference variables. \*\*\*p<.001, \*\*p<.01, \*p<.05

## Discussion and Conclusions

The criminal justice system is built on tenets of deterrence theory, which assume that humans are rational actors that weigh costs and benefits of criminal behavior (Beccaria, 1764; Bentham, 1789; Cullen et al., 2011; Nagin, 1998; Nagin, 2013; Pratt et al., 2006). The threat of



harsh punishments is intended to raise the cost of illegal behavior. Scholarship shows, however, that criminal sanctions often do not meet their deterrent goal, and can be criminogenic (Bales & Piquero, 2012; Chiricos & Waldo, 1970; Cullen et al., 2011). Nonetheless, correctional facilities operate under a parallel system and sanction inmates who violate prison rules in an effort to maintain a safe prison environment (Crewe, 2011; DiIulio, 1990).

There are a range of potential goals of using disciplinary confinement, and other sanctions, as an in-prison punishment. Prisons may, for example, seek to achieve not only specific deterrence, but also general deterrence, retribution, incapacitation, or to serve other practical objectives. This study assessed the use of disciplinary confinement as punishment through the lens of specific deterrence. But overall, only little is known about the effect in-prison punishments, and studies have not identified a misconduct-reducing effect (Labrecque, 2015; Lucas & Jones, 2017; Morris, 2016).

Accordingly, the goal of this chapter was to assess the effect of commonly used in-prison sanctions—disciplinary confinement, loss of gain time, and extra work duty—on the likelihood and timing to future misconduct, and to answer two specific research questions. The analyses focused on general misconduct, and instances of violent and nonviolent infractions. In response to the first research question, the findings did not identify a reduction of future misconduct among inmates punished with harsh in-prison sanctions. The chapter also explored whether the effect of in-prison punishment was gendered, and whether the effect varied within gender by race/ethnicity. In terms of the second research question, difference between but not within gender emerged in the effect of in-prison sanctions on future misconduct. Overall, four main results emerged across the analyses.

First, and in line with previous research (Labrecque, 2015; Lucas & Jones, 2017; Morris,

2016), disciplinary confinement did not reduce the likelihood of future misconduct nor did it increase the timing to misbehavior among a sample of Florida inmates. On the contrary, results of this chapter found that disciplinary confinement increased the odds of subsequent violence among inmates, and put inmates at risk of violence sooner. This effect however, was substantively modest. Given the large-scale use of disciplinary confinement in response to in-prison infractions (see chapter 3), the aggregated impacts of this increase are still meaningful.

Second, I identified differences in alternative to non-disciplinary confinement sanctions. The two main alternatives in Florida prisons include loss of gain time and extra work duty. Among all inmates, assignment to extra work duty was the only in-prison sanction associated with a reduction in future violence. This finding is not surprising given that qualitative inmate accounts suggest that inmates prefer work over idle time (Batchelder & Pippert, 2002) and that loss of gain time may be less meaningful in Florida prisons given truth-in-sentencing laws, which reduce somewhat the need for gain time given that inmates have limited flexibility in early release opportunities (i.e., they have to serve 85 percent of their sentences). This result also falls in line with research on remunerative control, which argues that incentives such as work assignments, create commitment to prison rules (Colvin, 1992; Etzioni, 1964; Huebner, 2003).

Third, the effect of in-prison sanctions on misconduct were found to be gendered. The odds of future violence were increased among females who received a loss of gain time and among males who received disciplinary confinement. Females punished with disciplinary confinement and males punished with a loss of gain time were at an increased risk of nonviolent misconduct. The timing to misconduct for females and future violence for males punished with harsh sanctions was decreased. It should be noted, however, that the identified effects were moderate in size. Fourth, and finally, this chapter's results did not identify variation within

gender by race/ethnicity. Thus, while there was a gendered sanction effect, it did not appear to affect males and females of different races/ethnicities in unique ways.

### **Implications for Theory and Research**

A number of implications flow from the findings of this chapter. The results of this chapter provide cursory insight into theoretical questions about how to effectively maintain prison safety and order and whether inmates in prison—especially those who engage in offending during incarceration—can indeed be deterred (see e.g., Mears and Reisig (2006) on supermax prisons). Harsh in-prison sanctions were not associated with a reduction in future misconduct, and so, at least in terms of a *specific* deterrent purpose, such sanctions do not appear to fulfill their goal. Further, the results provide an important platform for developing future theory and research that seeks to better understand the processes through which in-prison sanctions lead to behavioral outcomes.

This chapter also provides important guidance and suggests that future studies should target a range of potential intervening mechanisms. Studies should, for example, systematically explore how time in isolation impacts mental health and future behavior. Because inmates with mental health problems are more likely to report spending time in restrictive housing (Beck, 2015), it is important to more closely examine inmates' mental status across time. This ideally should include longitudinal assessments of mental health before, during, and after disciplinary confinement, and whether associated behavioral problems affect subsequent misconduct. Studies should also examine the collateral impacts of time in disciplinary confinement for inmates' ability to continue with rehabilitative programming. In theory, disciplinary confinement will cause programming failures or cessations which could have adverse effects. Scholarship also suggests that time in disciplinary confinement may harm perceptions of legitimacy. And in

accordance with defiance theory (see e.g., Sherman, 1993), by spending time in disciplinary confinement, inmates may perceive their treatment by the prison system as illegitimate or unfair, leading to future behavioral problems.

The lack of a substantial deterrent effect of the punishments examined in this chapter adds to the body of research that finds little deterrent effect of harsh criminal justice sanctions on criminal behavior. Harsh punishments that remove inmates from general population, just like harsh criminal justice sanctions that remove individuals from their communities, do not appear to have a crime-reducing effect. The findings also support prior research on the effect of disciplinary confinement on subsequent misconduct, and contribute to in-prison punishment literature by examining the effect of loss of gain time and extra work duty assignments. More specifically, the theoretical underpinnings of the deprivation perspective of inmate behavior found support in this chapter's analyses (Sykes, 1958; Sykes & Messinger, 1960). Punishments that increase the pains of imprisonment—disciplinary confinement—or those that lengthen exposure to these pains—loss of gain time—were associated with an increase in the likelihood of misconduct and a decrease in the timing to misbehavior.

This chapter's findings also add to the body of literature that examines gender differences in the prison experience. Prisons operate under a guise of gender-neutrality. All inmates must follow the same set of rules and regulations and are subjected to the same in-prison punishments (McCorkel, 2006). However, and as identified in this chapter, the effect of various sanctions may not operate the same across males and females. Findings showed a higher likelihood of misconduct for males punished with disciplinary confinement and similar effects of loss of gain time for females. There may be collateral consequences of using punishments such as losses of gain time that cut female inmates' social ties and prolong reconnection with important social

bonds that outweigh any benefits of the punishment. Lengthening incarceration by removing gain time may not serve as a punishment which corrects behavior, but instead adds to the pains of imprisonment. This may be a unique effect for women, as they are more likely to be parents than incarcerated men (Glaze & Maruschak, 2010), and are more likely to exhibit feelings of guilt, shame, hopelessness, and consider themselves inadequate parents during imprisonment (Dodge & Pogrebin, 2001).

This chapter provides insights into the effectiveness (or lack thereof) of in-prison punishments. Future research can build on the findings of this chapter in several ways. First, and perhaps most importantly, future studies can extend and verify the findings identified in this chapter by utilizing (or collecting) data that are able to account better for selection bias. There are several decision-making points leading up to an infraction (or lack thereof) after the first in-prison punishment, which can potentially influence the likelihood of a second infraction.<sup>10</sup> The circumstances surrounding the first infraction event may alter officers' perceptions and subsequent sentencing of inmates. For example, are females who violated a prison rule in the visitation room viewed differently than females who violated the same rule in the cafeteria surrounded by other inmates? And do these circumstances alter future misconduct, or the likelihood of officers to notice future misconduct? Are the effects of the circumstances of misconduct gendered? Scholars should focus data collection efforts on the circumstances of the infraction beyond demographic characteristics that lead to the sentencing event. To this end, qualitative and ethnographic data collection may be the most viable strategy to pursue.

At the same time, there may be facility-level circumstances that affect sentencing,

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<sup>10</sup> Similar to prior quasi-experimental assessments of sanction effects, the findings of this chapter are subject to selection bias, and any inferences drawn from the analyses should be interpreted with caution.

making harsh sentences more or less likely, and which in turn can affect future misconduct. For example, if facilities with high rates of violence use disciplinary confinement to incapacitate offenders, does this sentence act as a “cool-off” period, and decrease subsequent misconduct? On the other hand, in facilities with low violence rates, does the use of disciplinary confinement become viewed as illegitimate and function to increase future violence? Facilities with higher misconduct rates may also be overburdened during the sentencing phase, and rely on the most easily applicable punishment. There may be a diminished deterrent or retributive motivation behind sentencing in this case, and this may affect the likelihood of future misconduct. Thus, research should focus on the facility circumstances during the sentencing event.

Second, this chapter used the disciplinary hearing outcome as a measure of in-prison sanctions, and future studies can extend this chapter’s results by collecting data that are able to determine whether a punishment was implemented. Third, the analyses centered on the first in-prison punishment event. Many inmates who incur one punishment will likely be written up for a subsequent one, and so will receive another sanction. Future research can build on these findings and examine whether the accumulation of punishments influences behavior. Greater numbers of punishments across a sentence can for example, decrease the perceived legitimacy of in-prison sanctions (see e.g., Sherman, 1993). There may also be variation in the effect of the length of punishment on misbehavior. It is possible that the effect of lengthier disciplinary confinement stays, or removals of more gain time, can alter the influence of in-prison sanctions identified here. It may be that lengthier disciplinary confinement stays increase disorder, while shorter stays may be beneficial to temporarily pacify any violent situations between inmates.

Fourth, the findings of this chapter were specific to future in-prison behavior, and provide motivation for studies to examine the effects of in-prison punishments on recidivism and

behavior in the community upon an inmate's release. The overwhelming majority of incarcerated individuals will eventually return to their communities, and prisons are tasked with ensuring that these individuals did not incur any additional harms to their mental or physical wellbeing that can affect the safety of the community inmates will return to. Findings of this study identified a crime-increasing effect of in-prison punishments, and scholars should explore whether this increased likelihood of criminality transfers to the community as well.

### **Implications for Policy**

Several policy implications emerge out of this chapter. Perhaps most importantly for policy was the finding of the association of disciplinary confinement with future violence. As was highlighted in chapter 3, Florida prisons disproportionately sanction inmates with disciplinary confinement, and Florida Administrative Code dictates that virtually every rule violation can be punished with disciplinary confinement. The reliance on this form of punishment may be spurred on by hopes that it will deter inmates from future misconduct, curb violence rates in prison, and increase the safety of correctional officers and inmates. Although the findings presented here constitute just one study, they highlight critical policy implications of the overuse of disciplinary confinement. Namely, relying on disciplinary confinement to regulate inmate behavior can constitute a costly endeavor (Johnson & Chappell, 2014; Mears, 2006), and one that may be minimally effective in securing inmate compliance with prison rules and regulations.

If the key objective of sanctions is to maintain order and safety, prison administrators should consider a greater balance between coercive and remunerative controls, which has shown more beneficial results in regulating inmate behavior (Huebner, 2003). Scholars point to the idea that engaging values to motivate compliance with rules may be more useful in gaining

compliance than relying on the threat of punishment (Tyler, 2009). Extra work assignments may present one fruitful avenue prison administrators can consider in increasing inmate compliance with prison rules. Not least, prison administrators should consider policies that follow the advice of scholars that emphasize the legitimacy of sanctions, and base their policies on sound evidence-based research. The Obama administration, as well as the administration of several states, has pushed to reform the way disciplinary confinement is used in federal and state prisons that are centered on developing special guidelines for using disciplinary confinement for young inmates and those that are mentally or physically ill (Hammel, 2017; Mann, 2017; U.S. Department of Justice, 2016). The findings of this chapter lend empirical support to such efforts.



## **CHAPTER FIVE: CONCLUSIONS**

The female incarceration experience often goes overlooked in prison literature. The body of research that examines inmate behavioral patterns, and the overall prison experience, is limited by an almost exclusive focus on males. Differences in pre-prison lives, prison facility characteristics, and management strategies, provide impetus for studying female inmates. Assessments of the prison experience also necessitate a focus beyond one that is binary and “gendered”, to one that can account for gender, race, and ethnicity, as feminist criminology suggest that these characteristics shape many aspects of the prison life.

This dissertation added to scholarship on prison order and safety, and gender and racial/ethnic differences in the prison experience, using data provided by the Florida Department of Corrections (FDOC). The data were ideal for this dissertation, because they include longitudinal information on inmate infractions and the corresponding in-prison sentencing decisions, demographic variables, prior criminal history, and current offense information. And crucial for the goal of this dissertation, the number of incarcerated females of Black, White, and Hispanic background was large enough to allow for detailed empirical assessments.

In chapter 2, the dissertation examined whether gender and racial/ethnic variation exists in the nature of inmate misconduct and whether commonly assessed variables predict misconduct across inmate subgroups. The analyses presented in this chapter identified unique misconduct patterns across Black, White, and Hispanic male and female inmates, and identified some differences in the predictors of misconduct for these six inmate groups. Chapter 2 also identified

two inmate characteristics, the number of prior imprisonments and age, as stable predictors for each inmate subgroup and across all infraction types and counts assessed in the analyses.

Chapter 3 examined gender and racial/ethnic disparities that emerge in in-prison sentencing. The findings of this chapter showed that the harshest in-prison sanction—disciplinary confinement—was the one used most frequently in Florida prisons, across males and females, and Black, White, and Hispanic inmates. The chapter also identified relative leniency afforded to female inmates. Females received disciplinary confinement with less frequency than comparable males. The findings identified a larger gender gap among nonviolent inmates than violent inmates. However, the analyses did not identify an appreciable difference between genders or among racial/ethnic groups. Chapter 3 identified legal variables such as type of infraction as the strongest predictor of the sentence an inmate received.

Finally, chapter 4 identified a lack of a deterrent effect of harsh in-prison punishments. Disciplinary confinement, arguably the harshest available sanction and the sanction most commonly used in Florida prisons, did not reduce the likelihood of misconduct nor did it increase the timing to future misconduct. The results showed that disciplinary confinement increased the likelihood of male violence and female order violations. Chapter 4 also identified differences in alternatives to disciplinary confinement sanctions, and assignment to extra work duty was the only in-prison sanction that reduced inmate misconduct.

## **Implications**

At least five key implications emerged out of this dissertation. First, and most broadly, this dissertation has contributed to the work of unpacking the prison “black box” by empirically examining a large, diverse inmate population. Second, the dissertation advanced theories of inmate behavior, sentencing, and punishment. Analyses indicated that misconduct patterns of

males and females in prison is influenced by common predictors of inmate behavior. In fact, two imported variables—prior incarceration and age—emerged as the strongest predictors of male and female misconduct, and violence and order violations. The generalizability of the importation and deprivation frameworks was thus strengthened. Sentencing theories typically applied to court decision-making processes received partial support in this dissertation, but gender-specific sentencing theories appeared to hold behind bars. Females received relative leniency compared to males, but were treated more similarly if the misconduct was violent. Finally, defiance theory, more than principles of deterrence, appeared to be supported in this dissertation. Harsh in-prison sanctions did not deter inmate misconduct, and in some cases had a potential crime-inducing effect. The findings of this dissertation provide motivation for future studies of incarceration experiences, and gender and racial/ethnic differences in the experiences, to use these theoretical frameworks to inform their analyses.

Third, the dissertation has advanced our understanding of gender and racial/ethnic differences in misconduct trends. Females were generally less likely to offend, less likely to act violently, and offended less often than males. Black females' misconduct patterns however, mirrored more closely those of males. This raises important questions for future research, which can work to disentangle whether these differences are behavioral or whether officers enforce rules in disparate ways between males and females, and Black, White, and Hispanic inmates.

Fourth, this dissertation has provided critical insight into the official sentencing of inmates in prisons. Findings showed that prison officers rely most heavily on the harshest available in-prison punishment—disciplinary confinement—and revealed disparate sentencing. Females received relative leniency, and males were subjected to overall harsh in-prison punishments. This raises concerns about the fairness of the treatment of inmates. It also

provides impetus for research to examine the mechanisms that lead to this gender-gap in treatment. It also raises questions about the gender-neutral punishment policies prisons operate under. Why are males more likely to be sentenced to disciplinary confinement? Although it is possible that there are fewer disciplinary cells in female facilities, policies state that when disciplinary confinement cells are unavailable, as they may be in female facilities, inmates are to be placed in cells with physical barriers that preclude association with other inmates. The explanation of differential availability of this form of punishment may not be the sole cause of leniency afforded to females, and future studies guided by the findings of this dissertation and existing theory should explore reasons behind the overall harsher treatment of male inmates.

Fifth, the dissertation has contributed to the work aimed at improving safety and order in the prison environment. Disciplinary confinement did not emerge as a mechanism to deter male or female inmate misconduct. This means that current sanctioning practices may be relatively ineffective in fostering a safe prison environment. Future research should examine more closely the mechanisms which structure in-prison punishments' effectiveness. Prison administrators and scholars must also consider the cost of this practice on the communities that inmates will eventually return to. Relying on disciplinary confinement as the virtually sole punishment for inmate misbehavior may be ineffective in reducing inmate violence and crime in the community.

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## APPENDICES

### Appendix A: Florida Department of Corrections Approval for Data Usage

June 7, 2016

Dear David,

My name is Elisa Toman and I am a PhD candidate in the Department of Criminology at the University of South Florida. Dr. Bill Bales spoke to you previously regarding my interest in examining the differences in inmate misconduct and prison experiences between male and female inmates using data from the Florida Department of Corrections (FDC). From my understanding, you support my undertaking research on gender differences in the types of experiences inmates have related to in-prison infractions and using FDC data to do so.

To conduct my research and gain approval from USF's Human Subjects Committee, I need your approval to use the de-identified in-prison infraction data used previously by Dr. Bill Bales to examine a validation of prison risk assessment (the CARS data; Dr. Bales has agreed to provide these data, pending approval from FDC). Specifically, I will be using these data to conduct analyses predicting the types of infractions inmates receive and the future implications of infractions for individuals' behavior. Upon completion of my dissertation, I will provide to you an executive summary of my findings and their potential implications for research and policy directly related to FDC. Dr. Bill Bales (Florida State University) and Dr. Joshua Cochran (University of Cincinnati) will be directly overseeing my work with these data.

If you approve this request, please find below the appropriate signature line indicating your approval for my access and use of the de-identified data.

Thank you for agreeing to allow me to use the data for my dissertation research. I am looking forward to conducting the study and sharing my results with you and the DOC.

Sincerely,



Elisa Toman  
PhD Candidate  
Department of Criminology  
University of South Florida  
Email: lucaelisa@mail.usf.edu  
Cell: (305) 586-4644

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The signature below grants your approval to use data provided by the Florida Department of Corrections' Bureau of Research and Data Analysis for your dissertation research on the differences in prison experiences between male and female inmates. You have permission to conduct analyses with the available de-identified in-prison infraction data (the CARS data) used previously by Dr. Bill Bales.

Signature:  Date: 6-30-16

David Ensley, Chief of Research and Data Analysis  
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