The Gendering of Criminal Stigma: An Experiment Testing the Effects of Race/Ethnicity and Incarceration on Women's Entry-Level Job Prospects

by

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A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

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May 2014
ABSTRACT

Over the past 40 years, the rate at which women are incarcerated has increased dramatically. Of the 111,000-plus female inmates currently in prison, most will be returned to the community and reenter the labor market. Despite its significance in prisoner reentry and in how ex-offenders remain crime-free, previous research finds that employers are unwilling to hire employees with a criminal record. Moreover, Pager (2003) and Pager, Western, and Bonikowski (2009) found that White job applicants with a prison record were more likely to be interviewed or hired than Black or Hispanic applicants without a record. These troubling findings regarding the effect of race/ethnicity, however, are from research that focuses on men's employment. Given the already low job prospects of ex-prisoners makes it more difficult for women with a prison record to find employment, who also face labor market barriers on account of their race/ethnicity and gender. This dissertation research uses two audit methods with an experimental design to examine the independent and interaction effects of race/ethnicity and incarceration on the likelihood women job applicants will advance through the hiring process. Job applications were submitted online and in-person. The effect of race/ethnicity varied by the method used to apply for jobs. When applying for jobs online, Black women had lower odds of employment than White women. Hispanic women, however, had higher odds of employment than White women when food service jobs were applied for in-person. The effect of a prison record was significant in both experiments; the effect was direct online, but conditioned by ethnicity in-person. Hispanic women with a prison record were less likely than White women with a prison record to advance through the hiring process. The results point to the importance of
understanding how women are disadvantaged by incarceration and how mass incarceration contributes to racial/ethnic inequality through its effect in the labor market. Several recommendations follow for future research and policies concerning prisoner reentry and the use of criminal record information by employers.
ACKNOWLEDGMENTS

*I can do all things through Jesus Christ who strengthens me* (Philippians 4:13).

I know I have made my parents, Robert and Rosie Ortiz, very proud, but they have made so much of my journey possible through their unconditional love and unwavering support.

Mike, you make me so happy. I cherish the good thing we have.

I could not have survived the Ph.D. program without the friendship of so many of my colleagues, including Andrea Borrego, Mario Cano, Rick Moule, David Pyrooz, Jill Turanovic, and Clair White. I have learned so much from each of you.

I want to thank Miki Vohryzek-Bolden for years of mentorship and friendship.

This dissertation would not be possible without the tremendous effort of my committee, Scott Decker, Cassia Spohn, and Kristy Holtfreter. I am hugely indebted to Eric Hedberg for answering my numerous and, oftentimes, redundant questions. All errors and omissions are my own.

I would have surely lost my mind during the early stages of the research process without the assistance of Marcus Galeste. I also want to acknowledge and extend my appreciation to the testers. They subjected themselves to unpleasant situations while acting as job applicants and, yet, they went back into the field each and every time.

My research was made possible through a grant from the National Institute of Justice (2010-MU-MU-0004). The opinions, findings, conclusions, and recommendations expressed in this dissertation are solely my own and do not necessarily reflect the official position or policies of the U.S. Department of Justice.
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CHAPTER 1
INTRODUCTION

Women offenders are a glaring omission in discussions of the collateral consequences of incarceration. To date, the implications of incarceration on racial/ethnic inequality have been framed almost entirely as a function of men’s imprisonment. For example, research tends to focus on men’s experiences with reentering the labor market and the difficulties of Black and Hispanic men in finding work and earning a legitimate paycheck (Lyons & Pettit, 2011; Pager, 2003; Pager, Western, & Bonikowski, 2009; Western, 2002). This research on the employment barriers of Black and Hispanic men is then used as the basis for the argument that the penal system contributes to the poor socioeconomic circumstances of Blacks and Hispanics on the whole (Wakefield & Uggen, 2010; Western, 2002, 2006; Western & Pettit, 2005).

To be fair, the majority of the U.S. prison population is male. This fact, however, should not distract from the state of women’s imprisonment. Although the incarceration rate of men increased four-fold between 1973 and 2010, the incarceration rate of women increased more than ten-fold over the same 37-year period from 6 per 100,000 of the U.S. population to 67 per 100,000 (Sourcebook of Criminal Justice Statistics [SCJS], 2012b). The absolute number of women in prison may be smaller than the number of men, but the growth in women’s imprisonment has outpaced that of men. A change of this magnitude within the prison population is not without implications. Indeed, if there is one fact suggested by the research on the effects of imprisoning an increasing number of men, it is that incarcerating a growing number of women carries not only collateral consequences for women individually, but for the groups of which they are members.
The role of incarceration in generating racial/ethnic inequality has been primarily attributed to the economic consequences of incarceration given the disproportionate incarceration of Blacks and Hispanics (Pettit & Western, 2004; Wakefield & Uggen, 2010; Western, 2002, 2006; Western & Pettit, 2005). This relationship is most clearly observed through the employment consequences of imprisonment (Lyons & Pettit, 2011; Pager, 2003; Pager et al., 2009; Pettit & Lyons, 2009; Western, Kling, & Weiman, 2001). Indeed, job applicants with a prison record struggle to find an employer who is willing to hire them (Holzer, Raphael, & Stoll, 2004, 2006a; Western et al., 2001). However, research indicates that it is more than just a prison record that affects the employment prospects of inmates (Holzer et al., 2006b; Pager, 2003; Pager et al., 2009). Pager (2003) and Pager et al. (2009) found that employers discriminated against Black and Hispanic job applicants without a prison record, preferring instead to hire White job applicants with a prison record. Roscigno (2007) and Tomaskovic-Devey (1993b) contend that employment discrimination perpetuates and maintains racial/ethnic inequality.

The most notable limitation of the research on the employment consequences of incarceration is the lack of attention to women. This holds equally for an absence in the literature on the effect of incarceration on racial/ethnic discrimination against women. Yet, there is substantial evidence that indicates women face discrimination in the labor market and in the workplace on account of their race/ethnicity (see, e.g., Browne, 1999). The purpose of this dissertation is to close some of the empirical gap in the research on the collateral consequences of incarceration by examining racial/ethnic differences in women’s employment prospects. This dissertation research is centered broadly on understanding the mechanisms that link incarceration and inequality and refocusing the
lens through which this link is studied from an emphasis on men’s incarceration and employment to include women’s incarceration and employment.

Investigating the employment consequences of incarceration has implications for research and public policy. Specifically, examining women’s search for legitimate work after release from prison adds dimension to the scholarly and public policy discussions concerning prisoner reentry. As the prison population has increased, the number of parolees and the size of the population with a prison record has increased accordingly. Even though the female prisoner and parolee populations have grown substantially, women’s experiences with returning home from prison tend to get lost in the general conversation on the reintegration process that ex-prisoners navigate. Relatedly, developing a better understanding of women’s reentry experiences, including their experiences with looking for and finding employment, has implications for understanding why women recidivate and, conversely, why they desist from crime.

This first chapter of the dissertation introduces the issues that are at the core of why researching women’s labor market prospects, and racial/ethnic variation in those employment chances, advances previous research. This chapter begins with why employment matters from a policy perspective. Having a job is required for nearly all prisoners when they are released, which highlights the centrality of the labor market in general, and finding work in particular, in women’s reentry experiences and their likelihood of returning to crime or staying crime-free. Although working reduces the likelihood of reoffending, women’s labor market experiences are quantitatively and qualitatively different from men’s, and this must be reconciled with the current research on the employment consequences of incarceration, which consistently examines men as
the unit of analysis. That gender matters for finding work contributes further to the reason for focusing on women’s employment and understanding women ex-prisoners’ labor market barriers. Finally, not only does incarceration reduce employment chances overall, but job prospects are also limited by race/ethnicity. An overview of the empirical foundation that supports the negative effect of race/ethnicity on gaining a foothold in the labor market concludes this introductory chapter.

Women and ex-prisoners are at a disadvantage in the labor market. At the same time, for both women and ex-prisoners, race/ethnicity has a negative effect on employment chances and labor market mobility. The labor market plays a critical part in the structure of race/ethnicity in the U.S. Beckett and Western (2001) argue that criminal justice policies have facilitated the link between incarceration and inequality. The goal of this dissertation research is to contribute to the empirical basis of this argument and for connecting incarceration, employment, and racial/ethnic inequality, by focusing on the consequences of imprisonment on women’s labor market prospects. Toward this end, this dissertation investigates the following research questions:

1. Does race/ethnicity affect women’s employment prospects?
2. Does a prison record affect women’s employment prospects?
3. Does race/ethnicity moderate the effect of a prison record on women’s employment prospects?

This dissertation also examines the role of education in women’s employment chances for three interrelated reasons. First, prison inmates generally have poor education histories (Harlow, 2003), which lends context to understanding their employment history before and after incarceration (Sabol, 2007; Western, 2007). Second, as the population of
returning prisoners has increased and prisoner reentry has come to the forefront of criminal justice policymaking, providing inmates with opportunities to improve their education credentials has implications for public safety and preventing recidivism (Gaes, 2008). To be sure, correctional education programs translate to better employment outcomes post-release (Davis, Bozick, Steele, Saunders, & Miles, 2013). But more fundamental to the goal of this dissertation, education has become increasingly important for understanding racial/ethnic inequality, especially among women (Browne & Askew, 2005; Massey, 2007; McCall, 2000). Accordingly, this dissertation investigates the research question:

4. Does education affect women’s employment prospects?

The remainder of chapter one is designed to introduce the empirical foundation for researching these questions, including the limitations of current research on the employment consequences of incarceration.

**Women’s Reentry, Employment, and Recidivism**

Feminist criminologists rightly argue that the experiences of women before, during, and after prison are distinct from men’s (Bloom, Owen, & Covington, 2004; Cobbina, 2010; Daly, 1992; Dodge & Pogrebin, 2001; O’Brien, 2001; Richie, 2001). But, the reality for most men and women who are incarcerated is that they will be released from prison and returned to their communities. Making the transition from prison to the community is difficult and challenging regardless of gender (Petersilia, 2003). Despite the argument for gender responsive strategies to assist women returning to the community (Holtfreter & Wattanaporn, 2013), and the evidence indicating that there are between and within gender differences in the risk factors of recidivism (Holtfreter &
Cupp, 2007; Holtfreter, Reisig, & Morash, 2004; Reisig, Holtfreter, & Morash, 2006; Richie, 2001; Van Vooohris, Wright, Salisbury, & Bauman, 2010), men and women must similarly comply with the same general conditions of parole supervision. The most notable among these conditions is the requirement to look for and maintain employment. Travis and Stacey (2010) reported that nearly all states require parolees to work as a standard condition of release from prison.

In general, work and employment reduces the likelihood of reoffending (Uggen, Wakefield, & Western, 2005). For more than just financial reasons, employment is an important tool in how former prisoners rebuild and reestablish themselves after prison (Travis, 2005). Sampson and Laub (1993) argue that it is not merely employment status (i.e., having a job) that reduces the risk of former offenders returning to crime, but specific dimensions of employment, such as job stability and job quality (see also Uggen, 1999). Likewise, Maruna (2001) explains that when former offenders define their work and job as personally meaningful, work can forcefully influence the desistance process. In other words, identity transformations shaped by work-related experiences are central to the transition from a “life of crime” to a crime-free life. That employment matters for reducing recidivism and desisting from crime echoes decades of research that suggests that unemployment and underemployment is a cause of crime (Bellair, Roscigno, & McNulty, 2003; Chiricos, 1987; Crutchfield, 1989; Crutchfield & Pitchford, 1997; Fagan & Freeman, 1999; Krivo & Peterson, 2004; Sullivan, 1989; Uggen & Wakefield, 2008). Despite its salience in decreasing the likelihood of criminal activity among offenders, incarceration has a negative effect on labor market participation and legitimate wages (Apel & Sweeten, 2010a; Huebner, 2005; Western et al., 2001).
With few exceptions, a majority of the research on employment and recidivism has been centered on understanding the effect of work among men (see, e.g., Lalonde & Cho, 2008). The research on the prosocial effect of women’s employment post-incarceration and on the effect of work on women’s recidivism is inconclusive. For example, Uggen and Kruttschnitt (1998) indicated that working women were 83 percent less likely to be rearrested. Cobbina, Huebner, and Berg (2012), by contrast, reported no effect of post-release employment on recidivism among women. At the same time, Giordano, Cernkovich, and Rudolph (2002) suggested that women do not use employment as a “hook for change” when desisting from crime (p. 992). Opsal (2012) counters Giordano et al., concluding that nearly all the female ex-prisoners she interviewed used work as a way to construct new identities for themselves as they attempted to desist from crime in the months following their release from prison. Importantly, Opsal discovered that how work contributed to cognitive transformations among formerly incarcerated women changed over time, with difficulties in the workplace challenging women’s attempts to disengage from criminal activity in the long-term.

**Women in the Labor Market**

To understand employment-related differences among women who are coming out of prison and reentering the world of work requires an understanding of gender differences in labor market experiences. Women’s labor market experiences are distinguishable from men’s on a number of dimensions, including differences in occupational prestige and career trajectories (Jacobs, 1989; Padavic & Reskin, 2002). Moreover, these types of work-related gender differences mean that, on average, women
earn less money than men net of differences in human capital, including education, on-the-job skills training, and experience (Altonji & Blank, 1999). That the workplace experiences of women are qualitatively and quantitatively distinct from men’s poses an important challenge to understanding the effect of employment on women’s reoffending. Sex discrimination and sexual harassment against women affect not only their employment opportunities, earnings, and career tracks, but workplace performance and job stability (Bielby & Baron, 1986; Chan, Lam, Chow, & Cheung, 2008; Glomb, Munson, Hulin, Bergman, & Drasgow, 1999; Reskin & Bielby, 2005; Roscigno & Bobbitt-Zeher, 2007). Visher, LaVigne, and Travis (2004) reported that women who were preparing for release from prison expected to earn significantly less than men who also were getting ready for release. What is more, once out of prison, women, in fact, made significantly less per hour of work than men. Uggen and Kruttschnitt (1998) argued that the greater prevalence among women with a criminal record in the belief that their expected street earnings would exceed legitimate earnings was likely the result of lower pay in legal enterprises vis-à-vis higher profits from prostitution.

Furthermore, a better understanding of how legal employment factors into improving women’s successful reentry and desistance chances is contingent on recognizing and addressing the fact that women are defined in the labor market not only by their gender, but also by their race/ethnicity (see, e.g., Browne, 1999; Browne & Misra, 2003). It is evident that a White racial advantage dictates how social institutions, including the economy and labor market, are racially/ethnically structured (Bonilla-Silva, 1997; Tilly, 1999). Accordingly, among women in the workforce, Whites are assigned a position at the top of the racial/ethnic hierarchy, with the implication of that structuring
being that White women are preferred job applicants (Bertrand & Mullainathan, 2004),
more likely to be hired (Bendick, Jackson, & Reinoso, 1994; Bendick, Jackson, Reinoso,
& Hodges, 1991), and earn higher wages than Black and Hispanic women (e.g., Bound &
Dresser, 1999; Tienda, Donato, & Cordero-Guzman, 1992). To this point, McCall
(2001a) reports that although the male-over-female advantage is, on the whole, declining,
“inequality among women is emerging as a key feature of women’s work experience” (p.
175) (see also Blau & Kahn, 1997). Browne and Askew (2005) illustrate McCall’s
conclusion in their investigation of contemporary trends in women’s wages. From the
mid-1990s, when the U.S. was making a strong recovery from the recession that hit in
1991, to the early 2000s, inequality between White and Black women remained at a fairly
constant level, carrying over from trends observed in the 1980s by Bound and Dresser
(1999), while the wage gap between White and Hispanic women widened.

The Effect of a Criminal Record on Opportunities in the Labor Market

The critical role of race/ethnicity in shaping the labor market experiences of
women only adds to the consequences of a criminal record on women’s employment.
Two empirical foundations make this case clearer. First, the growth in the prison
population discussed earlier has had a disproportionate impact on racial/ethnic minorities.
The most recent figures from the Bureau of Justice Statistics indicate that the Black
incarceration rate is almost six times the White incarceration rate (Carson & Sabol,
2012). Hispanics are incarcerated at a rate that is three times greater than the rate of
Whites. Although racial/ethnic disparity in incarceration rates is more pronounced in the
male prison population, breaking down the female population along the lines of
race/ethnicity reveals much the same. Black and Hispanic women are incarcerated at rates that are 2.5 and 1.4 times the rate of White women, respectively.

Second, previous research on the consequences of imprisonment demonstrates that race/ethnicity makes getting a job that much more difficult. More specifically, Pager (2003) and Pager et al. (2009) found that job applicants with a prison record were, in general, less likely to be interviewed or offered a job than applicants without a record. More important, however, these studies also uncovered that White male job seekers with a criminal record were more likely to advance through the hiring process than Black or Hispanic men without a criminal record. Because incarceration has become so prevalent among Blacks and Hispanics—nine percent of Blacks and four percent of Hispanics in the total U.S. population in 2001 had served time in prison (Bonczar, 2003)—Pager argues that the intertwining of race/ethnicity with imprisonment and criminal records leads employers to stereotype minority job seekers (see also Pager & Karafin, 2009; Pager, Western, & Sugie, 2009). In other words, part of the reason that employers engage in discriminatory hiring practices against Black and Hispanic job seekers is because they assume that minority job applicants who do not indicate having a criminal record are essentially lying about the absence of their involvement with the criminal justice system (see also Holzer et al., 2006b). Even more broadly, Pager’s work is important for not just understanding the role of race/ethnicity in prisoner reentry, but also for the contribution it makes to understanding how incarceration drives and maintains racial/ethnic inequality (see also Wakefield & Uggen, 2010).

One limitation of Pager’s research agenda is that does not examine the role of gender, particularly for Black or Hispanic women. It is arguable that Black and Hispanic
women who have served time in prison are at a greater disadvantage in the labor market than White women, let alone their male counterparts, facing bleaker employment opportunities on account of their gender, race/ethnicity, and criminal history. Despite the empirical foundation grounding this line of reasoning, evidence that would directly support it is weak. Taking Pager’s (2003) study of differences in employment chances as the point of departure, Galgano (2009) examined differences between Black and White women in the effect of a criminal record. Her analysis, however, revealed no significant difference between White women with a criminal record and Black women without a criminal record in the likelihood of advancing through the hiring process. Given the timing of Galgano’s research, historical effects on the part of the Great Recession could partly explain non-significance differences. To be sure, Galgano noted higher callback rates among White women before the midpoint of her study—that is, before the recession peaked—and a discernible drop in the overall callback rate after the midpoint.

Importantly, both Pager’s (2003; Pager et al., 2009) and Galgano’s (2009) research used rigorous methodologies for examining the effect of race/ethnicity on employment outcomes. Pager’s results were based on an in-person audit that used real people—also referred to as testers or auditors—to apply for real jobs using fictitious résumés that had been carefully designed for the purposes of her research. Galgano used a correspondence design where fictitious résumés (of fictitious applicants) were submitted to employers over the Internet (e.g., through e-mail) without any direct interaction between fictitious job applicants and real employers. Regardless of the technical differences in procedures between the two approaches (see Neumark, 2012), both are field experiments that adequately control for differences employers might
consider when distinguishing between job applicants, including skills and qualifications, employment history, and education.

**Current Focus and Overview of Chapters**

This dissertation takes direction from the work of Pager (2003), Pager et al. (2009), and Galgano (2009) on the effect of incarceration on racial/ethnic differences in women’s employment chances. In general, there are gaps in social science research on how women, their race/ethnicity, and criminal justice system involvement intersect (Christian & Thomas, 2009; LeBel, 2012), and these gaps are made particularly clear where labor market and employment-related outcomes are concerned. Nevertheless, it is critical to understand how these intersections influence women’s success in finding and maintaining employment that is economically and personally rewarding and that reduces their risk of reoffending. Chapter two of this dissertation reviews the relevant research on women’s imprisonment and reentry and on women in the labor force and provides the theoretical framework for understanding why Black and Hispanic women encounter discrimination in the labor market.

To examine the effects of race/ethnicity and incarceration on women’s success in the job hiring process, this dissertation uses two field experiments. Like Galgano’s (2009) study, the first experiment relies on the correspondence method, where fictitious résumés created for the purposes of the research are submitted electronically (i.e., through the Internet) to real employers who are currently hiring. The second experiment takes direction from Pager’s (2003) and Pager’s et al. (2009) research by using the audit method, where testers pose as job applicants and apply in-person with real employers using fictitious résumés. Using both the audit and correspondence methods extends
research on the employment-related consequences of incarceration in two ways. First, where Pager’s and Pager et al.’s work looked at the effect of ex-offender status among Black, White, and Hispanic men, there is no in-person audit of employers that focuses on women ex-prisoners. Second, whereas Galgano examined Black and White women using a correspondence design, she did not examine the effect of ethnicity (i.e., Hispanic) on women’s employment opportunities. The methodology used to conduct this dissertation research is described in chapter three.

Little is known about the impact of incarceration on the job chances of Hispanic women. Schuck, Lersch, and Verrill (2004) argue that, historically, Hispanic women have been the group least likely to be researched in criminology. Where women’s post-prison employment has been the topic of research (e.g., Huebner, DeJong, & Cobbina, 2010; Lalonde & Cho, 2008), not only are Hispanic women rarely distinguished in the sample, but they are even more rarely analyzed when a quantitative approach is taken. In addition, while Pager et al. (2009) investigated the employment prospects of Hispanic men, they specifically examined the chances of Puerto Ricans. To this point, there is much variation within the U.S. Hispanic population in terms of ethnic sub-group origin (Ennis, Rios-Vargas, & Albert, 2011). Martinez (2004) also documents variation in Hispanic origin in the state prison population. Given these differences within ethnicity, and to extend research on the consequences of incarceration on employment, the research for this dissertation was conducted in a metropolitan area of Arizona, where the Mexican population is the third largest in the U.S. behind California and Texas (Ennis et al., 2011). As such, there is an implicit focus on Mexican women in this dissertation.
Education has an important role in determining the types of job opportunities available to workers and their career trajectories. This dissertation also examines the effect of a community college degree on the likelihood of advancing through employers’ hiring-related processes. Research indicates that education is a predictor of stable pre-prison employment among women (Blitz, 2006) and, relatedly, that stable pre-prison employment is a predictor of post-prison employment stability (Visher, Debus-Sherrill, & Yahner, 2011). At the same time, regardless of gender, the correctional population is less educated than the general population (Harlow, 2003), which lowers the job prospects of ex-prisoners.

Massey (2007) argues that education is now the primary mechanism of socioeconomic stratification and inequality. McCall (2000) calls the wage disparity between college and non-college educated women an important dimension of the “new inequality.” Educational attainment improves employment and economic life chances (Autor, Katz, & Kearney, 2008; Card, 1999; Mouw & Kalleberg, 2010) and, equally, contributes to employment chances after prison (Davis et al., 2013; Sabol, 2007; Western, 2007). It is this last point regarding education and employment during prisoner reentry that is reason for examining how educational attainment contributes to the employment prospects of female ex-prisoners. Adding salience to the role of education in prisoner reentry is the relationship between education and inequality. Understanding the reasons for disparity between women in the job market can add to broader discussions of the causes and consequences of social inequality and of structural differences in opportunity.

Chapter four of this dissertation presents the findings from the in-person audit of employers and online correspondence test of women’s employment prospects.
Specifically, chapter four details the techniques used to analyze the data and provides the estimated effects of race/ethnicity, a prison record, and education on the probability of a successful job search. Also presented in chapter four are the interaction effects of race/ethnicity and prison record.

The labor market is a dynamic place, reflecting the dynamic social and political contexts in which it operates. It is a place where gender, race/ethnicity, criminal record, and education each have a place in determining career pathways and economic life chances. These social forces act independently and in combination. This dissertation concentrates on the labor market prospects of women with a criminal record. Adding nuance to the issue at hand is the role of race—of being a Black or White woman—and ethnicity—of being a Hispanic woman—in contributing to the outcomes associated with the job seeking process. On a practical level, this line of research has implications for policies and practices that concern women’s reentry. On a more academic level, this investigation provides evidence for the argument that the growing use of the prison system to punish offenders is related to racial/ethnic inequality in the U.S. Chapter five of this dissertation provides an in-depth discussion of these implications.
CHAPTER 2

LITERATURE REVIEW

Criminal justice policies feed the corrections system and the size of the prison population. The growing use of incarceration in the U.S. to punish offenders has led to prison population growth that some have alleged is “out of control” (e.g., Blumstein, 1988). Pratt (2008) argues that the U.S. is “addicted to incarceration.” These observations are not without merit. The total corrections population and incarceration rates began to steadily increase in the 1970s, reaching levels so great that the American way of imprisonment has been colloquially termed “mass incarceration” (Garland, 2001). Other scholars (e.g., Pettit & Western, 2004; Raphael & Stoll, 2009; Spelman, 2009) refer to the expanding use of the prison system and growth in the prison population as the “prison boom.” But what does this buildup mean—what does the U.S. have to show for the fabulous size and growth of its prison system?

The U.S. spent nearly 40 years growing its prison population. It was only as recently as 2010 that the number of prison exits exceeded the number of prison admissions (Guerino, Harrison, & Sabol, 2011). Despite the importance of the current decline in the prison population, the effects of incarceration, generally, and mass incarceration specifically, are still significant for their impact on society, regardless of the slight change in prison population trends. Indeed, research suggests that the prison build-up has reached a point of diminishing returns. Rather than controlling crime, increasing incarceration rates are, after a point, actually related to higher rates of crime (Liedka, Piehl, & Useem, 2006; Pratt & Cullen, 2005). Hipp and Yates (2009) and Rosenfeld,
Wallman, and Fornango (2005) find that the number of ex-prisoners and parolees contributes to higher state and neighborhood crime rates.

If such is the case—that the U.S. has jeopardized public safety as a result of expanding its use of the penal system—then the question becomes, what can be done to reduce the effect of incarceration on crime? Just as important, what are the processes at work in the relationship between incarceration and crime? It is only to the extent that research moves toward a more complete understanding of the mechanisms that give rise to the incarceration-crime link that evidence-based policies and programs can address the criminogenic effect of incarceration.

**The Costs of Incarceration: Collateral Consequences**

Incarceration comes at a price that is both real and intangible. Prison system spending now commands a significant proportion of state budgets as reliance on the corrections system has become the default means to control crime (Ellwood & Guetzkow, 2009; Stuckey, Heimer, & Lang, 2007). Research also points to direct and indirect effects of mass incarceration, documenting an extensive number of social domains that are impacted by mass incarceration. Moreover, empirical work more often than not concludes that incarceration has a negative effect on a range of areas that concern public welfare and health (Mauer & Chesney-Lind, 2002; Raphael & Stoll, 2009; Weaver & Lerman, 2010; Weiman, Western, & Patillo, 2002). These collateral consequences of mass imprisonment include, for example, poor health-related outcomes among ex-prisoners (Massoglia, 2008; Schnittker & John, 2007), low educational attainment within schools that have high rates of parental incarceration (Hagan & Foster, 2012a, 2012b), and social deficits and behavioral problems within the generation of children and youth.
with incarcerated mothers and fathers (Cho, 2011; Geller, Garfinkel, & Western, 2011; Trice & Brewster, 2004; Wakefield & Wildeman, 2011; Wildeman, 2009).

**Racial/Ethnic Inequality**

On the ledger registering the consequences of mass incarceration (see Sampson, 2011), racial/ethnic inequality receives considerable attention from social scientists (Wakefield & Uggen, 2010; Western, 2006; Wheelock & Uggen, 2010). Inequality as a collateral consequence of incarceration can be manifested in a number of ways, but the economic effects of incarceration are an exceptional case of the collateral consequences of imprisonment.¹ One of the more obvious ways that incarceration impacts economic status is through the negative effect it has on employment (Western et al., 2001). Decades of research finds that employment chances are adversely affected by contact with the criminal justice system, in general, and conviction and incarceration, in particular (Apel & Sweeten, 2010a; Grogger, 1995; Nagin & Waldfogel, 1998; Pager, 2003; Pager et al., 2009; Schwartz & Skolnick, 1962; Waldfogel, 1994).

The relationship between incarceration and inequality is made clearer when the consequences of a prison record on employment chances are considered alongside the prevalence of imprisonment among Blacks and Hispanics. Historically and presently, racial/ethnic disparities are a key feature—and outcome—of the corrections system (Gabbidon & Greene, 2009; Mauer & King, 2007; Tonry, 2011). Bonczar (2003) estimated the lifetime prevalence of incarceration in the U.S. population, making clear

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¹For example, Wildeman (2009) investigated the prevalence of parental incarceration among minority children, finding that the rate of Black children experiencing the incarceration of a parent is significantly greater than the rate of White children. Wakefield and Wildeman (2011) examined racial/ethnic disparities in behavioral problems among children of incarcerated parents. Likewise, Wildeman (2012) reported a relationship between higher imprisonment rates and racial inequality in infant mortality.
the greater likelihood of having a prison record among minorities and showing that the prevalence of imprisonment among minorities has increased over time. More specifically, nine percent of the total adult Black population in the U.S. in 2001 had, at some point in their lifetime, served time in prison. Among the total adult Hispanic population, 4.3 percent had ever been incarcerated. In contrast to the prevalence of imprisonment among Blacks and Hispanics, only 1.4 percent of all White adults in 2001 had a prison record. As points of comparison, of their total respective populations in the U.S. in 1991, 6.2 percent of Blacks, 2.7 percent of Hispanics, and 1.1 percent of Whites served time in federal or state prison. Additionally, the higher lifetime rates of imprisonment among Blacks and Hispanics holds for men and women from each group.

Racial/ethnic disparities within the prison population translate to disparities between racial/ethnic groups outside of the prison system. Western (2002) argues that the deleterious effect of imprisonment on the economic life circumstance at the individual-level has direct consequences for the economic position of the group as a whole (see also Lyons & Pettit, 2011; Pettit & Western, 2004). Put differently, the growth of the prison system is as much a story of the mass incarceration of minorities as it is about understanding the processes contributing directly to the poor socioeconomic circumstances of Blacks and Hispanics. To be sure, adding to the literature on the effect of incarceration on employment, Pager (2003) and Pager et al. (2009) found that race/ethnicity had a larger effect than a criminal record (incarceration) on whether employers would callback a job applicant for an interview or make an employment offer. The take away is, not only do minorities face poor economic chances because of incarceration (Lyons & Pettit, 2011; Western, 2002), they face even bleaker employment
chances from the start because race/ethnicity and criminal stereotypes have become tightly intertwined in the wake of mass incarceration (Holzer et al., 2006b; Pager, 2007a). Incarceration, perhaps now more than ever, has a fundamental role in understanding the contemporary causes of and dynamics surrounding inequality in the U.S. (Uggen & Wakefield, 2010).

**The Consequences of Incarceration on Employment Opportunities:**

**Exploring the Relationship along the Lines of Gender**

Research that examines the economic consequences of a criminal record, however, is far from complete. Although there are several gaps in the literature as a function of the scope and breadth of the effects of mass imprisonment on society (see Sampson, 2011), some shortcomings in the research surrounding the monetary impact of incarceration are particularly prominent. This is the case for the consequences of a prison record on women’s employment chances. Although not fully absent from the literature, very little is known about the effect of a criminal record or incarceration on women’s job prospects (but see Galgano, 2009; Jurik, 1983; Lalonde & Cho, 2008; Richey, 2011; Richie, 2001), let alone how these labor market effects are potentially conditioned by race/ethnicity.

Much of the research on the effect of incarceration on employment-related outcomes has been motivated by upward trends in the prison population, including overall growth in the number of prisoners and an increase in the proportion of racial/ethnic minorities serving time in prison. Given that men are the majority of the imprisoned population, research has focused on the relationship between men’s incarceration and post-release employment outcomes. The context giving rise to research
on the employment consequences of incarceration, however, is not gender-specific. The female prison population has experienced the same changes, following the same timeline and trends found in men’s incarceration. To be sure, beginning in the 1970s, the number of women serving time in prison started to grow. Between 1973 and 2010, the rate at which women are incarcerated multiplied 11 times over, increasing from 6 per 100,000 of the U.S. population to 67 per 100,000. In 2011, Black and Hispanic women were incarcerated at rates that were 2.5 and 1.4 times the rate of White women, respectively (Carson & Sabol, 2012). The lifetime rate of incarceration among the total adult Black and Hispanic female population exceeds the lifetime prevalence rate among White women (Bonczar, 2003).

Women have different labor market experiences than their male counterparts, and these experiences are not to their economic advantage (see, e.g., Padavic & Reskin, 2002). At the same time, compared to White women, Black and Hispanic women are at a disadvantage in the “world of work” (see, e.g., Browne, 1999; Dozier, 2012; Pettit & Ewert, 2009). The job-place dynamics that confront Black and Hispanic women lend a level of context to research on the consequences on employment of a prison record that is wholly absent in the current literature on the effect of incarceration. Because Black and Hispanic women face a unique set of employment barriers is grounds for research that moves away from focusing primarily on men’s incarceration and toward addressing how gender, race/ethnicity, and a prison record converge in the labor market (Christian & Thomas, 2009; LeBel, 2012). Indeed, LeBel (2012) found that women ex-prisoners felt discriminated against on account of their gender, race/ethnicity, and prison record. Against this backdrop, it is clear that the criminal justice system has a special role in not
only explaining labor market differences and inequality among men (Western, 2002), but also among women.

**Chapter Overview**

Women’s employment is directly and negatively affected by incarceration, which has implications for understanding racial/ethnic inequality. This chapter provides the empirical and theoretical frameworks for examining women’s employment chances and the consequences of imprisonment in the labor market. Building out this framework begins with a discussion of prisoner reentry and employment. Employment has an important role in prisoner reentry, contributing to whether offenders recidivate and how they refrain from crime. For as integral as working is to understanding the success of ex-prisoners in remaining crime-free, having a prison record is consequential in the labor market, reducing the likelihood of securing work. More devastating to employment chances, however, is racial/ethnic discrimination. For racial/ethnic minorities who have been incarcerated, the barriers to employment are hard to overcome.

After discussing the effects of employment on the prisoner reentry process, the remainder of the chapter focuses on women. Issues discussed include the growth in the female prison population, the higher incarceration rates of minority women, and women’s recidivism. The research documenting the greater effect of race/ethnicity than incarceration on reducing success in the search for work has not paid enough attention to women, but women’s imprisonment has implications for understanding the relationship between incarceration and racial/ethnic inequality. This argument is flushed out in this chapter, but, briefly, women’s incarceration is salient in the relationship between incarceration and inequality because (a) women have lower status in the workplace than
men, which disadvantages female ex-prisoners regardless of race/ethnicity, (b) the labor market status of Black and Hispanic women compared to White women is lower, which disadvantages Black and Hispanic ex-prisoners, and (c) the economic status of female ex-prisoners matters when they are also mothers because of the intergenerational effects of incarceration. Finally, the theories guiding the explanation of these racial/ethnic differences between women in labor market-related outcomes as a function of employers’ hiring preferences are discussed. The chapter concludes with a summary of the framework presented.

**Prisoner Reentry and Employment**

The flipside of growing the number of persons in prison is that the number of parolees has increased. Realizing that an overwhelming majority of prisoners are released (Travis, Solomon, & Waul, 2001), the number of parolees grew from nearly 220,500 in 1980 to approximately 840,700 in 2010 (SCJS, 2012a). More prisoners return to prison for new crimes or violating conditions of their release (e.g., technical violations of parole) than do not (Langan & Levin, 2002; Pew Center on the States, 2011). To this point, the size of the prison population has increasingly become a function of the number of parolees who are recommitted to prison (Blumstein & Beck, 2005). Rosenfeld et al. (2005) indicated that, “all else equal, the net growth in prisoners released to the community will result in higher crime rates” (p. 101).

The tremendous growth in the prison population and its relationship to the increase in the number of parolees, and the contribution of parolees to both the prison population and crime rates, anchors the growing interest in prisoner reentry among scholars and policymakers. Reentry is the process where prisoners, still incarcerated, are
preparing for release back into the community (e.g., studying to get a GED to improve employment chances post-release) and/or the timeframe where offenders have been released from custody and are trying to transition from being incarcerated to leading life in the “free” community (Petersilia, 2003; Travis, 2005). It is this process that is at the center of understanding and preventing offender recidivism (Lynch & Sabol, 2001; Visher & Travis, 2003). The likelihood that a criminal offender will remain crime and arrest free is dependent on a myriad of factors (Gendreau, Little, & Goggin, 1996; Kubrin & Stewart, 2006; Uggen et al., 2005). Among the most salient correlates of recidivism is employment, including the ability to find and maintain work (Bellair & Kowalski, 2011; Mears, Wang, & Bales, 2012; Sampson & Laub, 1993; Uggen, 2000; Visher et al., 2011; Wang, Mears, & Bales, 2010).

Maintaining employment is a condition of parole in most states. Travis and Lawrence (2010) indicated that approximately three-quarters of states in 1982 required parolees to maintain employment as a condition of release and supervision, but that nearly all states required it by 2008. At the same time, the Bureau of Justice Statistics reported that more than 565,000 people left prison and entered parole supervision in 2010 (Bonczar & Glaze, 2011). If nearly all states are now at the point of requiring employment as a condition of parole, then it is clear that employment matters for a majority—over 800,000—of parolees.

Because of its significance in reducing offending, employment has an important and broad role in prisoner reentry. Employment among former criminal offenders provides the economic resources needed to obtain a stable housing and living situation and contributes to the quality of relationships with significant others and relatives (Berg
Indeed, Visher and Travis (2003) noted that factors improving the likelihood of a successful transition from prison to the community interact. In other words, to the extent that employment has an independent effect on recidivism, it also combines with other mechanisms that inhibit offending, so that the contribution of each at the same time is better than any single factor at reducing the likelihood of reoffending. Moreover, it is not simply whether an ex-prisoner is employed (i.e., unemployed or employed), but job quality that is key to how employment reduces the likelihood of reoffending (Sampson & Laub, 1993; Uggen, 1999). In spite of the extant research that shows the effect of employment on preventing crime and recidivism, ex-prisoners face a number of barriers as they reenter the labor market.

Ex-prisoners enter the job market with a number of deficits in their personal and work histories. Prisoners generally have low levels of education and unstable job histories (Harlow, 2003; Uggen et al., 2005). Despite the significant barriers that educational shortcomings and employment gaps pose to any job applicant, having a criminal record is arguably the most detrimental to employment prospects (Holzer et al., 2006a; Pager, 2003; Pager et al., 2009; Schwartz & Skolnick, 1962). Employers are less willing to hire ex-offenders and ex-prisoners than job applicants from other socially disadvantaged groups, including applicants who receive public assistance/welfare, have a criminal record is arguably the most detrimental to employment prospects (Holzer et al., 2006a; Pager, 2003; Pager et al., 2009; Schwartz & Skolnick, 1962). Employers are less willing to hire ex-offenders and ex-prisoners than job applicants from other socially disadvantaged groups, including applicants who receive public assistance/welfare, have a

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2 Realizing the totality of individual, family, and community issues that affect the success of prisoners reentering and reintegrating into their communities, the National Institute of Corrections developed the Transition from Prison to Community Initiative (TPCI) to provide guidance and direction to states’ reentry practices (Jannetta, Neusteter, Davis, & Horvath, 2012). The TPCI is a comprehensive model that addresses the return of prisoners, beginning with institutional risk/need assessment. Noting the need for gender responsive reentry policies and strategies, Holtfreter and Wattanaporn (2013) highlight how the TPCI model can include gender-specific strategies and practices that respond to the needs of women in prison and during women’s reentry.
patchy employment record, and do not have a traditional high school diploma (Holzer et al., 2006a; Pager, 2007a). Relatedly, if a criminal record has a significant negative effect on employment options, then it is unsurprising that the work-related earnings of this group are substantially lower than those without a history of criminal justice system involvement or those from other socially-disadvantaged or low-earning groups (Grogger, 1995; Lyons & Pettit, 2011; Nagin & Waldfogel, 1998; Waldfogel, 1994; Western, 2002).

Any effect of employment on reducing reoffending assumes a successful job search. In the same way that research on individual offenders must address issues of selection into employment (e.g., Uggen, 1999, 2000; Van Der Geest, Bijleveld, & Blokland, 2011), research must also be concerned with the decision-making calculus of employers (e.g., Kirschenman & Neckerman, 1991; Pager, 2003; Pager & Quillian, 2005). Not only do people select into whether they will work to begin with, including whether they will initiate the search for employment (see Apel & Sweeten, 2010a; Western & Pettit, 2005), but whether that process actually translates to any employment is contingent also on whether the employer decides to hire a job applicant with a criminal record (e.g., Holzer et al., 2006a).

Employer attitudes toward ex-prisoners dim employment chances. Previous research on employers’ willingness to hire ex-prisoners suggests that employers are reluctant to hire job applicants with a prison record out of concern for the safety and level of comfort of other employees in the workplace, as well as of potentially being held liable for negligent hiring if violence were to occur in the workplace (Giguere & Dundes, 2002; Harris & Keller, 2005; Pager, 2007a). Companies and employers also fear negative
customer reactions and tarnishing the reputation of the organization (Giguere & Dundes, 2002). In addition, employers question the adequacy of ex-prisoners’ skills, whether they will be a long-term employee, and their commitment to the job (Bushway, 2004; Graffam, Shinkfield, & Hardcastle, 2008). The explanations given for a general unwillingness to hire ex-inmates essentially indicate that employers tussle with the costs of hiring ex-prisoners. For example, if employers think ex-prisoners will not be reliable employees, then they will not go through the process of hiring and training ex-prisoners because the hiring and training process takes time and money and could be better invested in a more reliable type of job applicant. While hiring ex-prisoners may be costly from the employer’s perspective, equally high, if not higher, are the costs of reoffending to society and taxpayers (see Cohen, 2000).

Race/ethnicity adds to the consequences of a criminal record for employment. Where race is concerned, Pager (2003) reported that White men with a criminal record were more likely to receive a callback for a formal job interview or a job offer in Milwaukee’s low-wage job market than Black men without a criminal record. Pager replicated her Milwaukee project in New York City (Pager et al., 2009), adding Hispanic men to the analysis, and found, again, that White men with a criminal record have better employment chances in low-paying entry-level jobs than Black or Hispanic men without a criminal record.

The finding that the effect of race/ethnicity is greater than the effect of a prison record from Pager’s (2003) and Pager et al.’s (2009) research is particularly valuable because of her methodology. More specifically, she used a field experiment to assess the impact of a criminal record and race/ethnicity on the likelihood of employment by using
pairs of testers to apply for real jobs in order to measure employers’ hiring preferences. Testers applied for advertised job opportunities using fictitious résumés that were, in theory (see Heckman, 1998; Heckman & Siegelman, 1993; Lahey & Beasley, 2009), identical in terms of job skills, qualifications, employment history, and education level. By designing the résumés this way, any effect that previously acquired indicators of human capital may have on employers’ perceptions of productivity and employability were controlled. In addition, the testers Pager used were matched on physical stature and interpersonal communication styles, which further controlled attributes that could bias results. The only difference between the pairs of testers was the racial/ethnic makeup of each pair (i.e., one pair was composed of White males and the other pair of Black males in Pager (2003)), and within each pair, one tester’s résumé indicated that he had worked in prison (to signal to the employer that he had a criminal record) while his partner’s résumé did not.³

Pager’s (2003) and Pager et al.’s (2009) research corroborates the findings of a growing body of scholarship demonstrating that the economic life chances of racial/ethnic minorities are severely impacted by incarceration (Lyons & Pettit, 2011; Western, 2002; Western & Pettit, 2005). The fact that the employment consequences of incarceration has such a pronounced effect on minorities is more striking because Blacks and Hispanics have imprisonment rates that are disproportionately higher than Whites’ (Carson & Sabol, 2012). In other words, the deleterious effects of going to prison are concentrated within these minority populations.

³ Pager et al. (2009) used two teams of testers. Each team included a White, Black, and Hispanic tester. On one team, the Black and Hispanic testers were compared to the White tester without a criminal record. On the second team, Black and Hispanic testers had “clean records,” whereas the White tester was assigned the criminal record.
In spite of demonstrating the centrality of racial/ethnic discrimination in employment, Pager’s (2003) and her colleagues’ (2009) seminal work did not examine the effect of a criminal record on women’s employment, much less how the effect might differ between White and non-White women. Women’s imprisonment matters just as much as men’s in understanding the economic effects of incarceration and how such effects contribute to the structuring of racial/ethnic groups. Indeed, the labor market and economic disadvantages that are experienced by Black and Hispanic men hold true for women with racial/ethnic minority status as well (Bound & Dresser, 1999; Browne & Askew, 2005; England, Christopher, & Reid, 1999). In fact, the labor market barriers that Black and Hispanic women face may be more severe than the hurdles confronted by Black and Hispanic men (see, e.g., Browne, 1999). In order to fully understand the relationship between work and crime among women, including how legitimate employment can help or hinder their attempt to “go straight,” having a job and working must be examined and explored as not only a process that begins with searching for a job, but as a circumstance that is heavily contingent on a number of dynamics that not only fluctuate over time, but define the world and structure of work in the U.S.

**Trends in Women’s Imprisonment and Recidivism**

While a majority of the empirical work on the impact of incarceration has focused on men’s employment (e.g., Apel & Sweeten, 2010a; Visher et al., 2011; Western, 2002), women are a growing proportion of the prison population. Moreover, trends in women’s imprisonment are identical to men’s on all accounts, including absolute population growth, incarceration rate increases, and racial/ethnic disparities. In 2007, 105,786 women were in prison, up from the 54,000 women that were serving time in 1993 and
much greater than the 6,000 women in prison in 1973 (SCJS, 2012b). Moreover, the increase in the adult male imprisonment rate between 1970s and 2000s that is often cited in the literature on mass incarceration is less dramatic when compared to the change in women’s incarceration over the same time period. The male incarceration rate increased four times over between 1973 and 2007, going from 191 per 100,000 to 955 per 100,000 (SCJS, 2012b). The female incarceration rate, however, grew more than ten-fold between 1973 and 2007, starting at 6 per 100,000 and increasing to 69 per 100,000 (SCJS, 2012). Black and Hispanic women are incarcerated at significantly higher rates than White women. Whereas the incarceration rate for White women was 47 per 100,000 in 2010, it stood at 133 per 100,000 for Black women and 77 per 100,000 for Hispanic females in the same year. If growth in men’s incarceration is consequential and, indeed, the evidence suggests it is, then, clearly, trends in women’s imprisonment are not without implications too.

Despite the unprecedented growth in the female prison population, female ex-prisoners are a small part of the literature on the consequences of incarceration on the reentry process. In 1985, women accounted for seven percent of the parole population (Hester, 1987). Since 2000, women have comprised 12 percent of the parolee population (Bonczar & Glaze, 2011). Among the total parole population, a majority were incarcerated for drug-related crimes (Bonczar & Glaze, 2011). A breakdown of the parole population by sex and offense type is not readily available, but official statistics indicate that more women than men are incarcerated for property and drug crimes, a pattern that has been consistent for at least the past decade (Carson & Sabol, 2012; Harlow & Snell, 2000). Compared to the 54 percent of female prisoners incarcerated for a property or drug
crime, violent crimes account for 37 percent of the female prison population (see Carson & Sabol, 2012). As a point of comparison, more than half of men in prison are serving time for violent felonies (Carson, & Sabol, 2012).⁴

Adding to the importance of drug and property offending among women is that women convicted of these offenses are at the greatest risk of re-offending and returning to prison with a new conviction for committing these same crime types than women convicted of violent crimes (Deschenes, Owen, & Crow, 2007). Moreover, Deschenes et al. (2007) reported that women incarcerated for drug possession have the shortest crime-free durations following release from prison, with women incarcerated for a violent offense having the longest periods and women who property offend falling between these two types of offending groups. Regardless of original offense type or the recidivating offense, the percent of women who cycle back through the criminal justice system is not trivial—58 percent are re-arrested, almost 40 percent are re-convicted, and 17 percent are returned to prison to serve a new sentence.

Deschenes et al.’s (2007) study showed also that women’s recidivism rates vary by racial/ethnic background. Black women were more likely to recidivate than White women. In fact, across all points of new contact with the criminal justice system, Black women had higher rates of re-arrest, reconviction, and re-confinement for a new crime than White women. On the surface, it does not appear that Hispanics are more likely to recidivate than non-Hispanics; however, 18 percent of the data on ethnicity that Deschenes et al. analyzed were missing. Langan and Levin’s (2002) analysis of prisoners

⁴ According to the Federal Bureau of Investigation (2013), in 2012, approximately 19 percent of the persons arrested for violent crimes were female. Between calendar years 2008 and 2012, the number of females arrested for violent crimes decreased by almost six percent.
released from prisons in 14 states revealed that Hispanics were no less likely to be returned to prison with a new sentence than non-Hispanics.

**Women’s Reentry and Employment**

Women follow unique pathways to crime, incarceration, recidivism, and desistance that distinguish them from male offenders (Belknap & Holsinger, 2006; Daly, 1992; Giordano et al., 2002; Reisig et al., 2006; Salisbury & Van Voorhis, 2009; Simpson, Yahner, & Dugan, 2008). Despite these differences, women have the same standard conditions of parole supervision as men, including maintaining employment. Maruna (2001) and Opsal (2012) suggest that working has a critical role in how both men and women restructure and move on with their lives after imprisonment. The fact that being employed matters to women’s reoffending behavior strikes a balance with Heimer’s (2000) argument that women’s economic instability has influenced women’s offending (see also Hunnicut & Broidy, 2004). In a very early study of the connection between women’s recidivism and economic circumstances, Jurik (1983) found that subsidizing the income of female ex-felons who were unemployed or underemployed and providing job search services reduced the number of new arrests for crimes that are financially-motivated, including theft and prostitution. Similarly, Griffin and Armstrong (2003) found a significant effect of employment on reducing drug dealing among female probationers. For as significant of a role that employment is theorized to have in preventing a return to a crime and contributing to the desistance process, the empirical support for the argument is not unequivocal. This, however, goes for research on men’s employment as much as it does for women’s (e.g., c.f. Cobbina et al., 2012; Huebner et al., 2010; Uggen & Kruttschnitt, 1998).
Because women’s position within the labor market can be differentiated from men’s, research on the effect of employment on women’s criminal behavior and recidivism may not be adequately taking stock of women’s employment experiences on the whole when trying to understand how dynamics within the labor market affect women’s offending. Yet, this is starting point for why examining the consequences of incarceration on women’s employment chances is important. The lack of consensus in the literature on the relationship between working and reoffending is certainly grounds for further research, but focusing solely on this dimension of employment in prisoner reentry is an incomplete treatment of the issue. To take a step back from the relationship between working and reoffending, especially among women, there is little research that addresses how women fare in their search for employment and the barriers to employment confronting women with a prison record.

**Women’s Incarceration and Inequality**

The policies giving rise to the phenomenon of mass incarceration and that are responsible for the increase in men’s imprisonment are the same as those affecting women’s imprisonment numbers, including the increasing number of Black and Hispanic women in prison. The fact that minorities are affected the most negatively by incarceration policies (Tonry, 2011) is at the core of Western’s (2002, 2006) argument that incarceration facilitates racial/ethnic inequality through the collateral economic effects of imprisonment. Given that males account for the majority of the prison population, it is reasonable that research supporting Western’s argument—that contemporary forms of racial/ethnic inequality in the labor market are a collateral consequence of criminal justice policies—is based strictly on the employment
consequences of imprisonment among men (e.g., Lyons & Pettit, 2011; Pager, 2003; Pager et al., 2009 Western, 2002). Nevertheless, Bloom et al. (2004) argue that “attention to gender has long been absent from criminal justice policy” (p. 32) and that considering gender in policy would yield short- and long-term dividends for both the criminal justice system and society more generally. Accordingly, the tendency of researchers to examine men in the criminal justice system should not distract from or otherwise minimize inequality among women, let alone how women’s imprisonment contributes to racial/ethnic inequality. Not contemplating how or if racial/ethnic inequality in an era of mass incarceration is a function of women’s employment opportunities risks overemphasizing (and, even if unintentional, maintaining) the patriarchal structure of financial well-being in the U.S.

Research tends to frame the effects of imprisonment on women as indirect—that is, as a collateral consequence of men’s incarceration. The literature suggests that men go to prison and women are burdened by their absence so that men’s imprisonment is emotionally and/or financially consequential for women (e.g., Comfort, 2007; Lee & Wildeman, 2011; Western & Wildeman, 2009). This kind of framing on the consequences of incarceration can be found in research on the economic toll incarceration takes on women, especially as household income levels and child support decrease when men are imprisoned (Geller et al., 2011; Sugie, 2012). To this point, focusing on the employment consequences of incarceration among women extends current streams of research on the consequences of imprisonment, in general, and on women, in particular, by looking at how women’s imprisonment impacts their economic situation.
The consequences of incarceration on women’s employment opportunities is as much a story about the gendered effects of mass imprisonment as it is a story of the mechanisms that have contributed to racial/ethnic inequality as a product of mass incarceration. The links between race/ethnicity, unemployment, poverty, and incarceration are well-established in the literature (Chiricos & Delone, 1992; Fagan & Freeman, 1999; Freeman, 1991; Pettit & Western, 2004) and the causal pathways and feedback loops between imprisonment and poverty are becoming clearer (Frost & Gross, 2012; DeFina & Hannon, 2013; Rose & Clear, 1998). The role of poverty in crime and punishment is important. A majority of people living in poverty are women (DeNavas-Walt, Proctor, & Smith, 2013). At the same time, Black and Hispanic women are both more likely than White women to be imprisoned (Carson & Sabol, 2012) and more likely to be living below the poverty line (DeNavas-Walt et al., 2013). These concurrent facts about the socioeconomic situation of racial/ethnic minority women add dimension to the need to examine more specifically the ways in which incarceration affects women’s social location as both a cause and, more importantly, a consequence of their imprisonment. DeFina and Hannon (2010) found that adult incarceration is related to county-level increases in childhood poverty. To the extent that the poor economic situation within these children’s homes is associated with the labor market difficulties their formerly incarcerated mothers confront broadens the need to focus on women’s imprisonment and better understand the collateral consequences of the increasing number of women who are caught up in the net of the criminal justice system.

The economic effect of incarceration on women leads to collateral consequences for the networks, groups, and communities women prisoners are embedded in.
(Kruttschnitt, 2010). This is especially true for female prisoners who are mothers. Indeed, for incarcerated mothers—62 percent of women in state prisons are mothers to minor children (Glaze & Maruschak, 2008)—the role of incarceration on their post-prison economic situation has implications for the financial contribution they make to their children’s overall well-being. Farrington and Murray (2008) argue that maternal incarceration, over paternal incarceration, may be the most adverse to children; one negative effect on children of incarcerated parents is that these children’s own likelihood of employment stability is significantly reduced (see also Hagan & Dinovitzer, 1999). As such, the higher incarceration rates of minority women and the effect of women’s imprisonment on their children’s own employment trajectories implies that one way women’s incarceration concentrates economic difficulties within their racial/ethnic groups is through the intergenerational effects of imprisonment on employment.

The consequences of incarceration on women’s labor market opportunities, experiences, and outcomes have implications for public policymaking. Research consistently demonstrates that unemployment leads to a higher probability of recidivism, which jeopardizes public safety. To the extent that Black and Hispanic ex-prisoners face difficulty in gaining a foothold in the legitimate workforce once they return to their communities makes for a greater possibility that these offenders will not only return to poverty, but return to crime (Reisig, Bales, Hays, & Wang, 2007). That ex-offenders’ labor market difficulties are the result of racial/ethnic discrimination (see, e.g., Pager, 2003) only further motivates an investigation into women’s employment chances. Preventing discrimination against ex-prisoners and racial/ethnic minorities is a public policy issue. Policies that address discrimination have an important role in increasing the
number of labor market opportunities available to ex-prisoners. Moreover, because such policies can address the issues that unfairly prevent and limit employment, these policies can make for safer communities.

Criminal justice policies not only have been blamed for the prison buildup, but have been implicated in the collateral consequences of incarceration. This is a bold assertion, but one that must be considered because of the criminogenic nature of the collateral consequences of imprisonment. If the policies to incarcerate offenders are contributing to racial/ethnic inequality as research suggests (Western, Kleykamp, & Rosenfeld, 2003), then the fact that inequality is tied to higher crime rates (Kelly, 2000) is all the more relevant for justifying an examination of the employment consequences of imprisonment. At the same time, the effect of maternal incarceration on intergenerational unemployment suggests another pathway between incarceration and crime given the well-established relationship between unemployment and crime (see, e.g., Chiricos, 1987; Fagan & Freeman, 1999; Raphael & Winter-Ebmer, 2001; Uggen & Wakefield, 2008).

Incorporating research on women’s post-prison employment chances builds upon the literature that illustrates the toll incarceration takes on the economic life chances of racial/ethnic minorities and on their well-being more generally. There is no single reason, but a multitude of reasons that justify why women’s imprisonment matters for understanding how incarceration contributes to the structure of race/ethnicity in the U.S. The consequences of women’s incarceration for racial/ethnic inequality are likely indirect (Wakefield & Uggen, 2010). Despite the nature of this relationship, the effects of incarceration are cumulative, working at some capacity through employment to affect socioeconomic status (see also Hagan, 1993; Loeffler, 2013; Sampson & Laub, 1997).
The totality of the effects that incarceration has on women’s economic situation post-release—and in combination with racial/ethnic discrimination that cannot simply be reduced to selection effects that might explain the relationship between incarceration and post-release labor market outcomes (see Loeffler, 2013)—provides the impetus for examining the employment consequences of incarceration on women. Women’s incarceration matters in its own right because it is valuable for more fully understanding the long-term implications of imprisonment on society (Kruttschnitt, 2010).

**Women’s Labor Market Barriers**

Because women are a small fraction of the overall prison population, it may seem like a paradox to claim that women’s incarceration matters immensely to understanding the consequences of imprisonment (Kruttschnitt, 2010). At the same time, this fact—that women with a prison record are a minority within the general population—presents employers, then, with an atypical hiring-related situation, where stereotypes may be more relied upon in their decision-making calculus. To be sure, women who are looking for employment and who have a prison record have gone against traditional gender stereotypes on at least two fronts: One, by being convicted of a crime and serving time in prison (LeBel, 2012; see also Heidensohn & Silvestri, 2012) and, two, by pursuing economic independence from men by working, which is exclusive of criminal status (Eagly & Steffen, 1984). Because the traditional structuring of gender depicts women as inferior to men, gender stereotypes have a salient role in charting women’s labor market mobility (Bobbitt-Zeher, 2011; Cejka & Eagly, 1999; Heilman, 2001; Kmec, McDonald, & Trimble, 2010; Ridgeway & Correll, 2000; Ridgeway & Smith-Lovin, 1999).
Brennan and Vandenberg (2009) created a typology of how women offenders are represented in the media along two lines—one where they are “mad” or “sad” and the other where they are “bad.” When women who commit crime are portrayed in the news as bad, the generalizations are masculinized in that breaking the law is male behavior and female offenders have violated women’s gender role expectations (Berrington & Honkatukia, 2002; Bond-Maupin, 1998; Chesney-Lind, 1999; Chesney-Lind & Eliason, 2006). As a result of their man-like behavior, these women have, in essence, lost their “woman” status (Chesney-Lind, 1999) and are less deserving, then, of the leniency that is afforded to “real women,” who conform to gender role expectations (Farr, 2000; Grabe, Trager, Lear, & Rauch, 2006). The converse is that “bad” women are more deserving of any punishment that comes from violating not only the law, but also for violating society’s role expectations of women (Brennan & Vandenberg, 2009; Chesney-Lind & Eliason, 2006; Grabe et al., 2006; Huckerby, 2003). In contrast to “bad” women, the media also creates images of women offenders as sad or mad (Brennan & Vandenberg, 2009). To put it simply, this type of woman offender is a victim of circumstances beyond her control, including mental illness or other medical conditions (e.g., post-partum depression) (Brennan & Vandenberg, 2009; Huckerby, 2003). These women are viewed as complying with society’s gender role expectations and deserving of sympathy (Brennan & Vandenberg, 2009). Gender stereotypes have implications for women who are searching for employment after incarceration, mostly because these characterizations of women offenders have racial/ethnic undertones. The next section discusses racial/ethnic stereotypes of women and then moves toward an examination of racial/ethnic stereotypes of women offenders.
Racial/Ethnic Stereotypes of Women

Racial/ethnic stereotypes are an unfair aspect of how employers evaluate job applicants’ suitability (Browne & Kennelly, 1999; Kirschenman & Neckerman, 1991; Pager & Karafin, 2009; Zamudio & Lichter, 2008). Criminal stereotypes in the U.S. are viewed through the lens of race/ethnicity, where minorities are viewed as dangerous, regardless of any actual involvement in criminal activities (Chiricos & Eschholz, 2002; Chiricos, McEntire, & Gertz, 2001; Chiricos, Welch, & Gertz, 2004; Devine & Elliott, 1995; Quillian & Pager, 2001; Welch, Payne, Chiricos, & Gertz, 2011). These perceptions of Blacks and Hispanics only amplify the racial/ethnic stereotypes that persist outside of unwarranted criminal ascriptions. Specifically, stereotypes of racial/ethnic minorities have been linked to hiring and employment discrimination (Kirschenman & Neckerman, 1991; Moss & Tilly, 2001; Pager & Karafin, 2009). The influence of stereotypes range from generating an unwillingness to hire Blacks because employers believe they do not have the required social skills (Moss & Tilly, 2001) to influencing employers’ decisions to hire Hispanics because they are tractable (Zamudio & Lichter, 2008). Neckerman and Kirschenman (1991) reported that employers in Chicago used selective recruiting strategies to avoid attracting inner-city, lower-class Blacks when trying to fill entry-level jobs. Employers’ tactics included using local newspapers with smaller and “more employable” audiences as opposed to the major metropolitan newspaper. Half of employers believed that inner-city Black workers lacked basic skills and did not have a strong work ethic. About 40 percent of employers in Neckerman and Kirschenman’s study presumed that inner-city Black workers had a bad attitude. Although only nine percent of all employers believed inner-city Black workers did not
have interpersonal skills, employers used the interview to really gauge the social skills of lower income and poor Blacks in terms of identifying whether socioeconomically disadvantaged Black workers had the same cultural orientations as employers. Frazer and Wiersma (2001) found that although employers did not discriminate against Blacks during the hiring process, employers were more likely to recall Blacks’ answers to interview questions as less intelligent than Whites’ answers, even though the research setting was controlled and the design of the study had Blacks and Whites giving identical answers to employers’ interview questions. Frazer and Wiersma concluded that employers are prejudiced against Blacks even if their hiring behavior is not indicative of discrimination.

Lim (2002) found that regardless of regional differences in employment and labor market dynamics, employers held less favorable views of Blacks than they did of other minority groups. Lim also evidenced that the work habits, reliability, and attitudes of Whites were ranked more highly by employers than other racial/ethnic groups’. It is important to point out that 80 percent of the sample was White, which suggests that some degree of group-based bias could be at play in explaining the result that White employers prefer to hire White employees (see also Fiske, 1998; Massey, 2007; Pettigrew, 1998). Furthermore, Lim found that Hispanics and immigrants were viewed by employers in Los Angeles more favorably in terms of their work habits than they were by employers in Philadelphia, New York, and Atlanta. Lim argued that there is less heterogeneity within the immigrant and Hispanic populations in Los Angeles, in that they both are largely

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5 The race/ethnicity of the hiring manager/business owner has a significant effect on minorities’ employment chances. Minorities have better employment outcomes when other minorities are involved in employment decisions (e.g., Kim, 1999; Kornrich, 2009; Kmec, 2006; Wilson & Portes, 1980).
Mexican, than in other regions of the U.S. While this may be true, it does not mean that Hispanics have better employment prospects because hiring managers are less likely to ascribe negative characteristics to Hispanics. Offering a counterpoint to Lim’s findings that immigrants were viewed as having better attitudes than other minority groups, Zamudio and Lichter (2008) examined employers’ attitudes toward hiring Hispanic immigrants over U.S.-born Blacks in Los Angeles’ hotel industry. They found that rather than viewing Hispanic immigrants as having better soft skills, which is usually the reason attributed by researchers as to why employers choose other racial/ethnic workers over Blacks (e.g., Moss & Tilly, 1996), employers reported that they were more likely to hire Hispanic immigrants because they were easier to exploit and control managerially.

**Hispanics’ Labor Market Barriers**

Although it is valid to view immigrant Hispanics as distinct from U.S.-born Hispanics (see Massey & Bartley, 2005), Massey (2007) argues that immigration, and illegal immigration from Mexico particularly, and ethnicity have become so coupled that Mexicans “are more exploitable now than at any time since the 1850s [when the Mexican-American War ended and Mexico ceded land to the U.S.]” (p. 143). As contemporary forms of immigration reform have taken center stage politically (Newton, 2008), research on previous immigration reform efforts finds negative effects of immigration policies on Hispanic employment. Research by Lowell, Teachman, and Jing (1995) indicated that federal immigration reform legislation leads employers to hire fewer Hispanics simply because of the possibility that Hispanic job applicants could be foreign-born. Lowell et al. (1995) estimated that Hispanic employment losses that could be attributed to the Immigration Reform and Control Act (IRCA) accounted for almost
two percent of the total Hispanic unemployment rate. Another analysis of the effect of immigration reform uncovered that employers in job sectors that typically attract migrant workers (e.g., agriculture and custodial services) lowered employee wages, which affected all workers within those sectors regardless of national origin or race/ethnicity (Durand & Massey, 2003). In addition, Bansak and Raphael (2001) determined that immigration reform laws that penalize employers for hiring undocumented workers had a larger negative effect on the wages of Hispanics workers, relative to the change in wages for White workers, regardless of employment sector. Donato, Wakabayashi, Hakimzadeh, and Armenta (2008) documented a gendered effect of IRCA on Mexican migrant wages, with the negative effect of immigration reform on wages being larger for women than men. Donato et al. reported also that Mexican migrant women were more likely to report cash wages post-IRCA, suggesting that IRCA was a mechanism that moved Mexican women out of the formal and into the informal labor market.

The employment-related fallout of immigration reform that targets Hispanics is important because it ultimately worked to redefine—and lower—the social status of Hispanics (Massey, 2007). Indeed, while IRCA was passed by Congress in 1986, the socioeconomic circumstances of Hispanics relative to not only Whites, but to Blacks as well, have continued to decline (Massey, 2007). For example, Massey (2007) indicated that the Black-White male income ratio was greater than the Hispanic-White male ratio through the 1970s and 1980s, but that the Black-to-White ratio crossed the Hispanic-to-White ratio in the early 1990s. Browne and Askew (2005) reported a similar shift in the 1990s and into the early 2000s of the relative earnings of Black and Hispanic women. Specifically, they found that while the wage gap between Black and White women was
consistent through the time period (i.e., Black women earned eight percent less than White women in 1989 and nine percent less in 2003, controlling for education), disparity in Hispanic women’s wages relative to White women’s experienced a more sizeable increase, from no difference at the start of the 1990s to six percent by the early 2000s. De Anda (2005) shows increasing employment hardship over time among Mexican women compared to White women. Across three indicators of employment hardship, including unemployment, involuntary part-time employment, and working full-time or voluntarily part-time but living below the poverty line, the ratio of Mexican women to White women increased between 1992 and 2000. Although a claim could be made that differences between Hispanic and White women in employment rates and wages could be a function of human capital differences that influence job market mobility, Bendick et al. (1991), using research methods where such differences were theoretically eliminated, uncovered that Hispanic female job applicants were less likely to be contacted by hiring managers for prospective employment than White female job applicants. Because of the audit design used to conduct their study (see Fix & Struyk, 1993; Turner, Fix, & Struyk, 1991), Bendick et al. concluded that Hispanics are the victims of hiring discrimination solely because of their ethnicity.

**Racial/Ethnic Stereotypes of Women Offenders**

The change in the political tone surrounding Hispanics in the U.S. worked to change the employment prospects and job-related outcomes of Hispanics as much as it did to attribute a criminal stereotype to Hispanics (Massey, 2007; Newton, 2008; Wang, 2012). Indeed, the stereotypes of Hispanics as gang bangers, drug dealers, and criminal aliens (Bender, 2003; Lane, 2002) parallel the stereotypes of Blacks as violent, thuggish
or ghetto, and drug-involved (Hurwitz & Peffley, 1997; Sigelman & Tuch, 1997; Welch, 2007). These stereotypes, however, are not necessarily gender neutral in that perceptions, or “pictures in the head” (see Lippmann, 1922), are more likely to be those of Black or Hispanic men (see, e.g., Bender, 2003; Chiricos et al., 2001; Pager & Karafin, 2009; Russell, 1996) and less likely of Black or Hispanic women. Nevertheless, women offenders are stereotyped across a number of domains, including race/ethnicity (Huckerby, 2003; Vandenberg, Brennan, & Chesney-Lind, 2013).

Stereotypes of female criminals have racial/ethnic undertones (Bond-Maupin, 1998; Brennan & Vandenberg, 2009; Huckerby, 2003; Vandenberg et al., 2013). The so-called “bad” women that are described by the media are often racial/ethnic minorities (Huckerby, 2003; Vandenberg et al., 2013). Vandenberg et al. (2013) examined how crimes allegedly perpetrated by women were depicted in the news, which is an important information source that contributes to and perpetuates racial/ethnic stereotypes, particularly where crime is concerned (Chiricos & Eschholz, 2002; Gilliam, Iyengar, Simon, & Wright, 1996). Specifically, Vandenberg et al. found that news stories centered on White women were significantly less likely to have a negative tone than stories about minority women. Based on how the researchers conceptualized and operationalized the tone of the news article, White women’s crimes were more likely either to be neutralized or presented favorably (e.g., as lacking sufficient evidence) by the media. What is more, even when looking at the difference between violent and non-violent crimes, race/ethnicity continued to be the strongest predictor of the story’s tone.

When examining research on the racial/ethnic stereotypes of female offenders, racial/ethnic minority women are subject to the same negative labels that set them apart
socially and morally from their White counterparts. Adding to perceptions of racial/ethnic minority women as “bad,” stereotypes of women offenders also tap into sexuality (see also Farr, 1997), where regardless if they are viewed as acting man-like or hypersexual (Berrington & Honkatukia, 2002; Bond-Maupin, 1998), these offenders have, essentially, sexually-deviated for violating gender role expectations.

Racial/ethnic stereotypes of female offenders are pertinent for understanding women’s reentry into the labor market. These stereotypes form the basis for racial/ethnic discrimination in hiring (Holzer et al., 2006b; Kirschenman & Neckerman, 1991; Pager & Karafin, 2009; Pager & Western, 2012). Although there is no existing research on employers’ perceptions of women offenders, if racial/ethnic stereotypes are applicable to men’s employment chances, then certainly there is reason to speculate that the same holds true where the hiring of women is concerned. In an investigation of discrimination experienced by ex-prisoners, LeBel (2012) found that women with a prison record were just as likely as men with a prison record to report being discriminated against on the basis of race/ethnicity and criminal history. In a follow-up to her landmark investigation of employment discrimination, Pager and Quillian (2005) found that although employers said that they were just as likely to hire Black ex-prisoners as White ex-prisoners, the same employers were less likely to hire both Black ex-prisoners and Blacks without a criminal record during Pager’s (2003) audit.

Galgano (2009) examined racial differences in women’s post-prison employment chances in Chicago using an experimental design that was similar to Pager’s (2003). Galgano departed from Pager’s audit design by using a correspondence test (see also Bertrand & Mullainathan, 2004). Specifically, résumés were electronically sent to
employers (e.g., through Internet job sites), so that there was no face-to-face or otherwise “live” interaction between real employers and fictitious job applicants. Contrary to the hypotheses that followed from Pager’s study, Galgano found no racial differences in employers’ responses to Black and White women. She also found that Black women without a criminal record had the same employment chances as White women with a criminal record. Concomitant with the conclusions of Galgano’s study, Lalonde and Cho (2008) found that women had higher rates of employment in the months immediately following release from prison than in the months preceding incarceration. Nevertheless, Black female ex-prisoners were still significantly less likely to be employed after prison than White women.

When the relevant research is taken together, there is some degree of uncertainty surrounding the effect of a prison record on the employment of minority women. On the one hand, there is sufficient evidence to suggest that racial/ethnic stereotypes of criminals have a negative effect on the employment prospects of men, but little evidence exists to say that these stereotypes affect the success of women in finding jobs after release from prison. On the other hand, although it appears that women with a prison record do not necessarily face higher unemployment rates than men in the months following release, it also appears that men’s employment rates following release are higher than women’s, which suggests that women and men with a prison record do not have the same success in the labor market (c.f., Lalonde & Cho, 2008; Visher et al., 2011; Visher et al., 2004). Without more direct evidence, if and how the racialization and “coloring” of crime affects the employment of women remains an unaddressed empirical question. There is
no room to doubt that discrimination on account of race/ethnicity, criminal history, and gender confront women during reentry (LeBel, 2012; Opsal, 2012).

**Women’s Labor Market Status: Discrimination and Inequality**

Gender discrimination has a profound effect on the labor market experiences of women. Workplace discrimination not only excludes women from the workforce by hindering entry into the labor force in the first place (i.e., exclusion), but also by pushing them out by unfairly firing them (i.e., expulsion), and inhibiting their upward career and financial mobility by denying promotion and other opportunities to improve their status (Roscigno, 2007). The effects of discrimination are not only monetary in nature, but also psychological, with a reach that spans to other social domains in both the short- and long-term (Araujo & Borrell, 2006; Belle & Doucet, 2003; Feagin, Early, & McKinney, 2000). The experience of discrimination and its outcomes also holds true for men and women with criminal records (LeBel, 2012). More importantly, however, is that the consequences of discrimination go beyond the individual; discrimination—whether based on gender, race/ethnicity, or any other group-based characteristic—has a society-wide effect. Discrimination reproduces inequality, perpetuating as much as maintaining a social hierarchy where women are below men and racial/ethnic minorities are “less than” Whites (see, e.g., Roscigno, Garcia, & Bobbitt-Zeher, 2007; Stainback & Tomaskovic-Devey, 2009; Smith, 2002). As a result of discrimination, inequality takes the form of differences in employment opportunities, differential earnings, and disparity in other indicators of financial worth and socioeconomic status.

Gender and racial/ethnic differences persist despite all else being equal, including similarity in education, training, tenure, or other measures of human capital that could
otherwise explain differences in work-related outcomes (see, e.g., Altonji & Blank, 1999; Bertrand & Mullainathan, 2004; Neumark, 2012). For example, in a rebuttal to Wilson’s (1980) theory that race is losing its significance to social class in explaining differences between the economic chances of Blacks and Whites, Cancio, Evans, and Maume (1996) reported that the effect of race on men’s and women’s wages has not diminished over time, controlling for education, training, previous experience, parents’ educational background, marital status, number of children, and regional differences (i.e., differences in employment context). Raudenbush and Kasim (1998) examined racial/ethnic differences in educational achievement, literacy, and cognitive skills as explanations of wage inequality and unemployment and found that Blacks had significantly higher odds of unemployment and had significantly lower wages than Whites, regardless of these indicators of human capital. Huffman and Cohen (2004) found that race is a systematic mechanism that segregates Blacks and Whites in the job market so that certain jobs are more likely to be held by Blacks (and others by Whites) and that this racial segregation, in turn, penalizes the wages of Blacks (see also Tomaskovic-Devey, 1993a). Moreover, the effect of racial segregation on wages persists above and beyond individual-, job-, and labor market-level (e.g., regional) differences. Indeed, these racial/ethnic differences hold even when criminal records are constant across groups (Galgano, 2009; Lalonde & Cho, 2008; Pager, 2003; Pager et al., 2009).

When considering the structure of race/ethnicity and gender in the U.S., Black and Hispanic women have the least status, ranking at the bottom of a status hierarchy where White men are at the top, followed by Black and Hispanic men, and White women
(Altonji & Blank, 1999; Browne, 1999; Browne & Misra, 2003; Massey, 2007). It is because of this structuring that the case of employment discrimination against minority women is even more concerning. Not only is gender a source of discrimination in employment, but also race/ethnicity. From a purely theoretical perspective, the intersection of race/ethnicity and gender is more complex to understand and explain because it is impossible to reduce the bias against minority women to a single structural system like race/ethnicity or gender (Browne & Misra, 2003; McCall, 2005). These theoretical issues pose a challenge to the quantitative approach of investigating women in the workforce because race/ethnicity and gender can neither be added together nor interacted to capture the power dynamics of race/ethnicity and gender (Browne & Misra, 2003; see also Roscigno, 2011). Black and Hispanic women are a multiple minority (Crenshaw, 1989; 1999; King, 1988), facing not only labor market barriers as women (see, e.g., Neumark, Bank, Van Nort, 1996; Reskin, 1993; Ridgeway, 1997), but barriers as racial/ethnic minorities as well (see, e.g., Altonji & Blank, 1999; Bertrand & Mullainathan, 2004). Litigation related to employment discrimination brings a degree of understanding to the challenges faced by employed Black and Hispanic women. Specifically, Roscigno (2007) reported that Black women were significantly more likely than White women to claim workplace discrimination related to hiring, promotion, and general workplace harassment. What is more, Best, Edelman, Krieger, and Eliason (2011)

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*Empirically, an argument can be made that Hispanic and Black men are second and third, or vice versa, to White men in the hierarchal structure of race/ethnicity and gender. The same argument can also be made regarding the status of racial/ethnic minority women relative to White women. Massey (2007) makes this argument—that although Hispanics once had more socioeconomic status than blacks, such arrangements are time-bound and, at least, contemporaneously, no longer the case. These dynamics are important in their own right as they speak to the evolution of race/ethnic relations in the U.S. and that the structuring of race/ethnicity is the result of social processes evolving over time. Nevertheless, the specifics of this argument are beyond the scope of this dissertation.*
found that when women filed claims with the Equal Employment Opportunity Commission on the basis of race and sex discrimination, they were only half as likely to win as women who filed single bias (i.e., race or sex) claims. At the same time, a majority of cases concerning sex discrimination in firing and harassment are against employers in the low-wage service sector (Roscigno, 2007), a segment of the labor market where ex-prisoners are likely to seek work (Holzer et al., 2004; Pager, 2003; Pager et al., 2009; Western, 2002; Visher et al., 2004) When taken together, it is clear that women attempting to return to work after imprisonment, especially Black and Hispanic women, navigate an unwelcoming labor market that is riddled with a number of barriers to overcome.

**Theories of Employment Discrimination**

Discrimination is a serious issue affecting the reentry and reintegration of former prisoners. Racial/ethnic discrimination stands to thwart the employment of ex-prisoners (Pager, 2003; Pager et al., 2009), which threatens public safety by increasing the risk of recidivism. Moreover, it is not only unemployment that stands to increase the risk of reoffending among female ex-prisoners, but racial/ethnic and gender discrimination which also has a criminogenic effect (Broidy & Agnew, 1997; Burt & Simons, 2013; Perez, Jennings, & Gover, 2008; Simons, Chen, Stewart, & Brody, 2003; Unnever, Cullen, Mathers, McClure, & Allison, 2009). The sad reality for women coming home from prison is that while the Civil Rights Act was enacted in 1964 to put an end to employment discrimination against racial/ethnic minorities and women, employers continue to base their hiring decisions on race/ethnicity and gender 50 years later. For this once incarcerated group, they must overcome obstacles that stand in their way of
securing employment—and realizing the benefits of work—because they are ex-prisoners, because they are racial/ethnic minorities, and because they are women.

There are several theoretical foundations that offer guidance for understanding why racial/ethnic minority women face the highest barriers in the labor market. Holzer et al. (2006b) and Pager and Karafin (2009) use the economic theory of statistical discrimination (Aigner & Cain, 1977) to explain why employers are less willing to hire racial/ethnic minorities. Aigner and Cain (1977) posit that employers, in order to maximize their financial gains, make assumptions about the productivity levels of minorities relative to Whites. Specifically, employers assume that minorities, on average, will not perform as well as Whites on the job and, therefore, will cost employers more money in the long run to employ. Employers are less likely, then, to hire racial/ethnic minority job applicants, presuming that group-based assumptions about how the group performs on average holds true for any individual job applicant from that racial/ethnic group.

The statistical discrimination thesis extends to employers’ hiring-related behavior towards job applicants in an era where race/ethnicity—Black and Hispanic—and crime have become grossly synonymous. Holzer et al. (2006b) found that employers were unlikely to have hired Black job applicants when background checks were not performed by employers of new hires into positions that did not require a college degree. Conversely, employers who conduct background checks were more likely to have recently hired Black workers than employers who did not check applicants’ criminal background. Moreover, employers who preferred not to hire ex-criminal offenders and complete background checks were more likely to have recently hired a Black woman.
than employers who preferred not to hire ex-offenders and do not check criminal backgrounds. Along the same lines, Pager (2003) and Pager et al. (2009) indicated that employers were less likely to interview Black job applicants without a criminal record and more likely to interview White job applicants with a criminal record because employers assumed that Blacks were not being forthcoming with their criminal justice history in their job application materials.

Tomaskovic-Devey and Skaggs (1999) argue that employers in low-wage job markets could be less likely to engage in statistical discrimination because training costs and the required skill level for occupations in the secondary sector are less than the same type of costs in primary sector jobs. It is indeed probable that racial/ethnic minorities could be directed to lower wage jobs because of taste discrimination in that employers may be no less likely to hire minorities if they can offset the lost profits from the chance that minorities are less productive in the workplace by reducing the wages of minority employees relative to White employees (Becker, 2010). Being, however, that Holzer et al. (2004, 2006b) examined employers’ hiring practices in relation to jobs that did not require a college degree and that Pager (2003) and Pager et al. (2009) audited employers who advertised entry-level jobs that required no more than a high school diploma, suggests that statistical discrimination is at work in who is hired—and not hired—into the secondary, low-wage job market. As such, even within the low-wage job market, where the unskilled are likely to search for work, racial/ethnic minorities face discrimination because of employer assumptions about race/ethnicity, which is increasingly correlated with crime and imprisonment in the U.S. (Chiricos & Eschholz, 2002; Chiricos et al., 2001; Chiricos et al., 2004; Pager & Karafin, 2009; Welch et al., 2011).
Tomaskovic-Devey (1993a, 1993b) posits that it is not necessarily statistical discrimination that is behind employer behavior, but the process of social closure. Social closure perspectives are rooted in a Marxist theoretical tradition and have been refined from Weber’s (1978) interpretation of how some groups protect their access to economic institutions and resources by denying access to other groups (see also Murphy, 1984). Put differently, whereas the theory of statistical discrimination is more economic in its theoretical origins, social closure perspectives are more sociological in their intellectual roots. The social closure explanation of employment discrimination complements the economic theory of employer discrimination in explaining racial/ethnic inequality in employment. A social closure perspective can explain the racial/ethnic structure of women’s work in the primary (“good”) and secondary (“bad”) job sectors (Reskin, 1999; Roscigno et al., 2007; Tomaskovic-Devey, 1993a). Indeed, given the importance of preserving a White racial advantage, even if White women are applying for employment that offers low-pay to begin with, when employers are given the opportunity to hire Whites or racial/ethnic minorities, and holding constant all other measures of human capital, White women are favored job applicants (Bendick et al., 1991; Bendick et al., 1994; Bertrand & Mullainathan, 2004; Galgano, 2009; Neumark, 2012).

The idea of social closure in employment discrimination also complements racial threat theories, in that each suggests that a dominating racial group regulates access to resources, broadly defined, that benefit that particular racial group and preserves the preservation of the existing hierarchy of race/ethnicity. Blumer (1958) posited a theory of group position that is predicated on perceptions of racial group standing and adds dimension to the concept of social closure. More explicitly, Blumer argues that
discriminatory acts against racial/ethnic minorities are due to racial/ethnic prejudice that
is not determined from individual-level feelings (e.g., employers’ personal feelings
towards racial/ethnic minorities), but is the result of a historically defined structure of
race/ethnicity and how exactly those groups should continue to be ordered. Furthermore,
it is the structure of race/ethnicity—of the group positions of Blacks and Hispanics in
relation to the group standing of Whites—that gives way to negative stereotypes and
assumptions about minorities and reinforces assumptions that Whites are superior to
minority groups. Because of this “belief system” where Whites are “better” than
minorities, Whites feel a sense of entitlement to social and economic resources and
institutions that protect their socioeconomic standing over Blacks and Hispanics, who
also want these resources and access to these institutions. Thus, the threat posed by
Blacks and Hispanics to finite assets leads to discrimination, particularly by Whites,
against these minority groups in order to protect these assets and the long-standing group
position of Whites at the top of the racial/ethnic hierarchy.

Bobo and Hutchings (1996) extended Blumer’s theory to include the racial/ethnic
group threat posed by minority groups to other minority groups. Indeed, to assume that
all hiring-related decision-makers are White and that employment discrimination against
Black and Hispanic women is the result of this interaction with White employers is
racially-biased. Bobo and Hutchings’ findings are consistent with Blumer’s assertion that
competition for resources explains discrimination, but add that racial/ethnic alienation
from these resources drives competition. Alienation exists on a continuum from
enfranchisement, which is to be expected among Whites, who are typically the most
socially, politically, and economically integrated, to disenfranchisement, which is to be
expected among minority groups, who are variously integrated into social institutions depending on “[the] group’s historical position in the social structure” (Bobo & Hutchings, 1996, p. 956). The findings of their research yields support for their extension of Blumer’s group threat theory in that group-based alienation increases perceptions of threat and competition from other groups, but also provides support of Blumer’s original theory and the role of stereotypes in maintaining the structuring racial/ethnic groups. Consistent with group threat, Cohen (1998) found that in metropolitan areas with larger Black populations, there is greater Black-White inequality in earnings, with White job earnings being significantly higher and Black men’s and women’s earnings being significantly lower in these locales. In addition, Cotter, Hermsen, and Vanneman (1999) reported that the metropolitan labor markets where minority men earn significantly less than White men are the same local labor markets that give an economic advantage to White women and disadvantage minority women (see also Cohen, 2001).

Competition between groups for finite socioeconomic resources is a complex concept and process, but it no doubt has implications for understanding employment discrimination. Blalock (1967) lends depth to the group threat hypothesis, positing that racial threat and competition for jobs increases, and fuels discrimination, as the concentration of a minority racial/ethnic group increases, but that there is a threshold

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7 Chiricos, Welch, and Gertz (2004) use a group threat perspective, as well as the association of race with crime, to explain support for incarceration policies (see also Welch et al., 2011). Heimer, Johnson, Lang, Rengifo, and Stemen (2012) found that Black women’s imprisonment rates were higher in metropolitan areas with an increasing concentration of Blacks, which is also consistent with a threat perspective explaining social control (see also King & Wheelock, 2007). Furthermore, Black women were incarcerated at a higher rate in areas with higher poverty rates, which, given the association of race and welfare, is consistent with a threat perspective.

8 See Albrecht, Albrecht, and Murgia (2005) for an analysis of inequality in nonmetropolitan areas. Their findings suggest that the group threat perspective generalizes to nonmetropolitan areas as racial inequality in socioeconomic circumstances was greater in nonmetropolitan communities with larger minority populations.
effect of minority group population size. Threat exists only to a certain point and then levels out, at which point the previous increase in discrimination against minorities slows. McCreary, England, and Farkas (1989) supported Blalock’s thesis of a nonlinear effect, finding that the size of the Black population had a negative effect on Blacks’ employment odds, but had a positive effect when the size of the Black population was large. McCreary et al. suggested that the nonlinear effect, particularly the positive effect of a higher concentration of Blacks on increasing the employment likelihood of Blacks is the product of customer and co-worker preferences, which drive employers’ hiring behavior:

If people prefer to be sold goods and services by members of their own racial group, then employers will be motivated to discriminate against Blacks [and other minority group members] wherever they are a minority of customers. But when an area becomes more than half Black, hiring discrimination against Blacks no longer helps and may hurt business (p. 62).

Tienda and Lii (1987) provide further evidence of the effect of racial/ethnic composition on racial/ethnic employment differences, finding that the greater the concentration of Asian, Black, and Hispanic men, the higher the wages of college-educated White men, but not White men with less than a college education. Turning to women’s employment, McCall (2001) made a similar observation when it comes to explaining racial/ethnic differences in women’s employment. Specifically, the wage gap between White and Black women was wider in metro areas with larger Black populations. Additionally, given the coupling of immigration with Hispanics, McCall reported also that the wage gap between Hispanic and White women was larger in metropolitan regions with larger immigrant populations.

The racial threat framework, including the economic and other sociological theories that complement it, provides a logical foundation for explaining racial/ethnic
employment differences and inequality. Kornrich (2009) makes the case that queuing theory adds explanatory power to understanding employment inequality. Queuing theory (Lieberson, 1980; Thurow, 1975) holds that employers’ hiring preferences are a function of how available workers are ranked relative to one another along racial/ethnic lines (i.e., a labor queue is racially ordered) and the size (i.e., absolute and relative number) of the groups of workers available to them (e.g., fewer White women and more Hispanic women within the labor queue). At the same time, workers rank the types of jobs available to them—not all workers are attracted equally to the same types of jobs, so that workers order the types of jobs (e.g., “good jobs” over “bad jobs”) that they will pursue (see Reskin, 1993, 1999). Kornrich (2009) argues that the effect of minority group concentration on employment within a geographic area works alongside the racial/ethnic composition of workers within specific types of jobs. Theoretically, then, racial/ethnic threat is curbed because of a higher minority population and a larger representation of minorities within labor queues. Thus, employers might prefer to hire Whites, but will hire Blacks or Hispanics when members of these minority groups are a greater share of the workers applying for jobs if only because there are too few Whites within a job queue to fill available positions. Consistent with predictions from a racial/ethnic threat perspective, Kornrich found that although increases in percent Black and Hispanic within a metropolitan region contributed to racial inequality within a job queue, increases in the proportion of Black and Hispanic workers within a job queue reduced racial inequality in that job queue. This arrangement might particularly be the case for low-wage jobs where minorities—and minority women—are highly concentrated (Kmec, 2003; Thiess, 2012).
Kmec (2003) clarifies that it is exactly because the job is low-paying that employers hire minorities.

While queuing theory at least suggests that racial/ethnic minorities have better employment chances when they are a greater share of job applicants within a labor queue, it also maintains that minorities are less desirable hires than Whites, who are the preferred job applicant. At the same time, even within any given racial/ethnic group there is variation between members along other lines, such as prison record, which can be deleterious to employment prospects. Pager (2003) and Pager et al. (2009) show clearly that race/ethnicity trumps the effect of a negative credential, such as a prison record. Even when employers with low-wage job opportunities are confronted with White job applicants with a prison record, they are more preferred than Black or Hispanic applicants who do not.

**Summary and Conclusion**

The criminal justice system is an American institution, having a place like the economy and education system in defining American culture (Messner & Rosenfeld, 2001). Criminal justice policies have resulted in the unprecedented growth of the prison system, including exponential increases in the number of people incarcerated and in the amount of money governments must allocate to operate an expanding corrections system. The penal system casts a wide net, resulting in the proliferation of prison records (Jacobs, 2005) and catching up a disproportionate number of racial/ethnic minorities in the tangles of the criminal justice system (Blumstein, 1982, 1993; Mauer & King, 2007; Tonry, 2011). But in the same way that American institutions like the economy and the education system can define groups and create varying degrees of social status among
members of these different groups, the emergence of the criminal justice system in everyday American culture means that it now too has a role in defining groups and the social status of group members.

Incarceration is a consequence for offenders, but it is also consequential for society. After decades of steadily growing the prison population, research has tied this growth to higher crime rates (Liedka et al., 2006; Pratt & Cullen, 2005; Rosenfeld et al., 2005). That public policies are jeopardizing public safety is problematic, but it is a problem that can be solved. Part of the solution lies in addressing the mechanisms that give rise to the connection between imprisonment rates and crime rates. One such mechanism is through the negative effect of incarceration on the economic situation of those groups that are most likely to experience incarceration. Incarceration has an effect on the individual offenders who serve time in prison and on the groups of which they are members. Because of the higher prevalence of incarceration among racial/ethnic minorities, racial/ethnic minorities are more likely to be impacted by the effects of imprisonment.

Previous research has established that the employment of racial/ethnic minorities is negatively affected by incarceration (Western, 2002). Racial/ethnic minorities with a prison record are less likely to be hired than Whites and, when hired, earn significantly less than Whites who have also been to prison (Lyons & Pettit, 2011; Pager, 2003; Western, 2002). At the same time, regardless of the absence of a prison record in their history, racial/ethnic minorities are less likely to be hired, with employers rejecting the applications of Blacks and Hispanics in favor of Whites with a criminal record (Pager et al., 2009). These findings in contemporary research on the effect of imprisonment in the
labor market echo the legacy of discrimination against racial/ethnic minorities in the U.S. (Alexander, 2010; Tilly, 1999). Moreover, discrimination perpetuates inequality and maintains a White racial advantage while keeping down the social status of Blacks and Hispanics (Roscigno et al., 2007; Tilly, 1999; Tomaskovic-Devey, 1993b).

The research on the consequences of incarceration on employment has primarily looked at men’s experiences coming out of prison and reentering the labor market. Solely focusing on men is problematic because it minimizes the importance of women’s financial well-being and their own economic standing. Women’s employment and incarceration matter for several reasons. First, women have experienced a far greater increase in their incarceration rate than men, and the prevalence of imprisonment among Black and Hispanic women is greater than it is among White women. Second, women’s crime can be explained by their economic marginalization (Heimer, 2000; Hunnicut & Broidy, 2004), which brings up the fact that women face labor market barriers on account of their gender even before ever being incarcerated. In addition, Black and Hispanic women encounter employment discrimination on account of their race/ethnicity. That gender and race/ethnicity intersect implies that women’s reentry into the labor market is subject to more complex social dynamics than men’s. At the same time, women who are looking for a job when they have a prison record have gone against gender stereotypes, shedding additional light on how women’s labor market opportunities are impacted by incarceration. Women’s employment experiences matter for understanding how incarceration contributes to racial/ethnic inequality, but current research on the consequences of incarceration pays little attention to women reentering the labor market.
Ex-prisoners’ labor market experiences have implications for public policy. Women who cannot find employment after release from prison are at risk of returning to the poor socioeconomic conditions that contribute to their offending behaviors, including their chances of recidivism. Moreover, racial/ethnic discrimination, which is strictly prohibited under federal law, may increase the likelihood of offending. If the individual-level employment effects of incarceration stand to reduce the status of racial/ethnic minorities on the whole (Western, 2002), then the employment consequences of imprisonment on Black and Hispanic women could be the most detrimental to their groups’ standing. Indeed, Black and Hispanic women already have lower socioeconomic status (e.g., they are more likely to live in poverty (DeNavas-Walt et al., 2013)) and lower labor market status, which are likely to be lowered even further because of a prison record. In addition, for female ex-prisoners who are mothers, their children’s own employment stands to be negatively impacted by their post-incarceration employment struggles, suggesting that unemployment and poor economic circumstances will be further manifested within these minority groups. Economic inequality between Blacks, Whites, and Hispanics has implications. The connection between inequality and crime is well-established in the literature (see, e.g., Kelly, 2000). When trying to understand how mass incarceration is criminogenic and deleterious to society, racial/ethnic inequality through employment might be the clearest explanation.
CHAPTER 3
RESEARCH DESIGN

This chapter describes the research methods used to study women’s employment prospects and how those opportunities vary by race/ethnicity and incarceration history. This dissertation has been designed to address the limitations of previous research. After detailing these limitations, the discussion moves to the design of two field experiments and the procedures used to investigate how Black, White, and Hispanic women and women with a prison record fare in the search for employment. Also noted are some of the criticisms that surround the use of audit methods, including issues involving the deception of human subjects. These criticisms and concerns, however, are not detrimental to the use of audit methods in understanding the effect of race/ethnicity and a prison record in the entry-level low-wage job market.

Limitations of Previous Research

The trend in research to investigate men’s post-prison employment is particularly notable where the search for employment is concerned (see, e.g., Pager, 2003; Pager et al., 2009). Only one study has examined the effect of race and criminal records on the likelihood of women finding a job, but the focus on Black and White women, the use of a single experimental methodology, and the onset of historical effects limits the implications of the research (Galgano, 2009). Specifically, Galgano’s experiment did not examine Hispanic women, who are a growing part of both the general U.S. population and prison population. At the same time, the job search process is multimodal as the Internet becomes essential in how job seekers search for opportunities and employers advertise openings (Kuhn & Skuterud, 2000; Nakamura, Shaw, Freeman, Nakamura, &
Pyman, 2009; Stevenson, 2009). Despite the growing use of the Internet to look for employment and employees, no previous research on the effect of incarceration on women’s employment has examined how women fare in the in-person job application process, let alone in a job sector like food service/restaurants where employers are more likely to request an in-person application over an electronic application and where ex-prisoners are very likely to seek employment.

Another limitation of previous research on the effect of incarceration on employment is where it has been conducted. There is variation in the social and political contexts surrounding race/ethnicity and employment and these regional differences have implications for how the results of the research generalize. The experiments that have examined the employment consequences of a criminal record have been carried out in the Midwest, including Milwaukee (Pager, 2003) and Chicago (Galgano, 2009), and in New York City (Pager et al., 2009). This is an important point to make in light of the growing diversity within the Hispanic population and the spatial distribution of Hispanic groups across the country. For example, Pager et al. (2009) examined Hispanic men in New York City, but they acknowledged that Hispanic ethnicity was conveyed to employers using Puerto Rican names because of the large Puerto Rican population in New York City. Thus, Pager’s research speaks to the effect of Puerto Rican group membership on employment chances in New York City, but not necessarily to the effect of membership in other Hispanic groups on employment chances in other regions of the country. This is particularly to be expected for other Hispanic groups that are a greater share of the total Hispanic population or that are concentrated in other regions of the U.S. More to the point, Puerto Ricans are the largest group of Hispanics in the state of New York, but not
the largest group of Hispanics in the U.S. (Ennis et al., 2011). Mexicans account for 63 percent of the total Hispanic population in the U.S. (Ennis et al., 2011). At the same time, Puerto Ricans are U.S. citizens. Pager et al. commented, “In other labor markets [i.e., outside of New York City], where markers of citizenship…are more prominent sources of differences, evidence of ethnic discrimination may be stronger” (p. 784).

Pager et al.’s (2009) point about regional variation in labor markets and how that variation could strongly influence the prevalence of ethnic discrimination is exemplified in the southwestern U.S. where Mexicans are associated with illegal immigration, and illegal immigrants with crime (Wang, 2012). The State of Arizona, which has taken a strong political stance on the enforcement of immigration laws, requires employers, including private businesses, to verify the citizenship status of new hires. Moreover, the labor market and modes of production in the southwestern U.S. are not usually characterized by industrial manufacturing, which has influenced the structuring of race and economic inequality as the U.S. has turned from production and manufacturing to a service-based economy (McCall, 2001a; Wilson, 1987). In fact, McCall (2001b) asserts that in regions where immigration is concentrated, employment disparity between White and Hispanic women is greatest, regardless of individual-level differences in immigration status. McCall (2001b) found the greatest inequality between Hispanic and White women in Los Angeles. Los Angeles matters because 60 percent of the total Mexican population in the U.S. resides in California and 4.7 million Hispanics live in Los Angeles County alone (Ennis et al., 2011). Accordingly, it is important to take into account differences in ethnic context for understanding racial/ethnic differences in employment. Given regional differences in the Hispanic population and how the convergence of place and ethnic
subgroup membership shapes labor market experiences and outcomes, in addition to the absence of Hispanic women in criminological research (Schuck et al., 2004), this dissertation examines Hispanic women in Arizona, where the third largest concentration of Mexicans in the U.S. resides and where Hispanics account for 41 percent of the population in the Phoenix metropolitan area (Ennis et al., 2011).

To address some of the substantive limitations in the research on the effect of race/ethnicity and incarceration on women’s success in the job search process, including regional differences in labor markets and differences in how jobs are applied for, two field experiments are conducted. In the first experiment, a correspondence design is used to apply for jobs that were advertised online and required that a résumé be submitted to employers electronically. In the second experiment, jobs within a single sector are applied for in-person using trained “testers” to pose as real job applicants. The remainder of this chapter provides a comprehensive detailing of the design of both experiments.

**Comparing Correspondence and Audit Methods**

Field experiments that examine employment discrimination are broadly called audits (Bendick & Nunes, 2012; Neumark, 2012). There are important procedural differences in how audit research is conducted that distinguish audit studies from one another. More specifically, field experiments can be categorized as either using audit procedures or following correspondence procedures (Neumark, 2012). The main difference between audit and correspondence procedures is how jobs are applied for and the use of testers (Neumark, 2012). Research using the audit method requires the use of real people, referred to by researchers as testers or auditors, who are carefully trained to pose as job applicants and interact face-to-face with employers. Examples of the audit
method are found in Bendick et al., (1991), Bendick et al., (1994), Bendick, Rodriguez, and Jayaraman (2010), Neumark et al. (1996), Pager (2003), Pager et al. (2009), and Turner et al. (1991). In comparison, the correspondence method does not require using testers to pose as job applicants. The correspondence test uses carefully-designed résumés that are submitted to employers by mail or via some other form of communication. Correspondence tests do not involve face-to-face interaction between the job applicant and the employer. Bertrand and Mullainathan (2004), Galgano (2009), and Tilcsik (2011) provide examples of the correspondence method.

These methods, however, are similar in that both use matched pairs of fictitious job applicants to control for individual differences beyond the test conditions that could otherwise influence employers’ interviewing or hiring of applicants. Specifically, in in-person employment audits, testers are matched together in pairs along the lines of race/ethnicity. In correspondence studies, résumés are also matched together in pairs along the lines of race/ethnicity. Furthermore, each method calls for applying for jobs by first creating résumés with fictional credentials (e.g., job skills, types of previous jobs held) that are matched across pairs.

In the context of this dissertation research, three pairs of job applicants were needed—one pair that corresponds to White women, a second pair to Black women, and a third pair to Hispanic women. By using a matched pair design, the experiment can test the effect of a prison record because one applicant within each pair is randomly assigned a prison record and the other applicant acts as the control by having no record of incarceration. The experimental design of this dissertation is part of a larger study funded by the National Institute of Justice to examine the effect of incarceration on employment
(Decker, Spohn, Ortiz, & Hedberg, 2014). The following sections discuss how this design was accomplished.

**Initial Procedures: Résumé Construction**

Three pairs of résumés were created to apply for entry-level jobs. One pair corresponded to Black women, another to White women, and the third to Hispanic women. Before pairing résumés together, each résumé had to be created. Each résumé included four sections: An objective statement, a listing of skills and qualifications, a description of previous employment, and an education profile. Each section was designed to be identical across all six résumés. Indeed, the purpose of using an experimental design to examine bias in hiring is that the approach effectively controls for any source of variation in employment suitability that could influence employers’ hiring-related behavior, such as differences in experience and/or education. A hybrid of functional and chronological résumé formats (Parker & Brown, 2012) was used to determine how applicants’ information was presented to employers. Each résumé was one page, formatted simply, and used a plain font style.

Each objective statement conveyed a similar interest in applying and developing skills gained through previous employment. Given that the jobs applied for were entry-level, it seemed appropriate that the objective statement suggested to employers that the applicant recognized that their transferrable skills and their previous employment were related to the position they were applying for as well as seeing the position as a learning opportunity. Once six matching objective statements were created, statements were assigned to a résumé using random assignment.
Skills and qualifications were determined by conducting a content analysis of twenty advertisements for entry-level positions. Advertisements for jobs in three target sectors—customer service, general labor, and food service/restaurants—were examined and coded, resulting in the identification of a skill set with five broad dimensions that was desired by employers of ideal job applicants. Employers were seeking computer skills, written and verbal communication skills, customer service skills, the ability to work with others in a team environment, and organizational abilities. After creating six different skills and qualifications profiles that were comparable, each profile was randomly assigned to a résumé.

Each résumé described previous employment in three different jobs. Each job was in one of the three target sectors. Résumés indicated prior employment in customer service (e.g., courtesy clerk at a grocery store; cashier at a movie theater) and food/restaurant service (e.g., sandwich maker; server) with large nationally-recognized companies. For general labor experience, possible employers were identified through listings in the phone book. After careful research of these locally-owned businesses, general labor experience was included on résumés as employment with large local companies. Experience in this sector included, for example, work as crew members with a landscaper, painter, and construction contractor. Job-related duties in prior positions were developed based on descriptions of the positions that were provided on each business’s website. The Department of Labor’s Dictionary of Occupational Titles provided additional information on the work required in general and manual labor jobs that was also used to describe the positions on the résumés. The order in which work in each sector appeared on the résumé was determined using randomization procedures.
Each résumé included work experience between three different jobs; however, for tests of the effect of criminal record, the most recent six months of work experience included an inmate job at a state prison (i.e., the last job on the résumé). This effectively encoded on the résumé, and cued to employers, that the job applicant had a prison record (Galgano, 2009; Pager, 2003; Pager et al., 2009). The type of prison labor used to convey work as an inmate was based on examination of the Arizona Department of Corrections Operations Manual. Inmate jobs were selected that would be available to prisoners in lower security units. The name of the state-run prison (i.e., not state-contracted/private) was included on the résumé; however, there is only one state-run prison for women in Arizona.

Specifying the temporal dimensions of previous employment proved to be a challenging task. First, during the initial design of the study, it was decided that a drug offense would be the underlying reason for incarceration because of the representation of racial/ethnic minorities in prison for drug-related crimes (Carson & Sabol, 2012). Specifically, the conviction was possession of cocaine for sale, which carries a minimum sentence of three years. At the same time, because of a truth-in-sentencing mandate in Arizona for all felony offenses resulting in a prison sentence, all state prisoners serve 85 percent of their sentence. Arizona law also takes away the driver’s license of drug offenders under the age of 21 upon conviction, so convictions of applicants applying with a prison record had to occur after this age. More specifically, in order to match ex-

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9 The offense and sentence was not specified on the résumé, but was a necessary decision to make during the planning stages to reflect the reality of drug laws in Arizona and, relatedly, because testers during the in-person audit could expect to be asked about their conviction. Furthermore, the average length of stay for minimum security classification offenses in the Arizona Department of Corrections is 3.31 years and drug crimes account for the largest number of conviction offenses.
prisoners and non-prisoners on the potential job requirement of having a driver’s license, employment history covered the breadth of six years, from age 18 to 24. Altogether, each résumé had three and half years (42 months) of previous work experience. Excluding the six months of prison work, and before making any adjustments within a résumé to account for differences in the prison test condition, the number of months worked in each position randomly varied between nine and 16 months. Résumés that cued a prison record featured three years of uninterrupted employment prior to incarceration (i.e., no employment gaps). Résumés without the prison record featured six month employment gaps between jobs and, to account for six months of prison work on the paired résumé, two months were added to each of the three jobs indicated in the employment history. The chronology of employment for résumés that did not include a prison record begins one year after graduation from high school (see below), whereas it begins on résumés with a prison record the same year as graduation from high school. Within each pair, employment history ends on the résumé without a prison record one month prior to the last month of prison work specified on the résumé with a prison record. The prison test condition was randomly assigned to a résumé within each pair and then switched between each résumé each week thereafter for the duration of the experiment.

In addition to employment history, each résumé included a section specifying education level. Each résumé within each pair had a high school diploma. To convey high

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10 Having a driver’s license was not listed on the résumé as a qualification, but it is possible that employers could assume that job applicants without a criminal record are licensed to drive, while ex-prisoners are not. To minimize the collateral consequences of a drug conviction, driving qualifications were matched. Applications that were completed by testers during the in-person audit asked whether the applicant had a valid license.
school graduation to employers, the name of the high school and graduation year was specified on each résumé. High schools were selected from a Phoenix-area high school district that served the central area of the city and that were more racially and ethnically heterogeneous than other schools within the district. The specific high school was matched within each pair.

In addition to indicating high school graduation, random assignment procedures were used to assign a two-year (community) college diploma to résumés submitted to employers, which was signaled as having an associate of applied science in general business. This specific degree was selected because it is universally applicable to jobs in the three target sectors, with coursework covering all areas of business operations, including accounting, business ethics, human relations, and marketing. The year of graduation was two or three years after high school graduation and the degree was received from a community college in the central area of the city. This condition was randomly assigned to each résumé for each test (i.e., each job application). As such, it is possible that the résumé included both test conditions—a prison record and two-year college degree.

The objective statement, skills and qualifications, previous employment, and education sections of résumés were created first. Since three pairs of résumés were needed to conduct the experiments, the six résumés were then paired together using randomization procedures, with each pair consisting of two résumés each. In addition, there were four versions of each résumé given the number of test and control conditions. The résumés up to this point did not convey any specific personal information about the
applicants (e.g., name). The remaining steps involved creating applicants for each pair that included full names that were racially/ethnically identifiable and contact information.

**Specifics of the Correspondence Test**

**Cueing Race/Ethnicity**

In addition to having a prison record, résumés had to convey the race/ethnicity of job applicants to employers. This was done through applicants’ first and last names. For Black women, the research of Bertrand and Mullainathan (2004) provided the starting point for creating a sampling frame of names to use on the résumés. Bertrand and Mullainathan used birth certificate data to tabulate first names by race in order to determine which names were more likely to be distinctly Black or White. They then conducted a survey to determine perceptions of race based on first name alone. Of the names they provided for Black and White women (p. 1012), the sampling frame for this research included names that were identified at least 90 percent of the time by survey respondents as distinctly Black or White. From the sampling frame, two White first names and two Black first names were randomly selected.

For the pair of Hispanic women, Lavender (1988) researched first names that more frequently belonged to Hispanic adults. Lavender used surnames (i.e., last names) to identify Hispanics and then rank ordered 20 first names in five cities with large Hispanic populations. After removing duplicates, these names formed the sampling frame for Hispanic first names. Two names were randomly selected for the pair of Hispanic women.

Research from the 2000 Census was used to compile a list of last names that were strongly identifiable as Black, White, and Hispanic (Word, Coleman, Nunziata, &
Like Bertrand and Mullainathan (2004), Word et al. determined the frequency with which last names were concentrated within a specific racial/ethnic group. For each group, Word et al. provided the top ten last names with the greatest likelihood of occurring within that group and the percentage in the group with that last name (e.g., 98 percent of the population with the last name Yoder is White). Last names for which the prevalence within a group was less than 50 percent were not included in the sampling frame.\(^{11}\) Two last names were randomly selected from each racial/ethnic group.

First and last names were randomly paired together for each racial/ethnic pair. In the end, the names for the pair of White women were Meredith Schroeder and Kristen Koch. For the pair of Black women, the names were LaTonya Gaines and Ebony Jefferson. Hispanic names were Margarita Zavala and Lucia Huerta.

**Contact Information**

Once first and last names were selected, email accounts were set-up. Three of the most widely-used free email providers were chosen (e.g., Gmail) and randomly assigned to each applicant who was created. When the email provider’s system allowed, the email address was the applicant’s first and last name (e.g., meredith.schroeder@yahoo.com). Otherwise, an email address was created to correspond to the name of the applicant as closely as possible (e.g., latonya.gaines2@gmail.com). These emails were checked on a daily basis for correspondence from employers.

Each résumé provided a physical address and telephone number for the applicant. Using information provided by local real estate experts, the addresses of the largest apartment complexes in central Phoenix provided a sampling frame. From this list of

\(^{11}\) Three Black last names were eliminated. For both Whites and Hispanics, the percent having any of the top 10 last names was well-above 90 percent.
addresses, a residential address (i.e., the address of the main (leasing) office) was randomly assigned to each résumé within each pair. The areas of residence were similar to one another demographically and socioeconomically and in terms of crime and incarceration rates, therefore controlling for social class effects that may be conveyed to employers. Addresses were not matched within pairs. Cell phones with voicemail boxes were set-up with a pre-recorded greeting and checked on a daily basis for messages from employers.

**Applying for Jobs**

The six résumés described above were submitted to employers during the course of the correspondence test. The same résumés were also used, with modification, during the course of the in-person audit. These changes are detailed in a later section of this chapter that details the audit study procedures.

After a two-week pretest of applying for jobs with six fictional résumés, the correspondence test started during the first week of June 2011. The correspondence test was initially designed to generate a sample size with sufficient statistical power. In practice, this means that the sample size, or number of applications, would need to be at least 600 (100 jobs*6 résumés) to detect racial/ethnic differences, given the likelihood of a response that was established in the literature (Pager, 2003). However, as Galgano (2009) noted, her attempt to replicate Pager’s findings was affected by the escalation of the economic recession, which lowered the overall response rate and reduced the number of callbacks after September 2008. During the summer of 2011, the unemployment rate in the Phoenix metropolitan area hovered around nine percent, which is twice as high as

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12 No specific unit or apartment number was listed on the resume.
the unemployment rates during the time of Pager’s (2003) and Pager et al.’s (2009) audits of employers. In response to these real-world economic circumstances and to increase statistical power, the correspondence test was repeated in the summer of 2012, over the exact time period of the test conducted in 2011. The résumés submitted in 2012 were identical to those from 2011, except one year was added to all dates on the résumés.

In both 2011 and 2012, the same procedures were used to search and apply for jobs. Each week, jobs were selected that met criteria similar to Pager (2003) in that the positions were entry-level and did not have supervision or management responsibilities. Jobs required no more than a high school diploma and no more previous experience than that indicated on the résumés. Jobs where a criminal record would clearly prevent employment were excluded, including positions that required passing any type of background check or needing security clearance, as well as those that involved close work with children and the elderly. Jobs in the public sector were also excluded. Because applicants were fictitious, jobs that required a social security number (SSN) at the time of application were also excluded. For obvious reasons, including duplication, the sample of jobs was limited to advertisements where the hiring company’s name and address was provided. All jobs were located in Maricopa County, Arizona.

Job openings were identified using two different websites. The first site was careerbuilder, a major job search engine, which was accessed from a link on the website of a major newspaper serving the Phoenix metropolitan area. Businesses pay

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13 The unemployment rate in 2012 was just above seven percent during the same summer timeframe of the 2011 test.
14 Job advertisements that indicated a background check would be required of hires (as opposed to requiring hires to pass a background check) were selected, assuming the position met all other criteria.
15 Because it is fraud (and identity theft) to do so, SSNs could not be falsified for the purposes of applying for jobs online.
careerbuilder to advertise available positions, but job seekers do not pay to search, access, or apply for any of the jobs that are posted. Jobs found on careerbuilder were applied for using a built-in feature of the website where résumés were uploaded and sent to employers. Each submitted résumé was received by the employer as plain text in the body of an email. For each job application, an email was received that confirmed that the résumé had been sent to the employer. Jobs were also found on craigslist, a website that is designed to be analogous to classified ads. To apply for jobs found on this website, the résumé was usually emailed to the employer as an attachment. There were occasions, however, where the résumé was submitted as part of an application form on the employer’s website.

A list of job openings meeting the selection criteria from each website was compiled each week. Because three job sectors were targeted during the correspondence test, an attempt was made to apply for an equal number of jobs from each sector each week. In almost all weeks, there were more jobs in the customer service sector than in the general labor and food service/restaurant sectors. Furthermore, there were some weeks where no jobs in the general labor or food service/restaurant sector could be applied for because they did not meet the inclusion criteria or were duplicates of previous positions applied for.

Résumés were submitted to employers on the same two days each week by the author of this dissertation and another graduate student. In addition, the time of day when résumés were sent to employers was separated into two time periods, one in the mid to late morning and one in the mid to late afternoon. Résumés were randomly selected for the day and time during which they were submitted to employers online.
Specifics of the In-Person Audit

While the number of employers who use the Internet to advertise jobs is continually increasing (Nakamura et al., 2009), not all employers are interested in receiving résumés or computerized applications online. While searching for jobs during the correspondence test, it became clear that employers in the food service/restaurant sector preferred in-person applications. For this reason, combined with the fact that this particular job sector is easier for ex-prisoners to access than low-paying jobs in other employment sectors (Pager, 2007a), and that this sector added the second largest number of jobs to the labor market in the two-year period following the Great Recession (2009-2011, National Employment Law Project [NELP], 2012), the in-person audit of employers only targeted employers in the food service/restaurant sector.

To conduct an audit of employers, testers are needed to pose as job applicants. The most important and, perhaps, time-consuming part of carrying out an in-person audit of employers is the hiring of testers. As a job itself, the tester position was advertised as “Interviewer/Actor” and initially posted on a student employment site of a large public university within the geographic region where the audit was conducted. The advertisement for the position did not specify the purpose of the position or the nature of the research project.

The affirmative action and equal employment opportunity office of the university’s human resources department required that the word “actor” be indicated in the position title because a photograph was requested as part of the application. According to the university’s legal department, it was permissible to ask for a photograph when hiring actors. Requesting a photo, in addition to other application materials,
assisted in identifying the race/ethnicity of the applicant which, given the purposes of the study, had to factor into the interview decision. It also saved time that would have otherwise gone to interviewing applicants that looked too young or old.

Having applicants submit a photograph as part of the application also helped to identify prospective pairs that could then be contacted for an interview. In most cases, applicants were interviewed as if they were a potential match. Bringing in two applicants at a time allowed for a comparison, not just in terms of physical appearance (e.g., height, skin tone, body type), but also how their personal demeanors matched up and how they presented themselves, including their mannerisms, ability to make and maintain eye contact, whether they had an accent or speech impediment, and overall language and interpersonal communication skills. During the interview, the history of the audit method was discussed, including its application in previous research on the effects of race/ethnicity and criminal records on employment. The role of the tester as acting like a legitimate job applicant was also detailed during the interview to ensure that the applicant was comfortable with what would be required of them if offered the position. Applicants were told that they would be required to sign a non-disclosure agreement stating that they would not discuss in any way by using any form of communication the nature of or their involvement with the project until notified otherwise.

Each tester was trained on how to fulfill the role and responsibilities. The training process began with a review of a training manual created specifically for the in-person audit of employers. The training manual included instructions on how to greet the employer’s staff and hiring manager, on appropriate tone and speech to use during interactions with hiring managers, and on controlling body language. Testers were
provided with physical appearance and hygiene-related guidelines (e.g., jewelry, make-up, perfume) and on what to wear when applying for a position and to any subsequent in-person interaction with the employer such as an interview. Testers wore business casual attire, including tucked-in collared shirts, pressed slacks with a belt, and flat closed-toe dress shoes to make a professional impression on employers and establish the legitimacy of the tester as a serious job applicant.

The training manual also included a series of questions that were likely to be asked during the initial interaction between testers and hiring managers or decision-makers and during more formal job interviews. These potential questions were divided into those that addressed general employment suitability and those that addressed the test conditions assigned to testers. In terms of general employment suitability, testers were prepared to answer questions about why the employer should hire them, their strengths and weaknesses, employment history, including explanations for employment gaps, long-term career goals, and how to answer questions about experiences at their previous employers, including how they handled difficult customers and situations. Testers presented themselves to employers as an applicant with full-time availability who could meet the general requirements of the positions applied for (e.g., having a clean driving record, valid driver’s license, and auto insurance when applying for delivery and driver positions). Testers also were trained to be express interest in other positions that were offered in cases where they were steered and to convey their willingness to accept pay that was less than the minimum hourly wage.

For crime and prison related questions, each tester was provided answers that addressed inquiries about the criminal justice system process, including the
circumstances that led to their arrest, the type of crime they were convicted of, their life as an inmate, including working in prison, and their parole requirements. Parole requirements included general conditions of supervision (Travis & Lawrence, 2010) and a specific requirement of attending drug awareness classes because the conviction leading to incarceration was drug-related. When asked about their conviction and incarceration, testers were trained to tell to employers that they made a mistake and were ready to move on with their life.

Each tester completed and observed mock interviews as part of the training process. Mock interviews varied the types of questions regarding incarceration with the intention of preparing testers for handling employers who may not be welcoming to applicants with a criminal record. Mock interview questions were asked that were not included in the training manual so as to train testers to think on their feet and draw upon the information that was provided to them in terms of their personal and employment profiles. Each tester was mock interviewed under each résumé condition that could be assigned for any given job, including both the prison and education test conditions.

Testers also practiced applying for jobs with real employers during training. Testers had the choice of where to apply so long as it was not an employer that had been applied with online during the correspondence test. Testers searched for employers who were hiring using craigslist, but also applied where they saw “help wanted” signs and at restaurants where it was unknown whether the employer was currently hiring. Testers were required to practice applying for jobs using the résumé with the prison test condition (or with the prison and college test conditions) at least twice. Each tester completed between two and four practice applications.
Applying for Jobs

The résumés used by testers during the in-person audit were the same as those created for the correspondence test on every major dimension except one. The only difference to point out is that testers used their real first and last names and residential addresses. Falsifying personal information for the in-person audit was not an option because it would put testers in the position of engaging in fraudulent and unlawful behavior. In most cases, an employer requested that a supplemental application be completed (in addition to the tester providing a résumé) that asked for an SSN. Because of Arizona’s law requiring verification of employment eligibility and the use of SSNs to do so, the results of the audit could yield biased estimates if testers did not provide an SSN, particularly for Hispanics because the absence of an SSN could indicate to employers a lack of U.S. citizenship or legal resident status. At the same time, because testers used their real names, it cannot be assumed that testers’ real names are racially/ethnically identifiable to employers, which is particularly relevant when in-person applications, including résumés, are reviewed days or even weeks after the initial application is submitted. Even if testers used a racially/ethnically recognizable name created for the purposes of this project and their own SSN, the SSN and name would not match official government records. Accordingly, the tester’s in-person contact with the employer represented the only opportunity to convey race/ethnicity.

The in-person audit was conducted over a ten-week period in the summer of 2012, running concurrent with the correspondence test. Jobs in the food service/restaurant

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16 It is against federal regulations to use applicants’ information to obtain a credit report, which could include a criminal history report, without the explicit permission from the job applicant to do so. Rules on the use of E-Verify allow employers to verify the employment eligibility of new hires, not job applicants.
sector that had been previously applied for during the correspondence test were not applied for during the audit and vice versa. Similar to the correspondence test, job openings were found using *craigslist*, but not *careerbuilder*.

Testers were emailed a list of jobs twice during each week of the audit. Testers then had a 48-hour period to apply for the jobs they were emailed. Within each pair, the prison test condition was randomly assigned to a tester for each job. The education test condition was randomly assigned to each tester for each job. For quality control purposes, testers completed a form after each job application that collected information on the date and time of their application and the test conditions under which they applied.

**Critiques of Audit Research Methods**

Despite its advantage in providing evidence of discrimination (Fix & Struyk, 1993), audit research, which includes correspondence tests and in-person audit studies, is not without criticism. Critics also note that audit methods are limited in that they cannot definitively identify the processes that result in racial/ethnic differences in hiring (see, e.g., Lang & Lehmann, 2012; Neumark, 2012). These critiques and limitations, however, are not detrimental to the outcomes or the usefulness of this method. Indeed, neither the criticisms of the method nor its limitations are substantial enough to outweigh the validity of audit research in understanding how the labor market responds to minority job applicants, including women (Neumark et al., 1996) and racial/ethnic minorities. This section discusses some of the common concerns with the use of field experiments.

**Institutional Review Board and Human Subjects**

One criticism of audit research has to do with whether this research methodology is ethical because this type of research is deceptive (see Pager, 2007b). Employers do not
know that their job applicant pool includes fictitious résumés and/or testers nor that these résumés and/or testers are for the purpose of social science research and the measuring of racial/ethnic hiring preferences. The university’s Institutional Review Board reviewed and approved the specific protocol of the larger study in which this dissertation research is embedded (see Decker et al., 2014). As Pager (2007b) discussed, audit research is usually within the ethical boundaries established by the federal government on research involving human subjects and that such research poses only a minimal risk to employers. Specifically, employers have posted a job advertisement and are reviewing the job applications they not only requested, but that is part of their own job performance. At the same time, this dissertation research is examining entry-level job prospects where employers spend a few minutes reviewing applications, which also reduces the amount of time employers lose to evaluating fictitious résumés (see Fix & Struyk, 1993). Most jobs applied for in the in-person audit were also to those where a specific timeframe to submit applications was indicated. Employers were expecting applicants, further limiting the imposition of the research on their time and effort to evaluate testers’ applications. In the cases where job offers were made, testers notified the employer on the same day the offer was made that they would not be taking the position.

Finally, audit research, including this dissertation research, is not interested in initiating legal action against the employers who are audited. Because employers are only audited once by each pair, it is impossible to establish a systematic pattern of behavior for any given employer (Pager, 2007b). The point of this research is not to bring an Equal Employment Opportunity claim against an employer if they hire Whites over Blacks or Hispanics. Any information collected on the employers who were audited is confidential.
Background Checks of Fictitious Applicants and Testers

In the Internet age, audit research must also consider how fictitious résumés or testers could jeopardize the validity of the study and the reliability of the findings because employers find out, especially in the context of the online correspondence case, that the applicant does not really exist or, in the case of the in-person audit, is not who they say they are. This is a particular concern for researchers investigating the effect of incarceration on employment because employers evaluating minority applicants and/or applicants with a prison record are more interested in the specifics of these applicants’ background than non-minority applicants (Holzer et al., 2006b). Employers could attempt to perform a criminal background check or simple Internet search of any applicant, including fictitious applicants who were created for the purposes of audit research. With regards to background checks, the Fair Credit Reporting Act (FRCA) prevents employers from requesting a consumer report on an applicant without the applicant’s explicit permission, and this consent has to be obtained independent of the application. Accordingly, there is no way for an employer to eliminate an applicant on the basis of a background check that complied with federal law. Although Holzer et al. (2004) indicated that almost three-quarters of employers perform criminal background checks before hiring applicants, it is unlikely that they perform such checks before interviewing.¹⁷

In addition, if employers were to perform a simple Internet search using the applicant’s name, the employer would not find information that suggests the applicant is

¹⁷ Holzer et al. reported that 45.5 percent of employers always perform criminal background checks, 17.7 percent sometimes check the criminal background of applicants, and 36.9 never check.
not a real person. If employers were to suspect they were dealing with a fictitious applicant based on their Internet search, then, by design of the study, it is fair to expect the employer to remove all fictitious applicants from their applicant pool. At the same time, given that employers offering low-wage entry-level jobs spend minimal time evaluating job applications (Fix & Struyk, 1993), it seems unlikely that employers will spend additional time searching for the applicant on the Internet if the applicant was not selected for further consideration. During the in-person audit, testers deactivated their social media accounts.

**The Real Applicant Pool and Labor Queues**

Bertrand and Mullainathan (2004) also bring up the issue that audit methods cannot control employers’ total number of applications (i.e., labor queue) and the quality of the real applicant pool, which could bear on callback rates. This is true, but in a race/ethnicity-neutral hiring process, employers would rank order applicants. If better qualified “real” applicants were to apply for the same job as the fictitious applicants or testers used to conduct this dissertation research, then there should be no effect of race/ethnicity in the callbacks observed here because résumés and testers have equal skill and qualification levels (i.e., they are matched). If racial/ethnic differences do exist, however, it suggests that the application review process is not racial/ethnically neutral, regardless of how qualified other (“real”) applicants may be.

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18 Given how last names were selected and the size of the population with that last name (see section on how résumés were constructed), the number of Internet search results returned from a search using applicants’ names would likely make drawing a conclusion on the authenticity of an online job applicant impossible.
Alternative Research Methods

Given how complicated and costly audit research is, there is a question of whether other methods or data could be used to examine the research questions. Indeed, as previously mentioned, this dissertation research was made possible because it is taken from a larger study that was funded by the National Institute of Justice. Without considering the unit of analysis (i.e., men, women, or men and women), previous research uses a variety of methodological and analytic tools to better understand the effect of incarceration on employment. There are essentially three alternative methods available for investigating the effect of race/ethnicity and incarceration on women’s entry-level job prospects: Analysis of secondary data such as the National Longitudinal Survey of Youth 1997 (http://www.bls.gov/nls/nlsy97.htm), the collection and analysis of job search data from real women with criminal records, and survey data collected from employers.

Each alternative method is not without limitations, particularly for how individual offender data, whether secondary or primary, can be analyzed and what inferences can be made from the analysis. The use of propensity score matching (PSM) is one tool that allows strong inferences to be made about the key variables under investigation because it addresses the issue of selection, or unobserved differences between subjects that otherwise explain variation between subjects in the effect of a key variable (Apel & Sweeten, 2010b). Apel and Sweeten (2010a) used PSM to investigate the impact of incarceration on legal and illegal employment and work trajectories. Another method for dealing with unobserved differences between units of analysis is by using a fixed-effects model that can estimate the effect of unobserved time-invariant differences between
individual subjects in explaining variation in the outcome (see, e.g., Western, 2002). Indeed, a number of prior investigations on the effect of a criminal record on employment-related outcomes use a fixed-effects modeling strategy (see, e.g., Apel & Sweeten, 2010a; Grogger, 1995; Lyons & Pettit, 2011; Waldfogel, 1994; Western, 2002).

Another fact to keep in mind about any type of statistical analysis is that estimating the effect of any key variable of interest is going to be problematic when there is not enough power, which is a function of sample size (Cohen, 1992). Power has the potential to be an issue in research on women’s incarceration because women are a small part of the prison population. It is questionable whether the NLSY97, which are data used frequently in research on the effect of incarceration on employment, has an adequate number of observations on women who have been incarcerated. To be sure, although Apel and Sweeten (2010a), Lyons and Pettit (2011), and Western (2002) use NLSY97 data, their analyses only examine men. Richie (2011) also used the NLSY97 to investigate the effect of criminal convictions on employment and wages, but even after combining non-White women into a single minority category, only 56 White women and 38 minority women had convictions.

While statistical techniques can yield reliable estimates of the effect of incarceration on employment, secondary data analyses provide little in the way of understanding differences in how jobs are searched and applied for, unless those data are specifically available. At the same time, unless available, secondary data analyses cannot make assumptions about the types of jobs applied for in terms of whether ex-prisoners apply for positions for which they are qualified and have a real chance of obtaining given their skill set and educational levels. The job search and application process matter, and
this dissertation research is designed to take into account these processes as they relate to ex-prisoners’ job prospects.

Another method that could be used to examine ex-prisoners’ employment chances is an employer survey (Holzer et al., 2006b; Pager & Karafin, 2009). In this case, employers could be presented with hypothetical applicants using fictitious résumés like those created for the purpose of audit research. The problem with surveying employers and examining their hypothetical hiring behavior, however, is that research shows differences between employers’ willingness to hire and their actual hiring behavior (Pager & Karafin, 2009). That is to say, what employers say is different from what they do. Pager and Karafin surveyed the employers audited by Pager (2003) and found that employers who did not callback Black testers said during the survey that they would callback Black job applicants.

**Summary**

This chapter presented the research methods used to examine women’s entry-level job prospects and the designs of the online correspondence test and in-person audit of employers. Using an experimental design, this dissertation research tests the effects of race/ethnicity, a prison record, and education on women’s employment chances while controlling for other indicators of employment suitability that employers could be searching for among job applicants. The next chapter discusses the analytic techniques used to estimate women’s employment chances using the data collected over the course of the online and in-person experiments. The next chapter also details the findings from the online correspondence test and in-person audit.
CHAPTER 4
ANALYSIS AND FINDINGS

This chapter presents the results of two field experiments that test the independent and interaction effects of race/ethnicity and incarceration on women’s employment prospects. The experiments also test the effect of a community college degree on the likelihood of women advancing through the hiring process. This chapter is divided into three sections. The first section details the cross-classified random effects (CCRE) modeling technique used to estimate the effects of race/ethnicity and the experimental test conditions. In the second section of this chapter, the results of the analysis of the experiment using the correspondence method, where résumés were electronically submitted to employers via the Internet, are reported. In the final section of the chapter, the results from the in-person audit of employers, where testers submitted their résumés in-person to employers in the food service/restaurant sector, are provided.

Analytic Techniques

Measures

Both the online correspondence and in-person audit data are analyzed using a cross-classified random effects (CCRE) model, which is explained more fully below. In both experiments, the dependent variable is a dichotomous measure that is coded 1 if the applicant received a favorable response from the employer and 0 otherwise. In the case of the online correspondence test, callbacks (i.e., voicemails) and email responses from employers asking the applicant for an interview or for the applicant to return the call or reply to the email were coded as a favorable response. Favorable responses to applications submitted to employers during the course of the in-person audit include
callbacks for an interview or job offers made to testers where the employer conducted an on-the-spot interview. There are three independent variables included in both sets of analyses: Race/ethnicity, prison record, and education level. Race/ethnicity is measured as three nominal-level, dummy variables that indicate whether the job applicant is White, Black, or Hispanic. White is the reference category. Prison record is a nominal variable that measures whether the applicant applied for a job using a résumé indicating she is an ex-prisoner, coded as 1, or with a résumé without an indication of previous incarceration, which is coded 0. Education is also a nominal variable that measures whether the applicant has a community college degree, coded as 1, or a high school diploma, coded as 0. These predictors were mean-centered before being entered into the models estimating their effects.

**Models**

Cross-classified random effects (CCRE) models estimate more than one source of variation in the outcome that is due to how the data are structured (Raudenbush & Bryk, 2002). Cross-classified estimation procedures follow the logic of nested, or multi-level, data (see, e.g., Johnson, 2012; Raudenbush & Bryk, 2002); they depart from traditional multi-level models, however, in that they allow for parallel sets of clusters (Rabe-Hesketh & Skrondal, 2008). Said differently, the grouping variables do not neatly cluster

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19 For example, the job advertisement could have indicated to ask for a specific manager when applying for a job in-person. In these cases, all testers were instructed to ask for the manager. Managers, then, could have offered testers the opportunity to interview at the time they submitted their employment application. Callbacks for a second interview from these types of on-the-spot interviews that did not result in a job offer are measured as a favorable response.

20 Although it is true that prisoners—and, by extension, ex-prisoners—have low education levels compared to the general population, female prisoners are more likely to have graduated from high school than male prisoners (Harlow, 2003). Men are more likely to have a GED and more likely than women to have completed a GED while incarcerated. These differences are important to note because including a high school diploma in a study examining women ex-felons perhaps has more external validity than a study that examines men.
hierarchically and, as a result, two different grouping variables occur at the same level. An example of this method can be found in Raudenbush and Bryk (2002), where children from Chicago, modeled at level-1, are nested within both schools, modeled at level-2, and residential neighborhood, also modeled at level-2. The school attended by a child does not directly correspond to the child’s neighborhood nor does their neighborhood correspond to their school, so that schools are not nested within neighborhoods and neighborhoods are not nested within schools. Schools, instead, draw students from several different neighborhoods and neighborhoods send students to several different schools. Thus, using a CCRE model, a researcher can measure the effect of group set A (e.g., schools in the Raudenbush and Bryk example) over different values of group set B (e.g., neighborhoods), and the effect of group set B over different values of group set A.

In the case of the data analyzed in this dissertation, they are structured so that race/ethnicity and the prison and education test conditions occur at level-1. Level-2 variables are included for two distinct reasons, one that is methodological and the other that is substantive. First, the research methods used could unintentionally bias the outcome, so differences in how jobs were applied for need to be taken into account. Second, the employment being sought matters in that not all jobs applied for are the same and these differences need to be considered for how they could affect variation in the results of the job search. Level-2 variables, including the rationale for modeling variables at level-2, are discussed in more detail below.

Differences between Models

Correspondence test. For the correspondence test and audit data, race/ethnicity, the prison test condition, and the education test condition are modeled as level-1
predictors. There is a difference between the analyses, however, in the clustering variables modeled at level-2. In the case of the online correspondence test, the observations are grouped together in two ways. One group consists of the types of jobs that were applied for and a second of the résumés that were submitted online to employers. Applicants are nested within both résumés and job types, but résumés are not nested in jobs nor are jobs nested within résumés. Accordingly, the CCRE model separates the variation in the likelihood of a favorable response from employers between the effects of applicant characteristics, job types, and résumés. Thus, variation in the outcome has three sources, one source at level-1 and two sources at level-2.

Within the group of job applicants (level-1), variation exists along the lines of race/ethnicity, prison record, and educational attainment, which are specified on the résumés. Within the group of jobs (level-2), variation can be attributed to differences between five job types, including office and administrative positions, food service/restaurant positions, general/manual labor jobs, jobs in sales, and customer service positions. Résumés (level-2), although designed to relay identical information to employers, could include unobserved differences in addresses, email providers, high school attended, or other nuanced variations due to how the résumés were designed. When taken together, using a CCRE model allows for more precise estimates of the effect of observational-level predictors on employment chances because it accounts for unobserved differences at the job type-level and/or résumé-level that could also explain differences in the likelihood of employment.

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21 For example, one specific résumé was not designed to be submitted to only one specific type of job (e.g., there was no “general labor” résumé that was only used when applying for general labor jobs). Instead, one résumé was submitted to different types of jobs.
Including the résumé at level-2 in a CCRE model is motivated by concerns that unobserved differences in the content between each of the six résumés explains the observed distribution of the outcome across key predictors (see, e.g., Heckman & Siegelman, 1993). Such unobserved differences can be compared to tester effects in in-person audit studies (e.g., Ayres & Siegelman, 1995; Pager et al., 2009). For example, employers may look favorably at prior employment with one particular company (e.g., at a national chain because of (higher?) employee standards), which might favor the odds of the applicant with the résumé that includes previous employment at that particular business establishment, regardless of the applicant’s race/ethnicity, criminal history, or education level. If the résumés are conveying identical information to employers and there are no unintended and unobserved differences between those résumés, then the random effect of résumé should be zero. Job type was specified as a level-2 variable because previous research reports that the employment chances of racial/ethnic minorities and ex-prisoners depends on the type of employment, broadly speaking, for which the tester is applying (Bendick et al., 1991; Bendick et al., 1994; Galgano, 2009; Holzer et al., 2004; Pager, 2007; Pager et al., 2009). Accordingly, the random effect for job type could be greater than zero, but it is unknown specifically how much of the variation in the outcome could be attributed to differences between job types. At the same time, depending on the type of employment sought (e.g., food service worker), the likelihood of a favorable response from an employer could depend on the résumé received (e.g., the résumé indicates prior experience as a server in a sit-down restaurant versus a team member at a fast food restaurant).
**In-Person audit.** Similar to the grouping variables used in the analysis of the correspondence test data, the in-person audit data include two groups that are both modeled at level-2, in addition to the information on job applicants that is modeled at level-1. The two grouping variables are employers and testers. As mentioned earlier, tester effects are a source of concern in in-person audits because the testers themselves can (unintentionally) cause variation in the outcome. For example, despite their training regarding how to be consistent in their interactions with employers, some testers may display different body language when applying for jobs when they are assigned to the prison test condition. Employers, observing the tester’s behavior, may be less likely to call the tester for a second interview in such cases. As a result, there is a systematic effect of the tester on her probability of a favorable response and, unless this effect is accounted for, the individual-level predictors, including race/ethnicity and prison record, could be biased. Accordingly, between-tester differences are allowed to have a random effect on the outcome in the CCRE model. The implication of this modeling technique is that it is possible to determine the amount of variance, if any, in the likelihood of receiving a favorable response that can be explained by unobserved differences between testers. Like the expectation of the effect of résumés in the online correspondence test, the random coefficient for testers should be equal to zero: Testers should have no effect on variation in the outcome. The second grouping variable that is allowed to vary across observational-level predictors is employers. Although all of the employers that were audited are within a single sector, differences between employers (e.g., geographic location; small business versus corporate/franchise) could explain differences in employment chances.
Interpreting Model Estimates

Because the outcome is binary—whether a favorable response is received or not—a CCRE generalized linear model is used to estimate the random effect parameters for résumés and job types in the analysis of the correspondence data and for testers and employers in the analysis for the audit data. The random variance component associated with the individual-level (level-1) predictors is assumed to be a direct product of the probability of the outcome (Snijders & Bosker, 1999). Across all models, the intercept corresponds to the average applicant’s likelihood of receiving a positive reply from employers because predictors are mean-centered. Individual-level predictors are presented in log-odds form and can be converted into odds ratios and probabilities using the appropriate formulas.  

The effectiveness of the predictors in explaining variance is determined using proportional reduction in variance (PRE) estimates, which can also be conceptualized as pseudo-$R^2$ scores (i.e., the amount of variation in the outcome that can be explained). The PRE estimates are equal to the proportionate reduction in the variance components from the unconditional model to the conditional model:

$$PRE (\sigma^2) = \frac{\sigma^2 - \sigma_1^2}{\sigma^2}$$

With the random effects parameters, the variance partition coefficient (VPC) can also be calculated to approximate the proportion of variance that originates from each of the three sources (Goldstein, Browne, & Rasbash, 2002). For example, the formula for

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22 The odds ratio is computed by exponentiating the reported log-odds: $\exp(\beta)$. The predicted probability is determined by dividing the exponentiated log-odds by the sum of one and the exponentiated log-odds: $\exp(\beta)/(1+ \exp(\beta))$
the amount of variance associated with job type, which is included in the online correspondence model, is:

\[ VPC_{JOB} = \frac{\sigma_{JOB}^2}{\sigma_{JOB}^2 + \sigma_{RESUME}^2 + \sigma_C^2} \]

In this equation, the variance for each random effects component is used to partition out the amount of variation associated with any given random component, such as job type or résumé. Each model provides the within-group variances for the level-2 random components. As mentioned above, the within-group variance of level-1 predictors is assumed to be a direct product of the probability of the outcome. Accordingly, \( \sigma_C^2 \) corresponds to the level-1 variance, which is determined using the linearization approach recommended by Goldstein et al.:

\[ \sigma_C^2 = \frac{1}{(p)(1-p)} \]

**Findings from the Correspondence Test**

**Univariate and Bi-Variate Analyses**

Table 1 provides the basic distribution of the correspondence data. Six résumés that corresponded to three pairs of women were submitted online to 515 unique employers for a total of 3,090 job applications. The application data are balanced with regard to race/ethnicity (i.e., exactly one-third of résumés represent White women, another one-third of résumés are associated with Black women, and the last one-third correspond to Hispanic women) and the incarceration test condition. The community college education test condition was signaled to employers in 50.7 percent of the résumés submitted. There is no correlation between the two test conditions and no correlation between race/ethnicity and any of the test conditions.
Table 1

*Descriptives of the Online Correspondence Test of Women’s Employment Opportunities in Entry-Level Jobs*

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employers receiving résumés</td>
<td>515</td>
</tr>
<tr>
<td>Number of résumés submitted</td>
<td>3,090</td>
</tr>
<tr>
<td>Résumés submitted by race/ethnicity</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>1,030 (33.3)</td>
</tr>
<tr>
<td>White</td>
<td>1,030 (33.3)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1,030 (33.3)</td>
</tr>
<tr>
<td>Résumés with prison condition</td>
<td>1,545 (50.0)</td>
</tr>
<tr>
<td>Résumés with college condition</td>
<td>1,565 (50.7)</td>
</tr>
<tr>
<td>Employment sector of position applied for</td>
<td></td>
</tr>
<tr>
<td>Customer service</td>
<td>1,170 (37.9)</td>
</tr>
<tr>
<td>General/manual labor</td>
<td>864 (28.0)</td>
</tr>
<tr>
<td>Food service/restaurant</td>
<td>1,056 (34.2)</td>
</tr>
<tr>
<td>Favorable responses to résumés submitted</td>
<td>245 (7.9)</td>
</tr>
</tbody>
</table>

*Note.* Percentages in parentheses may not add up to 100 because of rounding.

An attempt was made to balance the number of jobs applied for within each of the three targeted employment sectors. A larger proportion of the 515 employers were in the customer service sector (37.9 percent), which is representative of the distribution of jobs in the “new economy” (McCall, 2001a). About 34 percent of employers were in the food service/restaurant sector. The remaining 28 percent of employers fall into the general and manual labor sector.

The types of work applied for closely overlaps with employment sector. For example, most of the food service/restaurant jobs fall within the food service/restaurant sector; however, there was an employer in the food service/restaurant sector that advertised a customer service position for which was applied. In this case, this employment opportunity is analyzed as a customer service job, and not a job within the
food service/restaurant sector. In all, 175 of the positions applied for involved food and restaurant service, 143 required general and manual labor, 47 were office and administrative types of jobs, 71 were sales positions, and 79 were customer service jobs.

Of the 3,090 résumés that were sent to employers, approximately eight percent received a favorable response from employers. Figure 1 presents the distribution of online job applications that resulted in a favorable response from an employer by the race/ethnicity of the job applicant. Slightly more than nine percent of White women received favorable responses from employers to résumés that were submitted online. Hispanic women received fewer favorable responses (8.1 percent) from employers than White women, but more than Black women (6.3 percent). There is a significant difference in the likelihood of a favorable response between White and Black women ($p \leq .01$), but no significant difference emerged between White and Hispanic women or between Black and Hispanic women. As expected, women without a prison record were more likely to receive a positive response to their job applications than women with a
criminal record, but the difference is only marginally significant ($p \leq .10$) (see Figure 2). Figure 2 shows the distribution of favorable responses by the education test condition. A degree from a community college provides no advantage over a high school diploma in improving women’s employment prospects.

![Figure 2. Online applications resulting in a favorable response by control and experimental conditions.](image)

Finally, Figure 3 breaks down the distribution of favorable responses received by the job type applied for. There are significant differences ($p \leq .001$) across the five job types in the likelihood of a favorable response. Most of the favorable responses were to applications for food service/restaurant type jobs. Sales type jobs also received a considerable proportion of favorable responses. These differences should be concerning: Grodsky and Pager (2001) found that wage disparities were greatest between Blacks and Whites in occupations that are client-driven, such as sales jobs. Research also suggests racial disparities in wages in food service jobs, and that these disparities are greater in

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23 There were no significant differences in the likelihood of a favorable response between office and general/manual labor type jobs or between food service and customer service type jobs.
areas that are farther away from the urban center of metropolitan areas where not only are minorities less likely to be employed, but where more non-minorities are likely to be customers (Ihlanfeldt & Young, 1994). Thus, in jobs that are highly customer-focused, such as those in sales and food service, and that present the greatest number of employment opportunities to women in the entry-level job market, minority women are disadvantaged by wage practices.

**Figure 3.** Favorable responses to online applications by job type.

**Multivariate Analyses**

The results from the analysis of the correspondence test are reported in Table 2.

The first model on the left side of Table 2 predicts the likelihood of receiving a favorable response from employers, unconditional on any individual characteristics of job applicants. The intercept corresponds to a 6.16 percent chance of receiving a favorable or positive response from an employer. The unconditional model also provides the variance components for the type of job applied for and the résumé submitted. As mentioned
above, the variance components and intercept, the latter of which corresponds to the likelihood of the average applicant, are used to calculate the VPC, which, for job type, is .04. The VPC for job type can be interpreted to mean that four percent of the variation in the likelihood of a favorable response from an employer to the average applicant is accounted for by differences in the types of jobs for which applicants applied. The résumé VPC is less than .01, suggesting that the specifics of the résumé submitted to employers had no discernible influence on whether female job applicants received a positive reply from an employer.

**Race/ethnicity and prison effects.** The second model on the right side of Table 3 predicts the likelihood of a positive response from employers, conditional on the individual characteristics of job applicants, such as race/ethnicity, and adjusts for any variation in the outcome that could be due to differences between the types of jobs applied for and the résumés submitted to employers. Converting the intercept of the full model to a probability (see footnote 23), the average female job applicant has a 6.30 percent chance of receiving a favorable response to her employment application. The effects of the predictors estimated in the CCRE model are consistent with the bivariate statistics reported above. Estimates from the model indicate that Black women were significantly less likely than White women to hear from employers in response to the résumé they submitted online for an entry-level job opening. More specifically, Black women’s odds of receiving a favorable response from employers were 37 percent smaller than White women’s chances. Although Hispanic women were also less likely than White women to receive a follow-up call or email from employers after applying for a
job online, the difference between White and Hispanic women’s likelihoods is not statistically significant.

Table 2

**CCRE Estimates of Women's Likelihood of Receiving a Favorable Response to Employment Applications Submitted Online for Entry-Level Job Opportunities**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Online/Internet Applications (N=3,090)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unconditional Model</td>
</tr>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>Intercept</td>
<td>-2.72**</td>
</tr>
<tr>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
</tr>
<tr>
<td>Prison Record</td>
<td>-0.40†</td>
</tr>
<tr>
<td>Community College Degree</td>
<td>-0.10</td>
</tr>
<tr>
<td>Black*Prison Record</td>
<td>0.17</td>
</tr>
<tr>
<td>Hispanic*Prison Record</td>
<td>0.32</td>
</tr>
<tr>
<td><strong>Random Effects</strong></td>
<td></td>
</tr>
<tr>
<td>Job type</td>
<td>0.76</td>
</tr>
<tr>
<td>Résumé</td>
<td>0.01</td>
</tr>
</tbody>
</table>

*Note. Log-odds are reported. The variance of the random effect is reported.*
*†p<.10 *p<.05 **p<.001*

Consistent with the hypothesis that women with a prison record are less likely to receive a favorable response from employers than women without a prison record, the effect of a prison record is marginally significant (p<.10) in the model. Having served prison time reduces women’s odds of making it through the initial stages of the hiring process by a factor of .67. The non-significance of the race/ethnicity*prison record interactions indicates that there is no conditional effect of race/ethnicity on the effect of having a prison record. Figure 4 provides the odds ratios for each category of job applicant by race/ethnicity and the prison record test condition. Despite the non-significance of the interaction coefficients, several observations are noteworthy, particularly the near similarity in the odds between Black and White women with a prison record.
record. Whereas White women with a prison record have odds of receiving a favorable response from hiring managers that are nearly 22 percent greater than the odds of Hispanic women with a prison record, the odds of White women with a prison record are five percent smaller than Black women’s with a prison record. At the same time, White female ex-prisoners have odds that are 11 percent greater than the odds of Black women who have not been incarcerated, suggesting in this context, that the effect of race is greater than the effect of incarceration when employers are presented with both types of applicants. Still, the effect of a prison record is not as damaging to Black women’s employment chances as it to White and Hispanic women’s chances.

Figure 4. The odds ratios of the independent and interaction effects of race/ethnicity and incarceration on the likelihood of a favorable response. To determine the effects of race and the prison test condition for White women, the CCRE model was reestimated without mean-centering the predictors. The intercept in the reestimated model represents the job chances of White women without a prison record and possessing only a high school diploma.
**Education.** Finally, the effect of a community college degree is not significant. The coefficient suggests that a community college degree negatively affected the likelihood of advancing in the hiring process, but it is difficult to put any stock in this non-significant finding. Figure 5 illustrates the difference in the chance of a favorable response by race/ethnicity and educational credentials. When racial/ethnic groups are examined separately, there are no significant differences in the chance of a favorable response between women with a community college degree and women with a high school diploma within any of the three racial/ethnic groups. The difference in the effect of educational attainment is most apparent, however, among Black women. Almost eight percent of Black women who applied with just a high school diploma received a positive response from employers, whereas only five percent of Black women with a community college degree received a favorable response.

![Figure 5](image)

*Figure 5. The effect of education on the likelihood of a favorable response to online job applications by the race/ethnicity of job applicants.*
Random job type and résumé effects. The random effect of job type in the full model indicates that it has a near-constant effect on the likelihood of receiving a favorable response to a job application. In the unconditional model, type of work explained four percent of the variation in the outcome. The proportional reduction in the variance of job type from the unconditional model to the full model is less than one-quarter of one percent; this means that the type of work applied for is still accounting for about four percent of the variation in employers’ hiring-related decisions. The effect of job type on the likelihood of advancing to the next stage of the hiring process is not statistically significant ($z=1.37$). Thus, the significant differences between Black and White women and between women with a prison record and non-offenders persist across all job types. Any random effect of résumé, even though negligible to begin with in the unconditional model, is completely explained by the social characteristics of female job applicants, including their race/ethnicity, incarceration status, and educational achievement level.

Findings from the In-Person Audit

Univariate and Bi-Variate Analyses

Three pairs of testers applied in-person with 60 employers in the food service/restaurant sector. The basic descriptive statistics of the audit are found in Table 3. Although three pairs of testers were sent into the field to audit employers, Black women are not as well represented in these data as White and Hispanic women. The job applications of Black women comprise 22 percent of the 252 applications that were submitted to employers. The applications of Whites and Hispanics are 40 and 38 percent,
Table 3

*Descriptives of the In-Person Audit of Women’s Employment Opportunities in Food Service/Restaurants*

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employers receiving résumés</td>
<td>60</td>
</tr>
<tr>
<td>Number of résumés submitted</td>
<td>252</td>
</tr>
<tr>
<td>Résumés submitted by race/ethnicity</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>55 (21.8)</td>
</tr>
<tr>
<td>White</td>
<td>101 (40.1)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>96 (38.1)</td>
</tr>
<tr>
<td>Résumés with prison condition</td>
<td>125 (49.6)</td>
</tr>
<tr>
<td>Résumés with college condition</td>
<td>125 (49.6)</td>
</tr>
<tr>
<td>Favorable responses to résumés submitted</td>
<td>42 (16.7)</td>
</tr>
</tbody>
</table>

*Note.* Percentages in parentheses may not add up to 100 because of rounding.

of the total number of employment applications that were submitted to employers, respectively. The main reason for the difference between the pairs of testers in the racial/ethnic distribution of audits completed is because there was an issue with the reliability of the applications (audits) that were reported as completed by a tester (i.e., a Black female). After a thorough investigation of the issue, questionable applications were excluded from the analysis. In addition, there were additional testers who had to be hired and trained after the audit began, which also reduced the number of applications that could be submitted during the course of the experiment. The fact that there are significantly fewer applications that correspond to Black women casts doubt on whether

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24 Unlike the online correspondence test where the data were balanced, the in-person audit data are not balanced. There is at least one racial/ethnic contrast for every employer audited (e.g., at least one White and one Hispanic tester applied for a job with the employer). The same is not true of the prison condition; there are three employers who did not receive an applicant without a prison record. The converse is that every employer was audited by a tester posing as a job applicant with a prison record.

25 Issues with reliability were first raised after reviewing the tester’s narratives, which were not consistent with a number a circumstances reported by other testers on that employer’s application process. Additional reviews of time logs raised additional questions over whether applications had been submitted to employers.
there are sufficient observations to detect racial differences in the likelihood of receiving a favorable response from employers. The issue of power is further examined at the end of this chapter.

**Figure 6.** Percent of in-person food service.restaurant job applications receiving a favorable response by the race/ethnicity of job applicants.

The rate at which favorable responses were received to applications for jobs in the food service/restaurant sector is 16.7 percent. Figure 6 provides the favorable response rate to applications submitted for each racial/ethnic group. Employers were most likely to respond favorably to Hispanic women; their job applications resulted in a favorable response 23 percent of the time they applied for employment. White women received a favorable response to 15 percent of the applications they submitted. The proportion of favorable responses being greater among Hispanic women than White women is opposite of the distribution observed in the correspondence test data; however, it is similar in that there is no significant difference between White and Hispanic women in their likelihoods of a favorable response. Black women received a favorable response to less than ten
percent of their applications. There is a significant difference \((p \leq 0.05)\) between the responses of employers to the applications of Black women and Hispanic women. There is no significant difference between Black women and White women.

![Figure 7. Percent of in-person applications resulting in a favorable response by control and experimental conditions.](image)

Figure 7 illustrates how incarceration and a community college degree are related to the probability of receiving an opportunity to interview or a job offer. On the one hand, it is clear that neither test condition significantly affects the possibility of a positive response to women’s employment applications. On the other hand, the difference between women with a criminal record and women without a criminal record is more pronounced in the in-person audit where job applicants interact face-to-face with employers than in the online correspondence test where women did not have any personal communication with employers. More specifically, there is close to a five percentage point difference in the likelihood of a favorable response to in-person applications between non-prisoners and ex-prisoners. Online, however, there was less than a two
percentage point difference between non-prisoners and ex-prisoners in the likelihood of a positive response from employers. Lastly, similar to the results from the online correspondence test, there is no discernible difference of any magnitude in favorable responses from employers between women with only a high school diploma and women with a community college degree.

![Figure 8](image)

Figure 8. The effect of education on the likelihood of a favorable response to in-person food service/restaurant job applications by the race/ethnicity of job applicants.

The effect of education is examined further in Figure 8, where employers’ favorable responses are disaggregated by the race/ethnicity of applicants. Racial differences in having a community college degree when applying for jobs in-person contrast with the differences found for the effect of a community college degree when jobs are applied for online. When applying in-person, Black women with a community college degree are more likely than Black women with only a high school diploma to receive a favorable response from an employer. Recall that in the online correspondence
study, Black women had better chances of a favorable response when they possessed only a high school diploma. The advantage of having a community college degree, however, applies to only Black women. Like the online results, for both White and Hispanic women, there is a nearly even chance of a favorable response regardless of educational credentials.

Table 4

**CCRE Estimates of Women’s Likelihood of Receiving a Favorable Response to Employment Applications Submitted In-Person for Food Service/Restaurant Jobs**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unconditional Model</th>
<th>Full Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>-2.64**</td>
<td>0.58</td>
</tr>
<tr>
<td>Black</td>
<td>-0.27</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.64*</td>
<td>0.80</td>
</tr>
<tr>
<td>Prison Record</td>
<td>0.70</td>
<td>0.72</td>
</tr>
<tr>
<td>Community College Degree</td>
<td>0.08</td>
<td>0.47</td>
</tr>
<tr>
<td>Black*Prison Record</td>
<td>-1.70</td>
<td>1.53</td>
</tr>
<tr>
<td>Hispanic*Prison Record</td>
<td>-1.89†</td>
<td>0.99</td>
</tr>
</tbody>
</table>

**Random Effects**

Employer 3.46 1.88 3.80 2.09
Tester 0.44 0.41 0.20 0.27

*Note. Log-odds are reported. The variance of the random effect is reported.
†p<.10 *p<.05 **p<.001

**Multivariate Analyses**

The left half of Table 4 provides the baseline estimates from an unconditional model that predicts the likelihood of receiving a favorable response from employers to an in-person job application. The intercept of the unconditional model represents a nearly seven percent chance of receiving a positive response from employers. This first model also establishes that differences between employers account for 17 percent of the
variation in the outcome. At the same time, the tester used to conduct the audit explains two percent of the variation in the probability of a second interview or job offer.

**Race/ethnicity and prison effects.** The next model estimates the effects of job applicants’ individual-level characteristics, in addition to the random effects of employers and testers, on employment prospects. The average job applicant had a ten percent likelihood of advancing through the hiring process, which is better than the baseline model predicted. Although being Black lowers the likelihood of receiving a favorable response from employers, the difference between Black and White women is not significant.

In contrast, Hispanic women had significantly greater odds of receiving a favorable response than White women. The significantly greater hiring chances of Hispanic women are contrary to theoretical expectations derived from past empirical work, as ethnic minorities are assumed to be at a disadvantage in the labor market. At the same time, the effect of being Hispanic is consistent with expectations when ethnicity interacts with a prison record. Hispanic women with a prison record were less likely to be contacted by employers for an interview or offered a job than White women with a prison record. Figure 9 graphs the odds ratios for each category of job applicant according to race/ethnicity and the prison test condition. The odds of a favorable response for Hispanic women with a prison record decrease by 61 percent compared to the odds of White women applying for a job with a prison record. Similar to the outcomes observed by Pager (2003) and Pager et al. (2009) among men, the odds of White job applicants with a criminal record advancing through the hiring process are greater than the chances of Black applicants without a criminal record. Also like Pager (2003), there is no evidence
of a statistically significant difference in the employment odds of Black ex-prisoners relative to White ex-prisoners. There is a clear racial hierarchy among employers when it comes to interviewing and hiring women with a prison record, with White women having better chances than Hispanic women and Hispanic women having a better chance than Black women.

**Figure 9.** The odds ratios of the independent and interaction effects of race/ethnicity and incarceration on the likelihood of a favorable response. To determine the effects of race and the prison test condition for White women, the CCRE model was reestimated without mean-centering the predictors. The intercept in the reestimated model represents the job chances of White women without a prison record and possessing only a high school diploma.

**Random employer and tester effects.** Finally, although the purpose of this research was to examine the effects of a specific set of individual characteristics on employment prospects, the design of the study could have introduced other reasons for variation in the outcomes associated with the application process. In particular, the model indicates that 25 percent of the variation in women’s likelihood of advancing through the
hiring process is explained by differences between employers ($z=3.02$). In fact, when individual-level characteristics were added to the model, the proportion of the variance explained by employer differences increased almost ten percent from the baseline model. The implication is that employers, even within a single sector with a large proportion of entry-level job opportunities that require minimum skills and previous experience, vary greatly in their hiring preferences and these differences are more pronounced depending on the job applicant.

Ideally, testers would have no discernible effect on variation in the outcome in an audit. There is some evidence of a tester effect, but the impact on variation in employers’ responses to employment applications is quite small. In the baseline model, a random effect of testers explained two percent of the outcome’s variance. Once individual-level predictors were included in the model, differences between testers accounted for 1.3 percent of the variation in the outcome. There is no evidence, however, that this effect is statistically different from zero ($z=0.73$).

**Post-Hoc Power Analysis**

Reliable findings rest on having a sample size that is large enough to detect statistically significant effects of the variables of interest, including significant group differences in the likelihood of an outcome when using randomized experiments (Cohen, 1992; Moher, Dulberg, & Wells, 1994). Because of the multi-level design of the experiments, the power analysis has to account for how the data are clustered by aspects of the job search process, including the types of jobs applied for and the employers applied with, as well as the audit methods used (i.e., résumés in the correspondence test and testers in the in-person audit) (see Spybrook, Bloom, Congdon, Hill, Martinez, &
Raudenbush, 2011). In addition, there needs to be sufficient statistical power to account for the hypothesized effect size of three key variables—race (Black and White), ethnicity (Hispanic), and prison record—as well as the favorable response rate. Power was computed using an R program, following the recommendations of Spybrook et al. (2011) when the data are multi-level and experimental.

Based on the effect sizes of three key predictors reported above, the online correspondence test and the in-person audit were adequately designed to detect statistically significant differences between women in employment opportunities. It is only for Black-White differences in the in-person audit that issues with power arise; however, this is not necessarily a function of design. As previously noted, the reliability of some of the audit data was called into question after the experiment had come to an end and these data were subsequently excluded from analysis. The exclusion of some of the data had a direct bearing on the ability to compare the employment prospects of Black and White women. Indeed, had the effect size of race been closer to an odds ratio of .40, which is similar to that reported by Bendick et al. (1994) in their audit study of employers’ racial preferences at the hiring stage, then the design of the in-person audit could have detected such differences, if they existed, between Black and White women.26

On the other hand, if the effect size was an odds ratio of .76, as found here, then the design would have required the auditing of 350 employers in order to have the power necessary to detect a significant effect. In sum, the finding here that Black women are no less likely to advance through the hiring process than White women is not necessarily

26 Bendick et al. included Black women in their study. This effect size is similar to that reported by Pager (2003) for black men.
representative of structural differences between Black and White women in the labor market.

**Summary**

This chapter presented the analysis and findings from two field experiments that examined the effect of race/ethnicity, incarceration, and education on women’s likelihood of employment. Several key findings emerged. First, there is a significant advantage to being a White woman in nearly every case: White women have better chances of advancing through the hiring process than Black women, and White women with a prison record are more likely to receive a favorable response from employers than Black or Hispanic women with a prison record. Second, a prison record is, for the most part, harmful to employment prospects, especially among Hispanic women. In the online correspondence test, the likelihood of advancing through the hiring process decreases by 19 percent when women apply with a prison record. In-person, the prospect of interviewing or receiving a job offer drops by nearly 24 percent when applying with a prison record.\(^{27}\) Finally, there is no indication of a community college degree improving women’s employment prospects in the entry-level job market. The implications of these findings are discussed in detail in Chapter 5.

\(^{27}\) For both the online and in-person figures, the percentage change in the likelihood of advancing the hiring process is calculated using the percent of favorable responses to applications, which are reported in Figure 2 and Figure 7.
CHAPTER 5

DISCUSSION AND CONCLUSION

“Doing time” comes with a high price-tag. State and federal corrections expenses have skyrocketed as a function of a nearly four-decades-long buildup of the prison population. But, those expenses represent only half of the monetary impact of mass incarceration. The real financial toll rendered by doing time in prison occurs at the individual-level. For offenders, having a prison record is economically consequential, limiting labor market opportunities and reducing viable employment prospects to low status jobs in the secondary market that provide little career mobility. The effect of incarceration on employment severely diminishes economic life chances in the long run because it is so difficult to recover from and compensate for the loss and lack of experience and low-skill levels that commonly accompany ex-prisoners in the labor market.

A number of prior studies establish the deleterious effect of incarceration on employment; however, the available empirical basis is largely based on samples of males. This dissertation research aimed to close some of the gender gap in research on the effect of incarceration on employment by using an experimental approach to examine the job prospects of women with a prison record. The rationale for the focus on female ex-prisoners and their employment is guided by a combination of previous research and trends in imprisonment:

1. Growth and trends in the female prison population mirror men’s on all accounts. However, over the past 40 years the incarceration rate of women has increased more dramatically than the incarceration rate of men.
2. There are racial disparities in both the female and male prison populations. It is without question that race is a salient issue confronting the administration of punishment in the U.S. (Alexander, 2010; Tonry, 2011). These disparities within the prison population, however, have repercussions for all racial/ethnic minorities, who are assumed, or stereotyped, to be criminal and criminal justice system-involved without evidence to the contrary.

3. Stereotypes of Blacks and Hispanics that are propelled by racial/ethnic disparities in the prison system have implications for the labor market prospects of all racial/ethnic minority workers. Criminal stereotypes work alongside other employment-related racial/ethnic stereotypes (e.g., “Blacks have no work ethic”), resulting in employment discrimination against members of these groups and, thus, lowering their social and economic status in various social institutions in the aggregate (Roscigno, 2007; Western, 2002, 2005). Pager’s (2003) and Pager et al.’s (2009) seminal research on the effect of incarceration on employment supports this proposition: White men with a criminal record were more likely to successfully advance through the hiring process than Black or Hispanic men without a criminal record (see also Holzer et al., 2006b).

4. Blacks and Hispanics confront significant barriers in the labor market, but race/ethnicity is not the only obstacle for minorities to overcome in the labor market. Gender also limits opportunities in the workplace. Black and Hispanic women must not only surmount racial/ethnic barriers that stand in their way, but overcome gender stereotypes of women workers and stereotypes of Black and Hispanic women that impede their access to jobs and career mobility.
5. Gender matters all the more for women in the labor market because of their roles and responsibilities as mothers. In fact, working women pay a motherhood penalty (Budig & England, 2001; Glauber, 2007; Waldfogel, 1997). The issue of motherhood—and its effect on employment—is relevant for understanding the relationship between women’s employment and incarceration because more than 60 percent of the female prison population has at least one minor child (Glaze & Maruschak, 2008). At the same time, there is no racial/ethnic variation among female prisoners in the likelihood of being a mother (Glaze & Maruschak, 2008). Accordingly, if motherhood works independently against women in the labor market, then combining it with any other employment-related impediment, such as race/ethnicity and/or a prison record, will not only adversely impact women’s economic life trajectory, but their children’s as well. There is a considerable, and still growing, body of research documenting the devastating intergenerational effects of maternal incarceration, especially the implications of women’s incarceration on their children’s own employment (Cho, 2009a, 2009b, 2011; Dellaire, 2007; Hagan & Foster, 2012a; Trice & Brewster, 2004).

It is the totality of the circumstances outlined above that justified an examination of the effect of incarceration on women’s employment. Even without considering how race/ethnicity and gender influence job prospects and employment experiences, former prisoners are the least desirable and most stigmatized type of job applicant from the point of view of employers (Holzer et al., 2004, 2006a). Accordingly, female ex-prisoners, including formerly incarcerated Black and Hispanic women and mothers with a prison record, face a unique but serious set of challenges to finding work after serving time in
prison that differentiates them from men. Overcoming these labor market barriers is essential for women post-release as economic marginalization is a correlate of not only their offending in the first place, but also key to their financial independence as they reintegrate and reestablish their lives after incarceration and try to remain crime-free.

Labeling a person with a prison record has ramifications (Chiricos, Barrick, Bales, & Bontrager, 2007), economically and beyond, for their families (Hagan & Dinovitzer, 1999) and communities (Drakulich, Crutchfield, Matsueda, & Rose, 2012; Rose & Clear, 1998). The greater the number of barriers that incarcerated women must overcome to secure gainful employment during the reentry process, the more intense the socioeconomic strain experienced by the groups with which these women are associated. Incarceration—and the devastating collateral consequences it imposes financially—alters the structure and position of groups on a societal level, with the severest effects rendered on Blacks and Hispanics, who are more likely than Whites to be incarcerated. Simply put, incarcerating women—and a growing number of women—carries non-trivial consequences, manifested in a number of ways through the economic dimensions of punishment.

Through two carefully controlled experiments, this dissertation tested the effect of imprisonment on women’s likelihood of successfully advancing through the hiring process. Taking direction from previous experimental research on the consequences of a prison record on the job-seeking process, the research examined the direct effect of incarceration on employment. The research also considered the theoretically important roles of race/ethnicity and education, with the literature substantiating the need to investigate how Black and Hispanic women fare in comparison to White women in job
search outcomes and whether women with a community college degree have more
employment opportunities than women with only a high school diploma. In addition to
testing the direct effects of a prison record and race/ethnicity, the research investigated
whether race/ethnicity conditions the effect of a prison record on employment chances.
Testing for these effects allowed for investigation into the following four research
questions:

1. Does race/ethnicity affect women’s employment prospects?
2. Does a prison record affect women’s employment prospects?
3. Does race/ethnicity moderate the effect of a prison record on women’s
   employment prospects?
4. Does education affect women’s employment prospects?

In addition, two job application strategies, or methods, were used to further
determine the effect of test conditions on the likelihood of advancing through employers’
hiring processes. In one, a more traditional approach to job seeking was taken: Job
applicants submitted their application materials, including a résumé, in-person to
employers at the place of business. The other application strategy relied entirely on the
Internet, using the online job search engines careerbuilder and craigslist to electronically
apply for jobs by uploading a résumé.

The research produced a number of interesting findings that address the research
questions specified above and that are particularly valuable for understanding the entry-
level job prospects of women ex-offenders. Because this research uses an experimental
design brings further attention to the fact that “real” ex-offenders probably face much
higher barriers in the labor market where their employment credentials and circumstances
are not “controlled” or randomly assigned. Social disadvantage, including racial/ethnic disadvantage and discrimination, accumulates throughout the life-course of women, leading not only to crime and unstable employment in the first place, but limiting their success in finding work when they attempt to reenter the labor market (Burgess-Proctor, 2006; Hagan & Foster, 2003; Moore, 2010; Sampson & Laub, 1997; Tienda & Stier, 1996). Accordingly, the magnitudes of the “real” effects of race/ethnicity and a prison record are likely underestimated in audit research that uses an experimental design (see Fix & Struyk, 199; Neumark, 2012).

Audit research examining the employment prospects of ex-offenders also cannot examine the effect of social capital on finding work. For offenders with employment-related capital, the effect of race/ethnicity and prison record may be lessened (Reisig, Holtfreter, & Morash, 2002). Research from the Urban Institute’s Returning Home Project found that more than half of ex-prisoners used friends and family to find a job (Visher et al., 2004). It is an empirical question, however, of how quickly social capital expedites finding a job since most ex-prisoners in Visher et al.’s sample were unemployed two months after release; it was only at eight months post release that employment rates increased. In the meantime, it is a fairly safe assumption to make that other job search methods are used given conditions of parole supervision to search for and maintain employment. Indeed, nearly three-quarters of ex-prisoners use newspaper ads to find jobs (Visher et al., 2004). Realizing how the Internet is changing the job search, this dissertation used online job search engines to search for employment opportunities.
The correspondence test conducted in this dissertation used a completely online approach to search and apply for jobs. This method yielded a very low callback rate, relative to previous correspondence tests. The low callback rate could partly be due to the lingering effects of the Great Recession on the unemployment rate. Challenging economic times not only change the composition of the applicant pool, but also increase the number of people looking for a job. Fountain (2005) found that as more people are applying for jobs online, the chance of success is lower. Moreover, a large proportion of online job searchers are currently employed (Stevenson, 2009), which puts them at an advantage over workers who are currently unemployed, as were the fictitious applicants and testers used to conduct this research. As applying for jobs online becomes increasingly more common, especially among younger job seekers (Stevenson, 2009), who, arguably, have limited work experience and are applying for the same types of jobs as ex-prisoners, who are disadvantaged by both their criminal record and limited work experience, suggests that ex-prisoners will have a harder time finding employment using the Internet. Nevertheless, previous research of welfare recipients suggests the online job search has the potential to increase the quality of jobs and wages that socially disadvantaged workers, such as female ex-prisoners, ultimately find (McDonald & Crew, 2006).

The job search is not a simple process. But the process alone should not distract from the real challenges that women, racial/ethnic minorities, and ex-prisoners confront in the labor market. Black and Hispanic women with prison records face higher barriers in their search for work and a more hostile labor market than White women or their male counterparts. The experimental effects of race/ethnicity and incarceration found in this
dissertation research suggest that the hiring process is neither neutral to race/ethnicity or prior imprisonment even though such effects could be rigorously controlled through the research design. The interpretations of the findings from this dissertation research are discussed below. Following from this discussion is a series of recommendations for future research and public policy.

Interpretation of Findings

The Direct Effect of Race/Ethnicity

With respect to the first research question—does race/ethnicity affect women’s employment prospects—the analysis uncovered that Black women were significantly less likely than White women to receive a favorable response to their online job applications. However, there is no evidence suggesting that Hispanic women were at a disadvantage in the hiring process in either the online or in-person application setting. In fact, Hispanic women were significantly more likely than White women to be invited to interview or offered a job when applications were submitted in-person to employers. These findings are somewhat consistent with predictions from theory, especially given the racial/ethnic context of the Phoenix metropolitan area, but additional mechanisms may be at work.

Numerically, the Black population in the Phoenix metropolitan area is rather small, comprising less than six percent of Maricopa County’s total population and close to five percent of the State of Arizona’s total population (U.S. Census Bureau, 2014). Original formulations of the racial threat perspective (Blumer, 1958) hold that as the minority population increases, the racial majority (i.e., Whites) perceives an increasing risk of losing jobs to minorities, including the political and economic security that comes from employment. Although the figures representing the Black population in Arizona
may seem small, the Black population has steadily increased, growing by more than 70 percent between the 2000 and 2010 censuses (Rastogi, Johnson, Hoeffel, & Drewery, 2011). This clear shift in racial composition could, indeed, be the driving force behind employers’ perceptions of Blacks as threatening and, thus, resulting in the lower likelihood of Black women advancing through the hiring process.

In addition to regional growth in the total Black population, 40 percent of the Black population is comprised of Black youth and young adults (age birth to 24 years), but only 27 percent of the White population falls within that age range (U.S. Census Bureau, 2014c, 2014d). Racial changes within the population, especially as manifested in the growth of a youthful Black population, could also couple with stereotypes of Blacks. Because of the lack of contact between employers and applicants in the online job seeking process, it is possible that employers rely more on stereotypes than they do when interacting with Black job applicants in-person, especially when Blacks are such a small proportion of the total Phoenix population and nearly 25 percent of the Black population between ages 16 and 64 is not in the labor force (U.S. Census Bureau, 2014b). The labor force participation of Blacks is important, as Dixon and Rosenbaum (2004) report that anti-Black stereotypes are weaker as a function of workplace contact with Blacks, and that the workplace has a much stronger effect on reducing anti-Black stereotypes than community-based contact or school-based contact (see also Fernandez & Greenberg, 2013). In addition, Anderson (2012) argues that being Black has become synonymous with being from the “ghetto.” This ascription of Blacks is an extension of perceptions of urban inner-city locales where drug dealing and use, crime and violence, poverty, and “welfare queens” are the norm – the types of neighborhoods that all Black people are
assumed to come from and identify with. Without contact between the employer and the Black job applicant and the “opportunity” for a Black applicant to prove otherwise in the online application process, Black job applicants may be stereotyped along the lines of “ghetto,” having antisocial tendencies, lacking acceptance of mainstream social values, and aspiring to accomplish little with their lives. Previous research has linked these negative ascriptions of Blacks to employers’ unwillingness to hire Blacks (Moss & Tilly, 2001; Neckerman & Kirschenman, 1991; Pager & Karafin, 2009).

Contemporary formulations of threat theories, including theories that integrate threat perspectives with theories of labor queues (Kornrich, 2009) and devaluation (Kmec, 2003), would also lend support to the finding here that employers are not opposed to hiring Hispanic women. Blalock’s (1967) extension of Blumer’s (1958) threat theory suggests a curvilinear effect of minority group population growth, in that a threat to jobs and other social and political resources increases as the minority group population increases, but only to a certain point. When the total population of an area is significantly comprised of a minority group, perceptions of threat dissipate and employers are less motivated to reject the applications or hiring of minority group members. To this point, the Hispanic population in the State of Arizona grew by 46 percent between 2000 and 2010 (Ennis et al., 2011). Hispanics account for 41 percent of the total population in the Phoenix area (U.S. Census Bureau, 2014a) and the Phoenix metropolitan area has the sixth largest Hispanic population in the U.S. (Ennis et al., 2011). Given the magnitude of this growth and these population figures of Hispanics in Phoenix may suggest that perceptions of social, economic, or political threat may have reached some sort of tipping point.
Yet, the size of the Hispanic population in influencing perceptions of threat does not seem to offer a complete explanation of women’s employment prospects. In Arizona, perceptions of Hispanics vary by perceptions of citizenship status, which are then related to perceptions of Hispanics as a social threat (Hagan & Palloni, 1999; Wang, 2012). In the in-person audit study, citizenship status, and its cultural cues (e.g., acculturation), were controlled. Hispanics testers did not have accents or bilingual language skills in English and Spanish. In addition, testers from all pairs dressed the same way in black slacks and a button-up collared blouse. To these points, Williams and Connell (2010) indicated that employers offering low-wage jobs in the retail sector hire employees who “look good and sound right” in a way that appeals to their customer base. Race/ethnicity, in this way, becomes intertwined with notions of class and culture to influence the low-wage job prospects of minority workers. The place of class and culture adds further nuance to McCreary et al.’s (1989) findings that suggested that employers in areas with higher minority populations could be penalized for not hiring workers from the minority groups that are represented within their customer base. Employers may hire racial/ethnic minorities, but it is a conditional decision. The hiring process is influenced by other mechanisms operating at a structural level that sort and rank job applicants even when they are from the same racial/ethnic group (Western, 2002; Zamundio & Lichter, 2008).

Any tempering of ethnic threat that could be accounted for by Hispanic population gains or acculturation may only be half of the story explaining Hispanic women’s labor market chances, especially their increased likelihood of finding work in food service/restaurants. Nearly every job that was applied for in the in-person audit had a starting wage equal to the state’s legal minimum of $7.65 per hour. Although low-wage
jobs like those in the food service sector grew the most coming out of the Great Recession, these jobs are hardly the “good jobs” that offer occupational and, relatedly, economic mobility (NELP, 2012, 2013b). Furthermore, NELP (2013b) indicates that low-wage jobs, particularly in food service/restaurants, cost taxpayers money in the long run because of food service workers’ dependence on public assistance for healthcare services and food costs that cannot be met with wages from food service/restaurant jobs. The fact that these low-wage jobs do not provide living wages is highlighted by a recent push within Congress to pass legislation that would increase the minimum wage to $10.10 an hour over three years and then adjust it for inflation thereafter (NELP, 2014b).

The wage dimensions of food service/restaurant jobs offer a lens through which to understand Hispanic women’s opportunities. Queuing theories of labor market dynamics posit that not all jobs are created the same: Not all available workers are looking for the same type of job, and certain workers are less inclined to pursue, for whatever reason, some types of jobs, leaving such jobs for other types of workers. This is specifically the case for low-wage jobs where minorities, in general, and minority women, in particular, are highly concentrated (Thiess, 2012). The concentration of Hispanics into particular types of jobs, including concentration that occurs over time, lowers the hourly wages associated with those jobs in part because employers devalue the work of minorities who have lower social status than White workers (Catanzarite, 2002, 2003). Simply put, employers hire Hispanics over Whites into low-wage jobs with the belief that Hispanics are better candidates for low-paying work, which blocks access to better paying jobs and contributes to occupational segregation and inequality (Harrison & Lloyd, 2013; Kmec, 2003). What is more, previous research also shows that employers will hire Hispanic
women because they are more exploitable in areas where the political system takes a proactive stance against immigration (Zamudio & Lichter, 2008), such as an area like Maricopa County and the State of Arizona (see Zatz & Smith, 2012).

**The Direct Effect of a Prison Record**

The second research question investigated was whether having a prison record affects employment prospects. In the online study, women who had a prison record were less likely to receive a favorable response to their application; however, it was only a marginally significant effect ($p \leq .10$), which must be considered next to the fact that over 3,000 total applications for employment were submitted to employers. At the same time, there was no direct effect of a prison record in the in-person audit of employers’ hiring-related decisions. The negative effect of incarceration in the online correspondence study could be due to the lack of contact between the employer and the job applicant. With in-person applications, employers had, and frequently took, the opportunity to discuss with testers (i.e., posing as job applicants) their prison record, including their conviction and post-prison circumstances, which could explain why incarceration had no direct consequence on women’s employment prospects when jobs were applied for in-person.

The question remains, too, if a prison record is as detrimental to women’s employment as theorized. Although it appears to be harmful to employment prospects in the online correspondence test, the effect is small relative to the number of applications that were submitted for entry-level jobs. In many respects, the results of the experiment are on balance with the findings reported by Lalonde and Cho (2008), who found that incarceration had a *positive* effect on women’s post-prison employment rates in the short-term, but that employment rates returned to their pre-prison rates over time, thus having
no effect in the long-term. In addition, they found higher employment rates among
women with more children. Although the potential reasons for higher than expected
employment rates were not explored by Lalonde and Cho, they did acknowledge the
analysis does not necessarily indicate a causal process between incarceration and
employment. It is possible that parole requirements, including that of maintaining
employment, contributed to the larger percentage of women working post-release (see
Opsal, 2009; Visher et al., 2004). Higher employment rates could also be accounted for
the fact that Illinois, where Lalonde and Cho drew their sample, bars felony drug
offenders from receiving forms of public assistance, therefore increasing the motivation
of these women to work, especially women with children who were already dependent on
public assistance before incarceration (see Mauer & McCalmont, 2013; Smith & Young,
2003). As a point of comparison, a study of females released from prison in Houston,
Texas, reported lower post-incarceration employment rates: 58 percent of women had
been employed before prison, but only 34 percent were working eight to 10 months after
release (LaVigne, Brooks, & Shollenberger, 2009).

Although the direct effect of incarceration on women’s employment remains an
area that needs to be better understood through additional research, employment status
(i.e., being employed or finding a job after prison) does not, in any way, imply that
women are better off economically post-incarceration. If women’s pre-prison
employment is any predictor of their post-prison employment status, such as it was in the
Lalonde and Cho study, then women who are able to find employment after prison are
likely going back to low-wage jobs. Visher et al. (2004) found that close to 60 percent of
female ex-prisoners were earning less than $7.70 per hour before incarceration. What is
more, Visher and her colleagues found that women reported earning not only less than they expected before their release, but also less than their pre-prison wages. These low hourly wages must be considered next to the time women work post-release. LaVigne et al. (2009) indicated that more than half of women employed after prison are working less than full-time. At best, then, these women’s net income was close to $200 a week.

Employment is often conceptualized in the literature on prisoner reentry as a source of informal social control that reduces the likelihood of reoffending. The existing empirical evidence on the relationship between women’s employment and recidivism is inconsistent, and beyond the scope of the research questions addressed by this dissertation research. Still, women’s incarceration and their post-prison employment options have implications for understanding their economic status. One key question to emerge from the findings on the small to null effect of incarceration on employment opportunities is whether the type of work available to female ex-prisoners provides living wages to meet their long-term economic needs.

Another important question from the results on the effect of incarceration on employment is why incarceration would have a smaller effect among women than among men. The particular focus of previous research on men highlights the fact that incarceration, especially from the employer’s perspective, is largely gendered—it is men who go to prison. More specifically, employers’ perceptions of criminals and of incarceration are shaped by the predominantly male involvement in crime. The result of gender differences in crime and incarceration is that there is less stereotypical information available to employers to draw upon when it comes to women job applicants with a prison record. At the same time, Hirschfield and Piquero (2010) indicated
that public attitudes toward ex-offenders are “softening,” especially as criminal records become more prevalent, or normal, within the general population. Assuming these are softening attitudes toward a base of ex-offenders that are largely male may, in turn, benefit female ex-offenders in the labor market. It is also possible that employers may use gender stereotypes of women and/or racial/ethical stereotypes to inform their evaluation of female ex-prisoners’ job applications. This idea is discussed next.

The Conditional Effects of Race/Ethnicity and a Prison Record

The results from the in-person audit of employers indicated no direct effect of a prison record, so that it had no bearing on the likelihood of advancing to the interview stage of the application process or receiving a job offer. The effect of a prison record on women’s employment opportunities was, however, conditioned by race/ethnicity. In the in-person audit of employers, Hispanic women, who were otherwise favored over White women for a position, saw employment prospects significantly decrease when they applied for jobs with a prison record. The likelihood of a favorable response for Black women with a prison record was not significantly different from White women with a prison record; however, employers ranked Black women with a prison record at the bottom of the racial/ethnic hierarchy in the online correspondence test and in-person audit study. These findings address the third research question.

Stereotypes and other kinds of cues and perceptions of applicants play an important role in employers’ hiring practices. Prior studies have suggested that employers are generally unwilling to hire ex-prisoners. Previous analyses have not, however, explicitly considered how gender may alter employers’ perceptions of ex-offenders and if employers are more willing to consider hiring female ex-prisoners than male ex-
offenders. The stigma that is often associated with a prison record may not carry the same magnitude for women as it does for men, so that stigma exists on a continuum and is conditioned by gender. Steffensmeier and Kramer (1980) found that survey participants held less stigmatizing beliefs of female offenders than male offenders. Similarly, King and Clayson (1988) reported that perceptions of female criminals were less negative than perceptions of male criminals, but that for both men and women, respondents’ reactions to the criminal label were not as complicated as might be expected. Reconciling their findings with research on gender stereotypes and Becker’s (1963) influential work on labeling theory, gender was the “master status” for female criminals, but the criminal label dominated how male criminals were perceived. King and Clayson elaborated further, suggesting that women are not generally viewed as having an innate criminal propensity in the same way that men are, so that female offending is viewed more as the product of external forces. Likewise, Maruna and King (2009) argued that ex-offenders are viewed as more redeemable or more capable of change when criminal behavior is viewed as either the product of social forces (i.e., “victim of society”) or of bad decision-making.

Because perceptions of female criminals are not only less stigmatizing, but less well-understood than perceptions of male offenders, employers may look for additional signals of an ex-prisoner’s employability, such as their race/ethnicity. The extant research on the labor market barriers of racial/ethnic minorities indicates that employers rely heavily on generalized beliefs of Blacks and Hispanics when evaluating their suitability for employment. In research using student-based samples, stereotypes of Hispanic women, and Mexican women specifically, were found to be centered on their sexuality
and relationship to their children, including being promiscuous, entering motherhood early, and being mothers to multiple children (Ghavami & Peplau, 2013; Niemann, Jennings, Rozelle, Baxter, & Sullivan, 1994). Given the higher rate of parenthood among the female state prison population (see Glaze & Maruschak, 2008), employers may draw from perceptions of Hispanic women and of women in prison, and assume that Hispanic women with a prison record have children. Employers may, then, perceive Hispanic women with a prison record as an unreliable hire because of their presumed childcare responsibilities. Indeed, because employers cannot legally inquire about a job applicant’s minor children, employers may use stereotypes of Hispanic women to judge the employability of Hispanic women with a prison record. Saucedo (2006) argues, too, that employers want subservient Hispanic workers, and more traditional stereotypes of Hispanic women characterize them as submissive (see also Zamudio & Lichter, 2008). In this respect, Hispanic female ex-prisoners have gone against ethnic specific gender stereotypes (Ghavami & Peplau, 2013), signaling to the employer the potential that these women could be difficult employees.

Additionally, if employers believe that Hispanic women have engaged in criminal activity as an extension of their relationship with men (e.g., boyfriends), and with Hispanic men in particular, then employers might think Hispanic women with a prison record are gang involved and/or violent given the gang-related stereotype of Hispanics (Harris, 1994; Horowitz, 1983; Zatz, 1987; Zatz & Portillos, 2000). The association of Mexicans with drug trafficking could also lead employers to be wary of hiring Hispanic women with a prison record, especially when drug trafficking is coupled with illegal immigration (Boyd, 2002; Massey, 2007; Provine & Doty, 2011; Roman, 2000).
mentioned previously, the State of Arizona is at the forefront of controversial legislation that deals with illegal immigration from Mexico. Regardless of an actual increase in illegal immigration, perceptions of an increase in the illegal immigrant population are associated with an increase in perceptions that undocumented Hispanics pose a criminal threat, particularly in Arizona and other southwestern states (Wang, 2012). Accordingly, Hispanic women with a prison record may be viewed as part of the “illegal immigration problem.”

The Effect of Education

Finally, to address whether education has a positive effect on women’s employment prospects, the findings from both the online correspondence study and in-person audit indicated that education beyond a high school diploma does not increase employment opportunities in entry-level or low-skill jobs. Theories of human capital investment and the research on the effects of education support, rather unequivocally, that education pays off in the labor market (see, e.g., Card, 1999; Marcotte, Bailey, Borkoski, & Kienzl, 2005; Rouse, 2007). This dissertation tested the effect of an associate’s degree, earned from a community college, on entry-level job prospects. On balance with the well-known relationship between receiving a degree from a four-year university and increased earnings, Kane and Rouse (1995, 1999) reported that a community college degree had a positive effect on annual income beyond a high school diploma, with female associate degree holders seeing a greater return to their community college education than males (see also Belfield & Bailey, 2011). Accordingly, it was expected that a community college degree would increase women’s employment chances.
The null finding of a community college degree in the research conducted here does not disconfirm any previous study on the value of education in the labor market nor the value of education in preventing crime and recidivism (see Lochner & Moretti, 2004). Instead, the non-significant result here can be accounted for at least three distinct, but interrelated reasons: (a) the entry-level jobs, including work in the food service employment sector, did not require the work skills gained through education, rendering it non-significant to employers’ decision-making calculus; (b) employers did not value an associate’s degree in general business, particularly for its relationship to the jobs applied for; and (c) a community college degree does not signal employability. All of these plausible explanations have implications for understanding women’s low-wage job prospects, in addition to understanding how education shapes into the employment prospects of ex-prisoners.

Community colleges have historically been oriented toward workforce development (Jacobs & Daughtry, 2006). Community colleges have also been viewed as democratizing, providing students, especially low-income students and racial/ethnic minorities, with access to higher education because of its affordability and minimal admission requirements compared to four-year universities and colleges. In this way, community colleges, on an ideological level, can play a structural role in facilitating socioeconomic mobility and alleviating inequality (Grubb, Badway, & Bell, 2003; see also Rouse, 1995).\(^28\) Despite political support that contributed to the growth of the community college system (Cohen & Brawer, 2003) and increased enrollment rates

\(^{28}\) Hout (2012) reviewed the literature on the economics of education and pointed out an emerging body of research that reveals the highest returns to education are paid to the students who do not go to college (i.e., the effect of treatment on the untreated).
(Rosenbaum, Deil-Amen, & Pearson, 2006; Mullins, 2011), the contemporaneous role of the community college in educating the workforce and preparing students for work has been the subject of much debate among education researchers (Brint, 2003; Brint & Karabel, 1989). Indeed, community colleges are tasked with many goals and provide a variety of educational and credentialing programs, including occupational certificates and vocational degree programs, in addition to academic associate’s degrees and general education courses that transfer to four-year degree programs. Because of its myriad of functions, evaluating, let alone assuming, the value of community college attendance is not as clear-cut as it would appear to be based on the robust relationship between education and employment gains.

Brint (2003) argues that vocational or occupational programs, as opposed to academic programs, are the most valuable form of community college education (see also Dadger & Weiss, 2012; Deil-Amen & DeLuca, 2010). Similarly, Rosenbaum et al. (2006) take serious issue with community college education and the contribution of education to employment chances and employment-related outcomes. They assert that a community college education provides students with an illegitimate signal or credential that students assume gives them status in the labor market, and that academic community college degrees do not prepare students with the skills that will translate into employment or transfer into the jobs that dominate the labor market. Deil-Amen and Rosenbaum (2004) further claim that there is generally a lack of understanding on the skills employers prefer given that, despite shifts in the U.S. economy toward technology, the labor market mostly consists of jobs that do not require a college degree (see also Brint & Karabel, 1989).
Roksa and Levey (2010) provide some evidence supporting the contention of Deil-Amen and her colleagues that the education system does not match up with the occupational system. Roska and Levely investigated the occupational status of graduates earning high occupation-specific degrees over college majors that are less occupation-specific.\textsuperscript{29} They found that holders of high occupation-specific degrees have higher occupational status coming out of college than graduates with less occupation-specific degrees. The advantage of a high occupation-specific degree, however, diminishes over time, while graduates with less occupation-specific college degrees experience increases in occupational status over time. Of course, the pattern that emerges over time in Roska and Levely’s work is based on four-year college degrees and not community college degrees. Jaeger and Page (1996) found diploma effects for occupational degrees at the associate’s level obtained by White women, but negative (and non-significant) diploma effects on annual earnings among Black women.\textsuperscript{30} Grubb (2002) further indicates that returns to vocational and professional programs completed at the community college level are greater when employment is related to the degree or certificate earned as opposed to unrelated to the education program.

Any effect of an occupational degree on the career or wage trajectory is predicated on a successful job search in the first place. Racial/ethnic discrimination and/or the stigma of a criminal record make finding a job, even an entry-level low-wage job, very difficult. The time dimension of a degree’s payoff includes a range of dynamics,\textsuperscript{29,30}

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\textsuperscript{29} Occupational status is a multi-dimensional measure of occupational socioeconomic status, including occupational prestige and the average education of holders of that occupation.

\textsuperscript{30} As opposed to the number of years of schooling that are assumed to be equivalent to achieving a degree. For example, 16 years of education is assumed equivalent of achieving/graduating with a bachelor’s degree.
including growth in human capital over the course of the career. Tomaskovic-Devey, Thomas, and Johnson (2005) argue that human capital acquired within the labor market is a social product, the result of employer decision-making to invest in some workers while devaluing other workers. Employment discrimination against racial/ethnic minorities limits the acquisition of human capital, regardless of racial/ethnic educational achievement. When these racial/ethnic dynamics within the labor market are considered next to the work histories of socially disadvantaged workers, including part-time employment, temporary spells of employment, employment gaps, and work in the secondary, low-wage labor market, it is clear that, “The value of an individual to an employer is no longer represented by the denomination of academic currency but the economy of experience” (Brown, Hesketh, & Williams, 2003, p. 120). McQuaid and Lindsay (2005) posited that the idea of employability is not simply a function of education and experience, but includes employers’ preferences and biases, labor market demands and labor supply, and larger structural forces.

**Conclusion: Future Research and Policy Recommendations**

The goal of this dissertation research was to gain a better understanding of how women with a prison record fare in their search for a job in the entry-level, low-wage labor market. The results of this research offer a starting point for future research, especially research that can inform policies and practices concerning prisoner reentry.

**Women’s Reentry into the Labor Market**

Future research needs to be explicitly concerned with the return of female ex-prisoners and the ways they are marginalized upon their return from prison. While previous research emphasizes the role of poverty as a gender-specific need among
women offenders (Holtfreter et al., 2004), research has not unpacked how women’s return to the labor market perpetuates poverty. Poverty is not simply the function of unemployment, but underemployment. For far too long, women have been second to the superior gender status afforded to men in the labor market. Women earn 77 cents for every one dollar earned by men for full-time year-round work (DeNavas-Walt et al., 2013). Women are segregated into certain job types, creating the perception that these occupations are specifically for women (i.e., “women’s work”) and, in turn, lowering the wages and status associated with these occupations. In addition to experiencing the real devaluing of their work efforts, women are uniquely subject to being the victim of sexual harassment in the workplace, with prevalence rates ranging from 30 percent (Choi, Binson, Adelson, & Catania, 1998) to between 40 and 75 percent (McDonald, 2012). Uggen and Blackstone (2004) reported that workers who are more financially vulnerable in the workplace were more likely to experience sexual harassment and that experiencing sexual harassment early in the life course, such as adolescence, increases the risk of being sexually harassed again in adulthood. The researchers, however, also noted the frequency of women who experienced sexual harassment in the workplace for the first time as an adult. Given the low wages of female ex-in-prisoners and their status as women, as racial/ethnic minorities, as working mothers, and/or as women with criminal records who are trying to gain control of their circumstances, there is certainly a case to be made that these women are exceptionally vulnerable in the workplace.

Economic marginalization, sex and racial/ethnic discrimination, and victimization are integral parts of female offenders’ lives and explain, in large part, their criminal behavior (Chesney-Lind & Pasko, 2013; Heimer, 2000; Katz, 2000; Miller, 2008; Richie,
2012; Simpson et al., 2008). Yet, researchers who study women’s reentry, rarely, if ever, examine the depth and scope of these experiences among women who are trying to find a job or who are working after incarceration. This lack of focus and understanding is surprising given the centrality of these issues to working women in general. Giordano et al. (2002) make the argument that women do not use employment as a hook for change. What is missing in their discussion, however, is how the structure of gender and race/ethnicity and the intersection of gender and race/ethnicity impact women’s employment opportunities and, thus, their agency to use employment as a hook for change. This creates a predicament for women who must maintain a job while completing terms of post-release supervision; the tradeoff of working a marginalizing job is the very real possibility of violating a condition of release and having their parole revoked (see Opsal, 2009; Steen & Opsal, 2007). Opsal (2012) found that women want to work and use their employment as a way to reconstruct their lives after incarceration, but that employment-related problems in low-quality jobs undo women’s efforts to create a crime-free future. These job-related problems, and their implications for women’s behavior and employment trajectories, need to be addressed by future research on women offenders.

Public policy has made great strides in facilitating prisoners’ reentry into their communities. This includes providing community-based employment programs and job assistance through comprehensive strategies such as the TPCI (Jannetta et al., 2012). Social service programs that assist women with finding work after prison, however, must be in a position to explicitly recognize the challenges and barriers that female ex-prisoners will confront during the job search and in the workplace. It is essential that
researchers partner with these organizations to understand the strategies job assistance programs use to assist women in overcoming these challenges to employment, including how women deal with rejection and the small number of opportunities that are realistically available. These strategies for breaking through or surrendering to these barriers have implications for women that need to be understood, especially for how these solutions used by employment programs can inform best practices.

In the same vein, there is an argument to be made for employment assistance programs that encourage and advocate for women to pursue the appropriate recourse when they encounter discrimination and harassment. Richie (2012) argues that state-sponsored assistance programs have a role in causing the further subordination of racial/ethnic minority women with a prison record because racism has become so institutionalized in public agencies (see also Tilly, 1999) and current labor laws do not make it across-the-board illegal to disqualify or discriminate applicants with a criminal record (Newell, 2013; see also Equal Employment Opportunity Commission, 2012). While there is certainly a valuable role state capital can play in women’s reentry (Holtfreter et al., 2002), attention must be paid to how these state-supported agencies and programs maximize, minimize, or neutralize women’s agency and effort to improve their social status after prison.

**Education and Ex-Prisoners’ Employment Opportunities**

Perhaps one of the major takeaways from this dissertation is that future research, and the extent to which it informs evidence-based policies, needs to better understand how education can improve employment opportunities (see also Batiuk, Lahm, Mckeever, Wilcox, & Wilcox, 2005; Davis et al., 2013). In discussing employment-
related reentry programs, Bushway and Apel (2012) base the utility and logic of such programs on a signaling perspective—that participation and completion of such programs can override the stigma associated with a criminal record and send a message of employability. The same signal-based idea of employability could also be applied to the logic of providing corrections-based education programs to offenders. Yet, Maruna (2012) cautions that the emphasis on such signals is “cheap” and illegitimate. Put differently, the value of mere participation in an education program (especially one provided by a corrections system that has lost its legitimacy for rehabilitating offenders) does not simply equate to the idea of employability or result in automatic employment.

Future research should further examine the effect of different types of educational achievement on labor market outcomes among ex-prisoners. In the experiments conducted in this dissertation research, a community college degree in general business was attained prior to incarceration. Meanwhile, Davis et al. (2013) reported some effectiveness of education attained in a prison setting on post-release employment rates, and most supervision policies provide parolees with the option of going to school over seeking employment. The influence of educational achievement on ex-prisoners’ labor market prospects might thus be a function of whether it was completed before or after incarceration. For ex-offenders who pursue an educational track after incarceration, labor market returns to education are questionable for the very reason that educational achievement alone does not have a straightforward bearing on employment options (but see Brown, 2014). Davis et al. reported higher post-release employment chances among prisoners who completed vocational training programs (28 percent increase in
employment odds) than prisoners enrolled in any educational program (eight percent increase in the odds of employment).

Roska and Levely (2010) argue that there is a lack of integration between the education and occupational systems in the U.S. Accordingly, if education can improve the labor market prospects of ex-prisoners, then the key might be in offering educational programs that provide a skill set that can be applied to a particular type of job. Indeed, the recent surge in interest among policymakers and researchers to increase the representation of women in science, technology, engineering, and mathematics (STEM industries) provides some (good) direction for where to focus correctional system efforts and how to improve the labor market chances and status of women (see also Langdon, McKittrick, Beede, Khan, & Doms, 2011). In this way, the effect of education on ex-prisoners’ employment chances is much narrower and more limited to a specific type of education and for a specific set of jobs that require less academic training and more occupation-specific skills. For ex-prisoners who go into jobs that are more common among former inmates, such as food service and retail (LaVigne et al., 2009; Visher et al., 2004), education beyond a high school diploma or its equivalent will doubtfully provide any significant advantage.31

**Employers’ Hiring Processes and Decision-Making**

Of course, there remains a need to understand and improve the circumstances under which employers will hire ex-prisoners. There is currently momentum for solutions that will improve ex-prisoners’ chances of getting their “foot in the door,” including “ban

31 A high school diploma/GED has been found to significantly increase employment among female ex-prisoners (LaVigne et al., 2009; Visher et al., 2004). The relevance of high school graduation to employment is important to note—education does matter, but the issue remains what level or type of education is most advantageous to ex-prisoners in the labor market (Davis et al., 2013).
the box” policies (Henry & Jacobs, 2007; NELP, 2014a). “Ban the box” policies are designed to remove questions from employment applications regarding past convictions, thus limiting the information employers have available to them when they initially evaluate applicants and decide which applicants will advance to the next stages of the hiring process. Policy guidelines allow employers to inquire into an applicant’s criminal history after the applicant has been interviewed, selected as a finalist for the position, or a conditional job offer has been made (NELP, 2014a). Variations of this policy exist across the country, some at the state level and others at the local level (NELP, 2013a; NELP, 2014a); in fact, ten states have enacted ban the box legislation, with four states applying their version of the policy to both public and private employers. Ban the box policies essentially give ex-offenders a fair chance with employers and the opportunity to apply for jobs they might have not otherwise pursued out of fear they would have been automatically disqualified. Employers, in turn, weigh, without bias, the credentials of applicants with a criminal record.

In the State of Massachusetts, their version of the ban the box policy allows applicants with a criminal record the chance to review a copy of the criminal background report obtained by the employer if a decision against the applicant is made (NELP, 2013a). This provision serves a dual purpose: One, employers are incentivized to use a state-regulated system to conduct background checks, and, two, applicants can validate the information used against them. In both scenarios, this type of provision addresses the widespread use of employer criminal background checks and the validity of

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32 The State of Arizona does not have any “ban the box” type legislation in effect (NELP, 2014a). No local jurisdiction in Arizona has enacted any ordinance analogous to ban the box (NELP, 2013a).
33 State law restricts employer access to an official central repository of criminal records.
information reported to employers (Holzer et al. 2006; NELP, 2014a; Stoll & Bushway, 2008). To be sure, employers are increasingly turning to unregulated criminal history background checks, especially those offered online through private companies (Blumstein & Nakamura, 2009; Bushway, Briggs, Taxman, Thanner, & Van Brakle, 2007; Freeman, 2008; Kurlychek, Brame, & Bushway, 2006; SEARCH, 2005). Bushway et al. find that over half (56 percent) of online companies providing criminal background reporting services to employers do not comply with the FCRA rules on the allowable use of criminal records. Because these companies do not adequately conform and convey to employers the FCRA guidelines, these online firms put employers’ at risk of misunderstanding and violating the law on the applicability of criminal history information in employment decisions. Moreover, Bushway and his colleagues found that only eight percent of the information on parolees and probationers matched arrests records maintained by the FBI and records reported by a private online background checking firm. As Bushway et al. note, however, the FBI does not provide case disposition information, so even official records are not necessarily the most accurate source of information on a job applicant’s “true” involvement with the criminal justice system. All this is to say that, although employment-related policies assisting ex-offenders are gaining traction, current policies are not comprehensive enough in how criminal records are used in hiring decisions.

There is a need for policy to address employers’ use of criminal history information, including (a) how that information is obtained and (b) how the information is used in the hiring process. Providing employers with time- and cost-efficient access to state-sponsored and regulated databases that compile information on convictions and the
penalties that resulted from such convictions eliminates the niche (and, thus, lucrative) market of private online background checking firms and minimizes the inaccuracy that comes from unregulated databases that are created by piecing together what public information is available (Bushway et al., 2007). Furthermore, overhauling how criminal background information is accessed by employers must simplify how penal codes and charges resulting in conviction are communicated to employers. Rap sheets are riddled with formal legal language that unnecessarily complicates the utility of background checks in the hiring decision, making it that much more difficult for the employer to comprehend the nature of the applicant’s conviction and determine its relationship to the position (Bushway et al., 2007).

Employers are undoubtedly concerned about hiring ex-offenders, especially because of negligent hiring laws that hold employers legally liable for employees’ workplace behavior (Bushway et al., 2007; Pager, 2007a). Accordingly, employers need direction on how to use criminal history information in their hiring decisions. This guidance in decision-making includes the importance of the amount of time since involvement and the risk posed to the workplace by the applicant based on both the amount of time that has passed since conviction and/or release from imprisonment and the relationship of prior convictions to the job (Blumstein & Nakamura, 2009; Meyers, McClain, & Maltby, 2013; Williams, 2007). Although estimates stem from research using an all-male sample, Blumstein and Nakamura (2009) reported that ex-offenders have the same probability of arrest as the general population after three to five, crime-free
Raphael (2006) points out problems with using arrest records to determine the risk associated with hiring ex-offenders, but his point remains the same: Risk decreases with time. This passing of time, and the change in risk that comes with it, needs to be accounted for by employers in their hiring decisions (Bushway & Sweeten, 2007; Kurlychek et al., 2006). Along the same lines, employers also need to know the steps taken by former offenders to disengage from crime, or what may be called signs of rehabilitation (Bushway & Apel, 2012; Freeman, 2008; Meyers et al., 2013), such as attending Narcotics Anonymous meetings and having a sponsor, but even this is predicated on ex-offenders having the opportunity to get their foot in employers’ doors.

Not all convictions are related in any reasonable way to the duties required by the position that is being sought by an ex-offender (Meyers et al., 2013). For example, a conviction of possession of drugs for sale, although economically-motivated, has little direct association with the ability to perform the duties of a file clerk when the applicant has no money-handling responsibilities or access to narcotics. Meyers et al. offer four points for employers to consider in determining the strength of the relationship between the nature of the applicant’s prior conviction and the nature of the job, including (a) the specific, daily job duties (e.g., routine interactions with vulnerable populations); (b) the essential job duties (e.g., accessing private personal information on customers or other staff); (c) the circumstances under which the work is performed (e.g., regularity and level of supervision); and (d) the places in which the work is performed (e.g., in homes).

Several scholars (Raphael, 2006; Schriro, 2012; Williams, 2007) argue that the corrections systems needs to bear some of the burden—much more than it does now—in

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34 This assumes age at first arrest is 18 or 20. The range in time depends on the offense type resulting in arrest.
improving the employment chances of ex-offenders. Part of this burden occurs at the institutional-level in terms of preparing prisoners for release and employment (Schriro, 2012). But, some of this burden occurs at the community corrections-level. Parole officers are valuable sources of information on the circumstances of job applicants with criminal records. They have access to and can explain risk and need assessment results that can more fully inform employers’ hiring decisions (Freeman, 2008; Piquero, 2012). Ex-offenders and employers would equally benefit from a system that can effectively identify how an ex-offender’s criminal history puts the workplace and customers at risk physically (Freeman, 2008), and how that risk changes over time as ex-offenders address their dynamic risks and needs (see Andrews, Bonta, & Wormith, 2006). Assuming proper validation of this kind of employment risk assessment and implementation, employers who depend on the assistance of the corrections systems to make a hiring decision could be relieved of legal liability in a negligent hiring lawsuit involving an employee with a criminal record. In brief, it is not a bad idea to give employers access to criminal history information; however, there is a need to manage that information, including how it is obtained and used. Criminal offending is a complex social phenomenon, and there is simply more than what is contained in a criminal record background report that needs to be considered in the employment decision.

Final Thoughts

There is a continuing interest among researchers in documenting and understanding the collateral consequences of mass incarceration. Labor market effects are certainly one area, and there continues to be a need to focus on ex-prisoners’ employment opportunities (or lack thereof) and work-related trajectories. Future research will need to
take a deeper look at the employment effects of a prison record by understanding how
men and women navigate a labor market and social structure that is hostile to
racial/ethnic minorities and to women’s work and employment gains. To better and more
fully understand the fallout of mass incarceration, including the many ways in which
collateral consequences and intergenerational effects are manifested economically, is to
better understand the intersection of social institutions like the labor market and prisoner
reentry.
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