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HOUSING DISCRIMINATION AND NEGATIVE ATTITUDES  
TOWARDS EX-OFFENDER PARENTS

by

Julie Wertheimer-Meier

A DISSERTATION

Presented to the Faculty of  
The Graduate College at the University of Nebraska  
In Partial Fulfillment of Requirements  
For the Degree of Doctor of Philosophy

Major: Psychology

Under the Supervision of Professor Richard L. Wiener

Lincoln, Nebraska

November 2023

# HOUSING DISCRIMINATION AND NEGATIVE ATTITUDES TOWARDS EX-OFFENDER PARENTS

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University of Nebraska, 2023

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While the Fair Housing Act prohibits housing discrimination because of race, gender, religion, sex, disability, family status, and national origin, it allows housing providers to discriminate on the basis of criminal history. Prior research shows that housing providers disproportionately deny housing to ex-offender applicants and single parent applicants with young children. An ex-offender parent's inability to acquire safe and affordable housing decreases the potential for reunification with their children and increases the risk of lost custody or parental rights termination. This dissertation consisted of two experiments that examined the effects of negative attitudes towards ex-offender parents on those parents' ability to access safe and affordable housing.

Experiment 1 was an experimental audit study which collected data in response to inquiries from an alleged single parent ex-offender rental applicant. Posing as an interested applicant, I emailed housing providers in cities across the U.S. with variations in criminal history (yes vs no) and family status (living alone vs living with an adult sibling vs living with a child) to ostensibly inquire about an apartment to rent. The housing providers took longer to respond, were more likely to respond negatively, and were less likely to send an application to an applicant with a criminal history than one who did not disclose a prior offense. They were also significantly less likely to respond,

but more likely to respond negatively, to applicants with a child than those who lived alone or with an adult sibling.

In a two-phase online experimental community survey, Experiment 2 measured the participants' implicit and explicit attitudes towards ex-offenders and single parents before employing a fractional factorial design to assess how individuals acting as rental agents weighed the applicant's race, gender, income, criminal history, and family status in the decision-making process. Participants were more likely to rent to an unknown applicant over a target applicant with a prior felony conviction (compared to no felony conviction). Explicit, but not implicit, attitudes towards both ex-offenders and single parents also predicted the rental decision.

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## **CHAPTER 1: LEGAL HOUSING DISCRIMINATION AGAINST REENTERING EX-OFFENDERS**

Nearly 2.2 million people are currently incarcerated in United States jails and prisons (Sawyer & Wagner, 2020). The vast majority of these incarcerated individuals (nearly 95%) will eventually return to their communities (Muhlhausen, 2018). When they do, these ex-offenders will face a multitude of barriers to successfully reenter the community. These “collateral consequences” of a criminal conviction are the indirect consequences of a criminal conviction—those that do not stem directly from the imposition of a sentence or fine (Lhamon, 2019, p. 9). Collateral consequences include state and federal barriers to obtain welfare benefits, employment, education, voting rights, handgun licenses, military service, and, importantly for the purposes of this research, housing after release from prison (Pinard & Thompson, 2006).

### **1.1 Overview of the Fair Housing Act**

The Fair Housing Act (FHA) prohibits housing “discrimination in the sale, rental, or financing of dwellings” (p. 1) because of a person’s race, color, religion, sex, disability, family status, or national origin.<sup>1</sup> However, the FHA does not protect those with prior criminal convictions (ex-offenders) from housing discrimination. In fact, the U.S. Department of Housing and Urban Development (HUD) issued guidance in 2016 that allows housing providers to deny housing because of criminal history so long as the discriminatory policies do not disparately impact a protected class (Kanovsky, 2016). In other words, housing providers may refuse to rent to applicants with a criminal history as

---

<sup>1</sup> The FHA provides for a few very limited exceptions (none of which apply to the current research): “owner-occupied buildings with no more than four units, single-family houses sold or rented by the owner without the use of an agent, and housing operated by religious organizations and private clubs that limit occupancy to members” (U.S. Department of Housing and Urban Development, 2023).

long as that refusal does not primarily affect applicants of a particular protected class (e.g., Black applicants, female applicants, or applicants with children).

Ultimately, however, it is difficult—if not impossible—to discriminate based on criminal history without disproportionately impacting women and people of color (Couloute, 2018; Oyama, 2009). People of color are incarcerated at disproportionately higher rates than their White counterparts (The Sentencing Project, 2021). Additionally, while a greater number of men are incarcerated than women (The Sentencing Project, 2021), formerly incarcerated women (particularly women of color) are more likely to be homeless upon their release from prison than are their male counterparts (Couloute, 2018). A number of factors may contribute to high homelessness rates among recently-released women. For example, an estimated 70-80% of incarcerated women report experiences of intimate partner violence as adults (Dichter & Osthoff, 2015). This means that incarcerated women, regardless of their parental status, may not have a safe home to return to after release from prison. Further, incarcerated women are more likely to be the sole caretakers of their children than incarcerated men (Mancini et al., 2016) and single parents in the United States experience disproportionately high rates of poverty (Casey & Maldonado, 2012). Because the majority of ex-offenders reentering the community will be people of color, and formerly incarcerated women are disproportionately more likely than formerly incarcerated men to need immediate housing after their release (Couloute, 2018), policies that categorically deny applicants with criminal histories almost necessarily disparately impact women and people of color (Oyama, 2009).

In order to avoid this disparate impact liability under the FHA, the HUD guidelines recommend against categorical prohibitions on renting to ex-offender

applications. The guidelines instead suggest policies that consider the “nature, severity, and recency” of criminal conduct (Kanovsky, 2016). Despite the recommendation to take mitigating factors into account when evaluating ex-offender applications, and private landlords’ preference towards policies that allow for discretion (Reosti, 2020), there are still situations where housing providers are encouraged—if not required—to discriminate based on criminal history.

For instance, the 2016 HUD guidelines include an exception to the general rule that housing providers should refrain from policies that categorically discriminate against people with criminal histories. Housing providers in fact may discriminate against individuals who have drug manufacturing or drug distribution (but not drug possession) convictions<sup>2</sup>, regardless of any disparate impact claims that might arise from such policies (Kanovsky, 2016). Further, the Housing Opportunity Program Extension Act (HOPE) requires public housing agencies to evict tenants who engage in “any criminal activity that threatens the health, safety, or right to peaceful enjoyment of the premises by other tenants or any drug-related criminal activity *on or off such premises.*” Moreover, the statute applies to any criminal activity conducted by a public housing tenant, any member of the tenant’s household, or any of the tenant’s guests (42 U.S.C. § 1437(d)(1)(6) (2000)). HUD has further enacted lifetime bans on housing individuals who have manufactured methamphetamine in federally assisted housing and on individuals convicted of sex offenses and subject to lifetime sex offender state registration requirements (Walter et al., 2017). Notably, the Supreme Court has upheld

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<sup>2</sup> It is worth noting that 46 and 14 percent of those incarcerated in federal and state prisons, respectively, are serving time for drug offenses. Further, nearly 99 percent of those inmates are incarcerated for drug trafficking offenses and would therefore receive no protection from the 2016 HUD guidance (Carson, 2020; Kanovsky, 2016).

these “One Strike and You’re Out” laws (Walter et al., 2017, p. 4), even as applied to criminal activity committed off the property by a tenant’s guest (*Dep’t of Housing and Urban Development v. Rucker*, 2002).

Ultimately, these “One Strike” policies create a strict liability eviction policy whereby public housing officials are authorized to evict tenants for engaging in criminal activity or inviting in guests who later engage in criminal activity. Public housing officials may hold tenants liable for criminal activity even if the tenants themselves did not engage in the criminal activity, the criminal activity did not occur on the residential property, and the tenant did not know about the criminal activity (*Dep’t of Housing and Urban Development*, 2002). Though public housing authorities can use discretion in the application of this policy, many critics claim that the HOPE Act incentivizes public housing authorities to strictly enforce the policy (Cain, 2003). The data supports this claim, as HUD’s Office of Crime Prevention and Security distributed a nationwide survey to all public housing authorities shortly after the passage of the HOPE Act in 1996. The 1,818 public housing authorities who responded to the survey reported that the number of drug-related evictions increased, and the number of applicants denied because of their criminal background nearly doubled in the six months following the enactment of the Hope Act (Walter et al., 2017).

## **1.2 Ex-Offenders’ Need for Housing**

These discriminatory policies mean that ex-offenders are nearly 10 times more likely to be homeless than the general population (Couloute, 2018). Rates of homeless are particularly high among those who have been recently released from prison and those who have been incarcerated more than once, as well women and people of color.



However, only examining rates of homelessness underestimates the number of reentering ex-offenders struggling to access housing. Examining rates of housing insecurity in addition to homelessness more accurately highlights the barriers to accessing permanent housing after release from prison. Those living with housing insecurity include—in addition to homeless individuals—individuals temporarily living in a boarding house (i.e., a multi-tenant house in which individual bedrooms are rented out to different tenants), a hotel, or a motel (Couloute, 2018). Released offenders are 27 times more likely than the general population to be homeless or housing insecure (Couloute, 2018). Consequently, ex-offenders frequently report that their first concern upon release from prison is finding a place to sleep that night (Evans et al., 2019; Morani et al., 2019; Walker et al., 2014).

The lack of affordable housing for released offenders creates a “revolving door of homelessness,” whereby homelessness increases the likelihood of re-incarceration, which in turn increases the risk of homelessness (Couloute, 2018, pp. 2-3; Walter et al., 2014). In addition to an increased risk of recidivism, the inaccessibility of permanent housing can reduce physical and mental health, make it more difficult to secure stable employment, prevent educational access, and limit the ability of the ex-offender’s friends and family to provide support (Couloute, 2018; Evans et al., 2019; Walker et al., 2014). Given these outcomes, it is no surprise that researchers and ex-offenders alike consider housing assistance to be one of the most useful methods of promoting successful reentry (Wright et al., 2014).

The public housing restrictions undoubtedly contribute to the high rates of homelessness among ex-offenders, but a lack of financial means and social support, as

well as landlord discrimination, also contribute to the high rates of housing insecurity among ex-offenders (Visher et al., 2004; Walker et al., 2014). Because the Fair Housing Act does not protect applicants with a criminal background, landlords can legally engage in overt housing discrimination against ex-offenders. In fact, the 2016 HUD guidance emphasizes that landlords may legitimately discriminate against ex-offenders if those discriminatory policies ensure the safety of their tenants and protect residential property (Kanovsky, 2016).

### **1.3 Overview of Existing Research**

Again and again, research shows that, following HUD guidance, housing providers inquire about an applicant's criminal history and use that information to disproportionately deny housing to applicants with criminal histories (Clark, 2007; Evans, 2016; Furst & Evans, 2017; Helfgott, 1997). The primary method of assessing real-world housing discrimination is through audit studies, whereby confederate "testers" pose as prospective tenants to call, email, or visit housing providers to assess how landlords and property managers respond to requests from prospective applicants with varying characteristics. Using this methodology, Evans and Porter (2015) found that landlords were more than twice as likely to consider an applicant without a criminal history than an ex-offender applicant, even after controlling for residency restrictions, landlord and applicant demographics, variations in conversation topics, and location. More recently, Evans et al. (2019) found that landlords and property managers were less likely to recommend that people with criminal histories apply for an apartment than those without such histories. In both instances, the criminal conviction was enough to significantly decrease the likelihood that the landlord would consider the applicant,

regardless of whether the applicant had been convicted of child molestation, statutory rape, or drug trafficking (Evans et al., 2019; Evans & Porter, 2015).

Though housing providers can and certainly do openly discriminate against applicants with criminal histories, their methods of discrimination sometimes occur more subtly, making it difficult to identify or even measure. Using a matched-pair audit design, Hanson et al. (2011) had testers send email inquiries to landlords about their rental availability. Each landlord received two emails, one from a prospective applicant with a White-sounding name and one from a prospective applicant with a Black-sounding name. The landlords used more negatively valenced language to describe a housing unit, took longer to respond to the email inquiry, and sent shorter email responses to inquiries from a presumably Black applicant compared to a presumably White applicants (Hanson et al., 2011).

While Hanson et al. (2011) did not examine ex-offender discrimination, anecdotal stories suggest that ex-offender applicants do experience these subtle forms of discrimination, even if they struggle to name it (Reosti, 2020). For instance, Reosti (2020) interviewed ex-offender applicants who reported that landlords frequently refused to share the reasons for their rejected application. And after reviewing transcribed conversations between real estate agents and tester applicants with criminal backgrounds, Furst and Evans (2017) found a similar unwillingness to overtly reject the tester because of their criminal history. Even though the landlords and real estate agents refused to name the criminal background as the reason for rejecting an ex-offender's application, the disproportionate number of rejected ex-offender applicants suggests evidence of a potentially discriminatory practice (Furst & Evans, 2017; Reosti, 2020).

Applicant characteristics other than criminal history may also contribute to housing discrimination. For instance, Hanson et al. (2011)'s audit study found that landlords were more likely to subtly discriminate against racial minorities by responding less amicably (and taking longer to send those responses) to inquiries from presumably Black versus White applicants. These results add to prior findings that showed real estate agents treat White clients more favorably than Black or Latinx clients (Ondrich et al., 1998), that White applicants receive more invitations to visit apartments than do Black applicants (Yinger, 1986), and finally that White applicants are more likely to access housing units than their equally qualified Black and Latinx counterparts (Yelnosky, 1998).

Applicant gender and social status may also play a role in discriminatory housing decisions, although there is less consensus on the importance of gender as a discriminatory factor on the housing market than race and social class (Evans & Porter, 2015; Hanson et al., 2011). For instance, Evans et al. (2019) found that landlords were equally willing to consider renting to male and female applicants. Similarly, Evans and Porter (2015) found that landlords were equally willing to consider male and female applicants without criminal convictions. However, the landlords were significantly more likely to show an apartment to a female applicant with a criminal conviction than a male applicant with a criminal conviction (Evans & Porter, 2015). Similarly, Ahmed and Hammarstedt (2008) conducted an internet audit study in which they manipulated the alleged applicant's ethnicity and gender. The results indicated that female applicants had less difficulty finding an apartment than male applicants.

However, other research suggests that women may generally be disadvantaged over men on the housing market (Evans et al., 2019). For instance, Massey and Lundy (2001) conducted an audit study in which they manipulated the applicant's gender and linguistic style (White Middle-Class English, Black Accented English, and Black English Vernacular). Race, gender, and class interacted so that poor Black female applicants experienced the highest rates of discrimination (Massey & Lundy, 2001). This is concerning for the reentering ex-offender population because most incarcerated people are poor, particularly incarcerated women and people of color (Sawyer & Wagner, 2020). Further, this category of formerly incarcerated women of color are particularly likely to be homeless following their release from prison (Couloute, 2018).

Despite the above evidence that some individual factors increase rates of ex-offender housing discrimination, some personal and situational characteristics do seem to improve the likelihood that ex-offenders will find affordable housing. First, the type of conviction may matter. Evans and Porter (2015) found that, while landlords were less likely to accept any applicant with a criminal history (92 percent for those with drug trafficking or statutory rape convictions), applicants with prior child molestation convictions were at a particular disadvantage. After controlling for a host of external factors (including residency restrictions required by sex offense criminal statutes), housing providers were 99 percent less likely to offer housing to an applicant with a child molestation conviction than with no conviction at all. Clark (2007) surveyed landlords in Akron, Ohio about their priorities when screening applicants, as well as their attitudes towards housing ex-offenders. Like Evans and Porter (2015), Clark (2007) found that, while 62 percent of landlords were willing to reconsider an ex-offender's application if

he or she could show evidence of rehabilitation, landlords were generally not willing to reconsider an applicant with a history of drug trafficking or sex offenses. Real estate agents similarly discriminate based on the type of offense conviction. Evans (2016) found that while seventy-five percent of the real estate agents agreed to assist prospective applicants with a statutory rape conviction, and 79 percent agreed to assist applicants with a drug trafficking conviction, only 55 percent of agents agreed to help applicants who admitted to a prior child molestation conviction.

Some research suggests that people with misdemeanor convictions might be more likely to find housing than those with felony convictions (Leasure & Martin, 2017). This is especially true when the felony conviction involves a sex offense (Clark, 2007; Evans & Porter, 2015). Leasure and Martin (2017) used an experimental audit design to examine the impact of different kinds of criminal records on the ability to find housing. A White male tester called a random sample of property managers in Columbus, Ohio to ask if the property manager would consider renting to the tester. The tester reported either a one-year-old felony criminal record, a ten-year-old felony criminal record, a one-year-old misdemeanor criminal record, and a one-year-old felony record with Ohio's Certificate of Qualification for Employment. The property managers were most willing to rent to an ex-offender with a misdemeanor and least likely to consider an ex-offender with a recent felony conviction. To illustrate, the predicted probability that a landlord would be willing to rent to somebody with a year-old felony conviction was 38 percent compared to an 84 percent predicted probability for somebody with a year-old misdemeanor.

Likelihood of rehabilitation may also make a difference (Clark, 2007; Leasure & Martin, 2017). Clark (2007) surveyed landlords in Akron, Ohio to determine the factors they found most relevant when deciding to rent to ex-offender applicants. While most landlords admitted that they do not accept applicants with criminal histories, landlords valued an applicant's eviction history, employment, and income above their criminal history. In addition, the percent of landlords willing to accept an applicant with a prior felony conviction rose from 35 percent to 62 percent if the applicant could show evidence of rehabilitation. Further, 62 percent of the landlords who initially refused to rent to an ex-offender indicated that they would reconsider the application if the ex-offender applicant would be living with his or her family.

Given that family members can provide both monetary and emotional support to ex-offenders throughout the reentry process (Muhlhausen, 2018), this finding provides additional incentive for ex-offenders to try to find housing with their family members. After conducting 73 semi-structured interviews with recent parolees, Walker et al. (2014) argued that safe, affordable housing that allows for the reunification of families can decrease the risk of recidivism (Walker et al, 2014). Half of the interviewees were released from prison homeless, and half were released to a predetermined residence. The individuals released to a permanent residence all viewed housing as "key" to their successful reentry (Walker et al., 2014, p. 321). Aside from providing much-needed social support, families can provide monetary assistance or help with transportation for returning offenders seeking employment (Walker et al., 2014).

However, living with family is not always a feasible option. A family member who invites a returning offender into their home may be liable for eviction under the

HOPE Act if the individual or any of his or her friends commits another crime (Cain, 2003). Families may shun a family member with a criminal conviction, live too far away from an ex-offender subject to parole requirements (Evans & Porter, 2015), or simply not have enough room for a returning ex-offender wishing to reunify with her children. Importantly, Clark (2007)'s survey of Ohio landlords found that the landlords were more willing to accept ex-offender applicants who would live with family but did not clarify the kind of family that landlords thought would live with the ex-offender applicants. Thus, it is not clear whether the landlords willing to reconsider their rental policies thought that the ex-offender would be living with an adult sibling, parent, or spouse, or if the applicant would be living with minor children. Despite the prohibition on housing discrimination because of family status (Kanovsky, 2016), landlords may be less willing to rent to adults with children (Reosti, 2020), and single parents may face more barriers to accessing affordable housing than do adults with no children (Jones & Teixeira, 2015). The additional barrier of needing to house young children could augment the already difficult task of finding safe and affordable housing as an applicant with criminal history. The inability for an ex-offender parent to find affordable housing not only increases the risk of recidivism, it decreases the likelihood of family reunification that necessarily requires a safe, stable place for the child to live (van Olphen et al., 2009).

## **CHAPTER 2: ILLEGAL HOUSING DISCRIMINATION AGAINST SINGLE PARENTS**

Although the FHA prohibits discrimination based on family status, some evidence suggests that single mothers and single fathers face significantly more barriers on the housing market than do heterosexual couples (Jones & Teixeira, 2015; Lauster &



Easterbrook, 2011). Given that single parents—and particularly single mothers—are more likely to be economically marginalized than are parents in heterosexual couples (Lu et al., 2020), it is possible that the lack of financial means constitutes the primary barrier to finding adequate housing as a single parent (Hanson & Hawley, 2011; Lauster & Easterbrook, 2011). In fact, both single mothers and industry experts acknowledge affordability as a significant barrier to finding suitable housing (Jones & Teixeira, 2015). Housing affordability is also closely related to housing size, an issue particularly relevant to families with children, as larger families require more space, but larger dwellings are typically more expensive (Jones & Teixeira, 2015).

For instance, Lauster and Easterbrook (2011) conducted an email audit experiment to examine housing discrimination against same-sex couples and single parents in British Columbia. The researchers emailed nearly 1700 rental agents, posing as a member of a heterosexual couple, a member of a homosexual couple, or a single parent, and coded the rental agent's responses as positive, negative, or an ambiguous request for more information. Both single mothers and single fathers were significantly less likely to receive a positive response than heterosexual couples. The landlords seemed particularly concerned that single parents would be unable to pay rent, seeking more reassuring information from single parents than from childless tenants (Lauster & Easterbrook, 2011). Landlords may therefore discriminate with reason against applicants who cannot afford the cost of rent, a particular criterion that is both a business necessity and may also disparately impact families with children.

Further, both the United States and Canada allow housing providers to discriminate because of household size via maximum occupancy restrictions, so long as

the restrictions serve a health code or business interest (Lauster & Easterbrook, 2011; Oyama, 2009). For example, the Ninth Circuit has upheld maximum occupancy restrictions whose purpose is to “preserve the value of the property,” even though the restrictions effectively bar families with children (*Pfaff v. U. S. Department of Housing & Urban Development*, 1996, p. 744). However, the additional barriers single parents face finding affordable housing cannot simply be explained by economic marginalization of single parents or the legality of occupancy restrictions. Although research on family status housing discrimination is scarce, particularly in the United States (Murchie & Pang, 2018), the research that does exist suggests that housing providers prefer renting to adults without children. In fact, some researchers have found similar rates of discrimination against racial minorities and families with children (Lauster & Easterbrook, 2011; Murchie & Pang, 2018). After all, children represent competing interests for rent, they may damage rental units, and they make a lot of noise (Murchie & Pang, 2018). Furthermore, there is anecdotal evidence such that single parents often report perceived housing discrimination because of their single parent status, and housing providers themselves acknowledge that such discrimination occurs. For example, Reosti (2020) interviewed experts from the rental housing industry, as well as independent landlords and property managers, to better understand how antidiscrimination housing requirements influenced rental decisions. While the interviews primarily focused on discrimination against renters with negative histories (e.g., criminal histories, eviction histories, and/or damaged credit), some participants acknowledged that landlords do make “unfounded judgment calls based on...the behavior of their children, if they bring

their children to the screening, and other things that they probably shouldn't consider” (Reosti, 2020, p. 634).

Similarly, Jones and Teixeira (2015) surveyed low-income single mothers in British Columbia to gather information related to their current living arrangements and housing costs, their housing search process, residential mobility, the affordability and suitability of available housing, and experiences of housing discrimination. Aside from finding affordable and appropriately sized housing, the mothers in this study cited discrimination as the most common barrier to finding adequate housing. Nearly 67 percent of Jones and Teixeira (2015)'s participants believed that rental agents discriminated against them because of their children, and 70 percent reported discrimination based on being a single parent. Murchie and Pang (2018) more recently conducted a randomized email correspondence audit study to examine landlord treatment of rental housing applicants based on race, gender, religion, sexuality, and family status in the 20 most populated cities in the United States. Landlords were least likely to respond to inquiries from single parents, with only 33 percent of such inquiries receiving a response. Black single parents were one of only two groups (the other being Arab males) to receive response rates lower than 30 percent. The researchers further found that, among the various combinations of characteristics, single parent status was almost always a strong and significant negative signal. Race, gender, and social class rarely compensated for the harm that “single parent” did to an applicant's rental prospects. Importantly, some of the mothers in Jones and Teixeira's (2015) study acknowledged that landlords would initially say that an applicant with children was not an issue but would indicate in a follow-up appointment that children were not preferred.

Showing further evidence of subtle prejudice, Liegghio and Caragata (2016) examined micro-aggressions experienced by mothers within the social welfare system in Canada. Microaggressions constitute subtle, often unconscious, verbal and nonverbal, interpersonal exchanges that dismiss and devalue the experience of members of marginalized groups. In qualitative interviews, the women in Liegghio and Caragata (2016)'s study reported that the welfare care workers made them feel unworthy, unintelligent, and incompetent by using a dismissive voice and making degrading comments. This denigration resulted in single mothers' perception that they were problematic "cases" rather than human beings in need of services. While the microaggressions reported by Liegghio and Caragata (2016)'s participants occurred in conversation with welfare case workers, rather than housing providers, the results can likely generalize to single parents' experience on the housing market. Single parents living with children are more likely to be single mothers than single fathers, and single mothers are significantly more likely to live in poverty than single fathers (Lu et al., 2020). In addition, some of the women reported that their case workers threatened them with losing custody of their children (Liegghio & Caragata, 2016). Ex-offender parents seeking to re-unify their families similarly risk losing custody (or even parental rights) of their children if they are unable to find suitable housing (Prguda & Burke, 2020; Wertheimer & Wiener, 2020).

The consequences of housing discrimination against ex-offenders and single parents—and, perhaps, single parent ex-offenders may be dire. Ex-offender parents often wish to reunite with their children after release from prison; however, the inability to find safe and secure housing with their children makes reunification difficult, if not

impossible (van Olphen et al., 2009). Judges make decisions involving child custody and the termination of parental rights based on the best interests of the child (Child Welfare Information Gateway, 2021; *Santosky v. Karmar*, 1982; Wertheimer & Wiener, 2020). While the determination of the child's best interests involves a largely subjective process that varies from state to state (*S.M. v. E.M.B.R.*, 2013), a primary component of the best interests (BIOC) analysis is the parent's actual ability to care for the child (Flens, 2005). Twenty-one states list the "health, safety, and/or protection of the child" as a guiding principle in shaping the BIOC analysis, and ten states explicitly include the parent's ability to provide a safe home for the child as part of the analysis (Child Welfare Info Gateway, 2020, p. 2).

Criminal justice and social welfare involved parents experience heightened levels of government surveillance because of well-meaning laws designed to protect children from parents who cannot or will not provide adequate care (*Santosky v. Karmar*, 1982; Wertheimer, 2020). However, the law does not require perfect parenting. The Supreme Court itself has noted that "the fundamental liberty interest of natural parents in the care, custody, and management of their child does not evaporate simply because they have not been model parents or have lost temporary custody of their child to the State" (*Santosky v. Karmar*, 1982, pp. 753-754). Yet involvement in the criminal justice or social welfare systems "opens the door" to the government's determination of whether one's parenting is "good enough" (Brank, 2019, p. 2).

While non-system involved parents may be able to stay with a friend or in temporary housing without losing custody of their children, parents returning from incarceration and under the watchful eye of the criminal justice system must find stable,

secure housing in order to reunite with their children. Because a parent's ability to find housing is relevant to the best interests of the child, a parent's inability to acquire housing decreases the potential for reunification and increases the risk of lost custody or parental rights termination (Child Welfare Information Gateway, 2021; *Santosky v. Kramer*, 1982; Wertheimer & Wiener, 2020).

### **CHAPTER 3: PSYCHOLOGY OF ATTITUDES**

In addition to the systemic factors that promote housing discrimination, negative attitudes towards both ex-offenders and single parents, as well as the compounded negative attitudes towards ex-offenders who are single parents, may influence the housing provider's discretionary rental decisions. This section will first provide an overview of the research on attitudes generally before describing the field of research on attitudes towards ex-offenders and single parents more specifically.

Attitudes constitute the "general evaluations people have regarding people, places, objects, and issues" (Briñol et al., 2019, p. 1). The multicomponent model of attitudes proposes that attitudes, as summary evaluations of a target stimulus (the attitude object), are composed of cognitive, affective, and behavioral components (Glock & Kleen, 2020). The cognitive component encompasses a person's knowledge of and thoughts about the attitude object. For instance, a person's evaluation of a political candidate may stem from information they have learned about that candidate's background and policies.

People tend to view their cognitions about an attitude as beliefs about the attitude object and its attributes. Thus, when people evaluate a stimulus favorably, they are more likely to associate it with positive attributes; and when they evaluate a stimulus

negatively, they are more likely to associate it with negative attributes (Eagly & Mladinic, 1989). This evaluation can have lasting repercussions, as both positive and negative attitudes towards an individual member of an outgroup can generalize to create attitudes towards the outgroup as a whole (Stark et al., 2013). These generalized evaluations of social groups as the attitude object act as stereotypes, which are the cognitive component of attitudes providing generalized information about how members of particular groups will and should behave (Eagly & Mladinic, 1989; Glock & Kleen, 2020; Payne et al., 2017; Wittenbrink et al., 2019).

The affective component, reflected in attitude valence, encompasses the emotional response to the attitude object (Eagly & Mladinic, 1989; Glock & Kleen, 2020). The same evaluation of a political candidate described above could arise from feelings of anger or pride after seeing a candidate speak, rather than information learned about that candidate. Affectively based attitudes tend to be better predictors of judgments and behaviors than other types of attitudes (Rocklage & Fazio, 2018). Prejudice, which captures the general dislike some feel towards a particular group, represents an emotional, rather than cognitive, evaluation of a social group and its group members (Payne et al., 2017; Wittenbrink et al., 2019).

This affective component matters because the valence of stereotypes (whether one feels positively or negatively about the group they have evaluated) often mirrors the affective component of the attitude, which in turn influences the valence of the behavior. Thus, a negatively valenced stereotype may contribute to hostile or discriminatory behavior towards the evaluated group (Glock & Kleen, 2020). However, it is important to remember that neither the valenced evaluation in general (i.e., the attitude) nor the

emotional component specifically (i.e., the prejudice) represent an actual hostile act, that is behavior itself (Wittenbrink et al., 2019).

Most relevant to the present proposal, the behavioral component of attitudes encompasses people's actual actions regarding the attitude object (Eagly & Mladinic, 1989). This behavioral component of attitudes operates in two ways. First, people can infer attitudes from observing their own actions and behaviors (Briñol et al., 2019; Glock & Kleen, 2020). For instance, a person who notices that they are standing with their arms crossed and frowning while watching a political debate might infer from their own hostile body language that they do not like the candidate.

Second, people normally behave in ways that are consistent with their attitudes (Glock & Kleen, 2020). Attitudes vary on several dimensions, and that variability affects the relative influence of the attitude on a person's ultimate behavior. For example, attitudes can vary in their valence, meaning that a person can form positive, negative, or neutral evaluations about an attitude object. The attitude's valence influences the way people tend to interact with the attitude object, namely, approaching stimuli they feel positively about and avoiding stimuli that elicit more negative evaluations. Attitudes can also vary in their extremity (relative deviation from neutrality) and strength (ability to endure over time and resist persuasive attack) (Glock & Kleen, 2020). Attitudes that are stronger and more extreme tend to exert greater influence on a person's thoughts and behaviors than weaker attitudes (Briñol et al., 2019; Luttrell et al., 2016). Attitude confidence, ambivalence, accessibility, importance, knowledge basis, and the extent to which the attitude resulted from deliberate thought all increase attitude strength (Luttrell et al., 2016).



The moral basis of an attitude also contributes to attitude strength. Luttrell et al. (2016) examined whether the mere perception that an attitude had a moral (vs non-moral) foundation influenced attitude-behavior consistency and resistance to persuasion. Across three experiments (two with undergraduate participants and one with Amazon Mechanical Turk workers), the researchers manipulated whether the perception that the participants' attitudes were based on morality or tradition/pragmatism before assessing their attitude strength and willingness to act in favor of the attitude object. The undergraduate participants read an essay in favor of adopting a senior comprehensive exam policy at their university (the MTurk participants in Experiment 3 read about recycling) and then wrote a response to the essay. The participants then received false feedback indicating that their thoughts on the policy were morally based or were based on pragmatism/tradition. The results revealed a stronger correlation between attitudes and behavioral intentions for the participants who perceived a moral basis to their attitudes compared to the participants who perceived a rational basis for their attitudes. Further, participants who perceived their attitudes as morally based altered their attitudes less in response to a persuasive message than those who perceived an equally important but non-moral basis for their attitudes.

People tend to act in accordance with their attitudes (Briñol et al., 2019; Glock & Kleen, 2020). For instance, Schaible et al. (2021) examined how police officer attitudes influenced the likelihood that they would refer an offender to a diversion program. Schaible et al. (2021) recruited 118 police officers during a diversion program training session to complete a survey assessing their feelings of optimism/pessimism towards offenders, their perceptions of offenders' personal culpability for their criminal behavior,

and their willingness to divert offenders. The officers who felt optimistic about the offenders' abilities to rehabilitate were 33.5 percent more likely to recommend diversion than officers who felt more negatively about offender rehabilitation. More importantly, the officers who viewed the offender's behavior as resulting from structural circumstances rather than a personal failing were more than twice as likely to make a referral. Police officer attitudes thus influenced how they treated people with criminal histories (Schaible et al., 2021). Notably, Schaible et al. (2021) found that the officers who viewed the offender's behavior as resulting from internal, personal failings were half as likely to refer the offender to a diversion program, choosing instead to arrest the offender and track them through the criminal justice process. When people act to avoid or punish members of those prejudiced groups (e.g., by refusing to provide housing for people with criminal convictions), they activate the behavioral component of attitudes by engaging in discrimination (Payne et al., 2017; Wittenbrink et al., 2019). Such attitudes can contribute to behavior even when a person is unaware that they hold a particular attitude.

Dual process models of cognition assume that different kinds of processes (i.e., automatic vs controlled) contribute to human behavior (Frieze et al., 2009). Controlled processes are based on higher-order, deliberate reasoning that influences behavior in a slow, effortful, and intentional manner (Frieze et al., 2009). Automatic processes, on the other hand, operate based on effortless, unintentional associations (Frieze et al., 2009). Attitudes made up of deliberately maintained conscious evaluations are defined as cognitively based explicit attitudes, while affectively based implicit attitudes are automatic evaluations that predict reflexive and spontaneous behavior without any

conscious awareness (Greenwald & Banaji, 1995). Notably, people can hold contrasting explicit and implicit attitudes. In one experiment, Rydell et al. (2008) presented undergraduate participants with a series of trials in which a negatively or positively valenced subliminal prime preceded a description of a target person described as having performed a specific behavior. The valence of the behavior was always opposite that of the subliminal prime. For example, a description of the target person performing a positive behavior would follow a negative subliminal prime (e.g., “ugly”). This manipulation successfully produced contrasting implicit and explicit attitudes (e.g., a negative implicit attitude but a positive explicit attitude) before the participants read the target person’s opinion about a controversial issue. Ultimately, the discrepancy between the participants’ implicit and explicit attitudes created cognitive dissonance, which increased the amount of information the participants were able to process. The greater the discrepancy between the implicit and explicit attitudes, the greater the amount of information that the participants processed about the objects. This moderator effect explained why participants paid greater attention to the quality of the target’s opinions when the valence of the primes was inconsistent with the valence of the behaviors.

Given that people can simultaneously hold contrasting implicit and explicit attitudes, and that both implicit and explicit attitudes individually and collectively drive behavior, recent work has explored how and when different kinds of attitudes influence different kinds of behaviors. Because controlled processes require so much cognitive effort, explicit attitudes only guide behavior when people possess the opportunity and motivation to engage in the effortful processing. When lacking the opportunity and motivation for controlled processing, implicit attitudes will more actively guide behavior

(Friese et al., 2009). Thus, the more controlled the behavior, the greater the role that explicit attitudes play in predicting that behavior (Briñol et al., 2019; Glock & Kleen, 2020).

Whether behavior reflects the underlying attitude ultimately depends on the availability of processing capacity and motivation (Wittenbrink et al., 2019). In a clever experiment examining attitudes towards people with AIDS, Neumann et al. (2003) showed that implicit attitudes influence automatic behavioral tendencies while explicit attitudes influence deliberate behaviors. The researchers assessed participants' attitudes towards people with AIDS using both an Implicit Association Test (IAT) and an explicit attitude measure. Participants then indicated their willingness to interact with people with AIDS and completed a computerized attitude task where researchers measured the speed with which a computer mouse was either pulled towards or pushed away from the body in response to images of people with AIDS. The results showed that explicit attitudes towards people with AIDS were related to the participants' deliberate behaviors but not their automatic behavioral tendencies. Conversely, the participants' scores on the IAT predicted their automatic avoidance tendencies but not their deliberate behavioral intentions.

Because limited processing capacity influences the ease with which an individual can access (i.e., bring to mind) an attitude, Rocklage and Fazio (2018) explored the extent to which attitude accessibility influences behavior. In addition to being a primary indicator of attitude strength, attitude accessibility predicts where people choose to direct their attention, how people process information relating to an attitude object, and their ultimate judgments and behaviors. Rocklage and Fazio (2018) systematically examined

the relationship between attitude accessibility and attitude basis (emotionality vs cognition) across 10,000 attitudes, 280 participants, and 50 attitude objects. Participants viewed each attitude object before selecting the adjective (from a list of positive and negative adjectives) that best described their evaluation of the object. Participants then saw the names of the previously rated attitude objects before indicating as quickly and accurately as possible whether they liked or disliked the object. They found that participants more easily accessed and responded to affectively based attitudes than cognitively based ones, particularly for positive evaluations. Supporting research showing that affectively based attitudes better predict behavior than other types of attitudes, this finding suggests that emotional reactions provide particularly useful information regarding one's evaluation of a stimuli, partly because processing emotionality requires less conscious awareness than processing cognitive information.

It is certainly easier for researchers to understand how explicit attitudes contribute to behaviors because measures of explicit attitudes typically ask people to self-report their evaluations before researchers measure their behavioral intentions or actual behaviors. However, these explicit measures are understandably limited by a person's knowledge of their own attitudes and their willingness to report their socially undesirable explicit attitudes (Frieze et al., 2009; Glock & Kleen, 2020). Measuring implicit attitudes is trickier because implicit attitudes fall outside of conscious awareness. Researchers cannot ask participants to report attitudes that they do not know they hold. Instead, implicit measures examine attitudes indirectly (Frieze et al., 2009; Greenwald & Banaji, 1995). For instance, many implicit tests focus on the automatic nature of implicit

attitudes and commonly track reaction times so that people are unaware that their attitudes are being assessed (Glock & Kleen, 2020).

Critics of such tests note that implicit bias tests only weakly predict behavior (Payne et al., 2017). However, a literature review examining variables that moderate the predictive validity of implicit measures on behavior found two primary determinates of moderation (Friese et al., 2009). Implicit measures better predict behaviors influenced by variables related to cognitive control (e.g., cognitive capacity, processing time, and working memory capacity) and reliance on automatic processes (e.g., mood, uncertainty, and habituation). For instance, implicit measures are better predictors of behavior when an individual operates with impaired cognitive capacity as compared to full cognitive capacity (Friese et al., 2009). Hofmann et al. (2008) measured explicit attitudes using the Blatant and Subtle Prejudice Scale and implicit attitudes with a race IAT among college students and found that while explicit attitude measures failed to predict participant behavior in a conversation with an African confederate, more positive implicit attitudes towards the African partner predicted greater visual contact and more illustrative gestures when the participants were cognitively busy than when they operated at full cognitive capacity. Additionally, implicit measures are better behavioral predictors when the behaviors are affectively (vs cognitively) based (Friese et al., 2009), perhaps because of the relative accessibility of affective attitudes (Rocklage & Fazio, 2018). Thus, attitudes instrumentally affect human judgments and behavior, often in ways that promote stereotypes, prejudice, and discrimination. Negative attitudes towards stigmatized groups (for example, ex-offenders and single parents) can lead to discrimination against those

stigmatized groups, even when the negative attitudes are held outside of conscious awareness.

## **CHAPTER 4: ATTITUDES TOWARDS EX-OFFENDER PARENTS**

### **4.1 Ex-Offender Attitudes**

Prior research highlights not only negative attitudes towards ex-offenders, but the consequences of those negative attitudes on ex-offenders' ability to successfully reenter the community. Criminal justice research shows that regardless of the seriousness of the crime (e.g., violent murder or minor drug offense), people view offenders and ex-offenders as members of a deviant sub-class, who as a group are generally dangerous, dishonest, and disreputable (Denver et al., 2017; Hirschfield & Piquero, 2010; LeBel, 2012a). When asked to describe the concepts and personality traits they most associated with criminals, MacLin and Herrera (2006)'s participants believed that criminals were generally sociable, vindictive, introverted, angry, and antisocial. Further, the word "bad" was one of the most common associates of the word "criminal."

Rade et al. (2016) conducted a meta-analysis of public attitudes towards ex-offenders to examine the prevalence and significant moderators of negative attitudes. The meta-analysis included 19 studies with at least one outcome variable examining attitudes towards reentering ex-offenders (representing 73 unique effect sizes and 9,355 total participants) with data drawn from the general public. The results suggested that people in general (regardless of their age, race, education, religious beliefs, or household income) hold these negative attitudes towards ex-offenders (Rade et al., 2016).

To the extent that people hold negative attitudes towards ex-offenders and criminals in general, research suggests that people hold especially hostile attitudes

towards those convicted of violent crimes and sex offenses (Denver et al., 2017; Rade et al., 2016; Willis et al., 2013). Denver et al. (2017, p. 675) provided a nationwide sample of U.S. adults with a description of an ex-offender job applicant and asked participants whether they would support the employer's decision to deny the applicant a job "solely on the basis of his criminal record." Participants showed significantly more support for denying employment for those applicants with a violent conviction compared to a nonviolent drug or property offense conviction, even after controlling for the type of position and time since release. In addition, this "mark of violence" meant that participants mistakenly perceived those with violent offenses as being far more likely to recidivate than those with nonviolent drug or property offenses (Denver et al., 2017, p. 671). In fact, the reality is exactly the opposite (Alper & Durose, 2018). The Department of Justice examined the adult recidivism rates in the United States between 2005 and 2014 to find that, both cumulatively and in each year separately, released violent offenders were less likely to reoffend than released property offenders (Alper & Durose, 2018).

Turning specifically to those convicted of sexual offenses, Viki et al. (2012) explored the relationship between the dehumanization of sex offenders and the public's particularly negative attitudes towards these offenders. Across four studies, student and community participants completed a dehumanization measure examining the participants' perceptions of "pedophiles," "child molesters" or "rapists" before reporting their attitudes towards rehabilitating, socially excluding, and punishing sex offenders. The researchers found a positive correlation between dehumanization and desire for punishment. When participants dehumanized sex offenders, they recommended longer sentences and became



more likely to support the exclusion of sex offenders from society. Further, participants who dehumanized sex offenders were also less likely to support their rehabilitation.

In addition, common societal rhetoric about sex offenders promotes the essentialist beliefs that all sex offenders will continue to commit sex offenses and that treatment is unlikely to reduce that risk (Vel-Palumbo et al., 2019). Psychological essentialism is an implicit belief that some categories (e.g., birds, humans, food) have essential intrinsic properties that define what a category member is like and what that category member can become. To connect essentialist attitudes to criminal record stigma, Vel-Palumbo et al. (2019) conducted three studies examining the role of essentialist attitudes in the treatment of sex offenders compared to those who commit property crimes. Undergraduate participants rated crimes (e.g., fraud, sexual assault, homicide) on various essentialist traits (e.g., discreteness and immutability) and indicated their attitudes towards the use of restrictive management strategies (e.g., offender registries and occupational restrictions) for sex offenders. The researchers found that participants essentialized less crimes involving vandalism, fraud, and theft than crimes involving homicide, drug use, and sexual assault. This means that while participants may have recognized situational factors that might contribute to property crimes, participants implicitly believed that someone must be inherently criminal in order to commit violent, sexual, and drug-related crimes. Further, essentialism, but not crime severity, predicted support for restrictive and punitive policies like sex offender registration, notification, and residency requirements.

This finding aligns with prior research showing that essentialism predicts support for boundary-enhancing legislation like transgender “bathroom bills” and support for

same-gender classrooms (Roberts et al., 2017). Roberts et al. (2017) measured individual differences in essentialism before asking their sample of American adults to report their support or opposition to a bill requiring that people use the bathroom that matches their biological sex. Participants high in essentialism were more than twice as likely to support the transgender bathroom bill than those low in essentialism. A similar follow-up study measured the adult participants' gender-specific essentialist beliefs before gathering participants' support or opposition to same-gender classrooms. The results again revealed that participants high in essentialism were significantly more likely to support same-gender classrooms (Roberts et al., 2017).

Though informative, dehumanization and essentialism are far from the only individual characteristics predictive of attitudes towards ex-offenders. People who report left-leaning ideology and those who live in urban areas tend to report more favorable attitudes towards ex-offenders than their counterparts (Hirschfield & Piquero, 2010; Rade et al., 2016). However, prior contact with ex-offenders seems to be an especially strong predictor of more favorable attitudes towards ex-offenders (Hirschfield & Piquero, 2010; Rade et al., 2016). Hirschfield & Piquero (2010) conducted a random-digit telephone survey of over 2,000 people across four states and found that while age, race, political ideology, residential location, and trust in court judgments did predict attitudes towards ex-offenders, contact with ex-offenders was the strongest predictor of more favorable attitudes. Contact, and especially quality contact, can even soften negative attitudes towards sex offenders (Viki et al., 2012).

Labeling, and in particular the way the public describes crimes and the people who have committed them, can also be highly predictive of attitudes. Denver et al. (2017)

manipulated the use of crime- vs person-first language to examine the effect of the label on perceptions of recidivism risk. Crime-first language creates a group of people distinguished by its criminality while person-first language separates the criminality from the central identity of an individual (Denver et al., 2017). Denver et al. (2017) surveyed a nationally representative sample of American adults. The survey asked the participants the likelihood of recidivism for either “convicted criminals” (crime-first) or “people convicted of crimes” (person-first). Compared to using person-first language, using crime-first language significantly increased participants’ estimates of the likelihood that people convicted of violent crimes would recidivate. Imhoff & Jahnke (2017) similarly showed that participants expressed stronger punitive attitudes towards “pedophiles” (crime-first language) than towards “people with sexual interest in prepubescent children” (person-first language).

As described in the sections above, these well-documented negative attitudes make it more difficult for ex-offenders to access affordable housing (Clark, 2007), employment (Denver et al., 2017), and even reunification with their children (Wertheimer & Wiener, 2020). However, perceiving and anticipating this kind of stigma can also influence a person’s mental and physical health, as well as their ability to adjust to the community upon reentry and their general well-being (LeBel, 2012b; McWilliams & Hunter, 2021; Moore et al., 2016). For example, LeBel (2012b) conducted a series of interviews to assess how formerly incarcerated people perceived ex-offender stigma as well the effects of perceiving that stigma. The formerly incarcerated respondents did believe that society stigmatizes formerly incarcerated people, and perceiving that stigma predicted the likelihood of having multiple parole violations and weaker social bonds

with family and friends. McWilliams and Hunter (2012) further examined the relationship between perceived and internalized stigma, criminal record discrimination, and quality of life in an online survey of ex-offenders. The survey measured the extent to which participants perceived stigma and criminal record discrimination, their general life satisfaction, and the extent to which the ex-offenders used secrecy (i.e., hiding their criminal record) and withdrawal (i.e., disengaging from society) strategies to cope with the effects of their criminal history. Not only did participants perceive society's negative attitudes towards their criminal record, but this perceived stigma impacted their use of healthy coping mechanisms and their overall quality of life. The ex-offenders who perceived criminal record discrimination reported using coping methods of secrecy and withdrawal to avoid experiencing the stigma. These coping mechanisms, particularly secrecy, appear to have diminished the participants' reported quality of life.

#### **4.2 Single Parent Attitudes**

Wertheimer and Wiener (2020) found that when people hold more than one stigmatized identity (LeBel, 2012b), it can augment the effects of negative attitudes towards ex-offenders who are also single parents. Discrimination against single parents in the housing market may reflect explicit and implicit negative attitudes towards single parents. Though the Fair Housing Act prohibits discrimination on the basis of family status, research nonetheless suggests that people tend to view single parents in a hostile light. For example, some "myths" about single-parent families include the perceptions that single parents are irresponsible, unmotivated, and unable to properly discipline their children (Kim, 2000).

Much of the research documenting negative attitudes towards single parents occurred in the 1980s and 1990s. Bryan et al. (1986) conducted one of the first examinations of societal beliefs about different types of family structures. Undergraduate participants read a paragraph describing a married, remarried, divorced, widowed, or never married adult with a child. The participants perceived never-married parents less positively than all other measured groups. In particular, participants perceived never-married single parents more negatively than married parents on measures of parental satisfaction, stability, and personal characteristics. Further, participants rated never-married single parents more negatively than all other parental groups on measures of social evaluation, personal character, and stability. In a similar study, undergraduate participants rated married, divorced, step-, and never-married parents on 26 characteristics (e.g., caring, impatient, bad role model for children, not family-oriented, had a happy childhood). The participants rated never-married parents as more likely than the other parents to have poor family relations and parenting skills (Bennett & Jamieson, 1999). Rhodes and Johnson (2000) additionally found that, when asked open-ended questions about their perceptions of different stigmatized groups (e.g., people of color, women, and single parents), graduate student social workers could identify strengths associated with people of color and women. However, they failed to identify any strengths associated with single parents (the majority of whom are women and people of color).

Though this research nearly all occurred in the late 1990s, Usdansky (2009) suggests that attitudes towards single parents remained relatively stable throughout the 20<sup>th</sup> century. Usdansky (2009) coded and analyzed depictions of different family

structures in popular American magazines ( $N = 474$ ) and social science journals ( $N = 202$ ) from 1900 to 1998. This analysis revealed that 64 percent of magazines and 60 percent of scholarly journal articles portrayed never-married single parents as “harmful to individuals, institutions, or society (p. 214).” The number of both divorced and single-parent households increased dramatically throughout the 20<sup>th</sup> century. Yet while depictions of divorce became less critical over the course of the century, Usdansky (2009) found no change in the depiction of never-married single parents in the same time frame. In fact, these sources depicted never-married single parents as negatively at the end of the century as at the beginning of it.

To better understand the factors that influence current negative attitudes towards single parents, Hakovirta et al. (2021) used data from the 2012 International Social Survey Program, a cross-nationally collaborative survey, to compare cultural differences in attitudes towards single parents. The dataset included responses from more than 25,000 individuals who were at least 15 years old from 22 different countries. Men, couples with children, religious people, right-wing voters, older people, and those with higher educational attainment were less likely than their counterparts to think that single parents can raise children as well as parents in two parent households. Notably, over 40 percent of the U.S. respondents felt that single parents could not raise children as well as two parents together.

Despite these negative attitudes, Dermott and Pomati (2016) suggest that single parents provide for their children as well as couple parents. Contesting the cultural perception that single parents are “deficient parents,” Dermott and Pomati (2016) examined data from the United Kingdom’s 2012 Poverty and Social Exclusion survey.

The researchers analyzed data from more than 2,000 couple parents and 373 single parents who were living with a child aged 16 or younger. When comparing the responses of the couple parents to the single parents, the researchers found few differences in the parenting behaviors in each type of household. Both single and couple parents reported similar rates of eating dinner with their children, helping children with their homework, and playing games with their children. On measures of economizing behaviors, single parents were more likely than couple parents to cut back on their own expenditures to provide for their children when faced with financial difficulties. If replicated in other Western countries, these data from the U.K. could go a long way toward challenging the negative attitudes that people hold towards single parents generally, as well as single mothers and single fathers specifically.

Decades of research has documented negative attitudes towards single mothers. For instance, the graduate student participants surveyed by Ganong and Coleman (1995) stereotyped married mothers with nearly all positive characteristics (e.g., forgiving, protective, and warm) but never-married single mothers with nearly all negative ones (e.g., unpleasant, bad at childrearing, and failures in marriage). More recently, a Pew Research poll found that nearly 70 percent of Americans believed that society suffers when single women raise children on their own (Pew Research Center, 2010).

Though the public holds negative attitudes towards both single fathers and single mothers, research suggests that attitudes towards single mothers might be more negative than towards their male counterparts. For instance, DeJean et al. (2012) experimentally tested the public's attitudes towards single mothers and single fathers. Over 1300 community participants read a vignette describing a single mother or single father before

completing a series of questionnaires assessing their attitudes towards single parents. The participants perceived single mothers as less responsible, less moral, less fortunate, and less of a good parent than single fathers.

Haire and McGeorge (2012) further explored specifically negative attitudes towards single mothers compared to single fathers. Community participants read a vignette describing a never-married custodial single mother or father solving a problem related to parenting. The participants then completed a survey assessing their beliefs (including their specific negative attitudes) about single mothers or fathers. While participants ascribed situational explanations to their negative attitudes regarding single fathers, they assigned personal attributions to their negative attitudes regarding single mothers. For instance, participants described single mothers as neglectful, irresponsible, immature, promiscuous, insecure, and pessimistic about the future. Alternatively, they described single fathers as having difficulty finding childcare and finding another partner.

As with ex-offenders, single mothers report experiencing social stigma and reduced social status on account of their single parenthood (Caragata, 2009). Caragata (2009) analyzed longitudinal data involving interviews with over 100 single mothers on social assistance in Canada about their experiences as single mothers. The women reported feeling that the welfare workers questioned their parenting abilities, morality, judgment, honesty, and overall worth. Some women internalized this stigma, questioning their own self-worth and experiencing feelings of hopelessness and despair. Single mothers in the U.S. report similar experiences. When NPR's "Talk of the Nation" radio segment described the results of the Pew Research Center (2010) poll finding that most Americans opposed single motherhood, single mothers called in to report being unfairly



excluded from social events and feeling ostracized from their communities (Neal Conan, 2011).

That the public holds these negative attitudes towards single mothers is concerning, as single mothers make up the vast majority (roughly 80%) of single custodial parents and incarcerated parents (Casey & Maldonado, 2012; Dermott & Pomati, 2016; Maruschak et al., 2016). The Department of Justice recently reported that 58 percent of female and 47 percent of male inmates in both state and federal prisons were parents of at least one minor child (Maruschak et al., 2016). Most of those mothers reported being the sole caretakers of their children (Mancini et al., 2016). This means that, in addition to enduring negative attitudes related to their ex-offender status, most ex-offender women must also endure negative attitudes related to their status as single parents and single mothers.

Even though negative attitudes towards single parents disproportionately affect single mothers, single fathers still face hostile attitudes related to their parenting status. For instance, Goldscheider and Kaufman (2006) compared attitudes towards single mothers and single fathers by asking participants if they felt it was “all right” for a man to have a child without being married. A clear majority of male (55 percent) and female (57 percent) respondents reported that it is “not all right” for a man to have a child without being married. In fact, both men and women found it more acceptable for women to become single parents than men.

More recently, Wertheimer and Wiener (2020) randomly assigned MTurk participants to read a vignette about a single mother or father with (or without) a criminal history and/or history of substance abuse. The participants then completed a social

distance scale and indicated the extent to which they believed the parent should, would, and deserved to regain custody of his or her minor child. Participants rated fathers with an offense as less deserving of and likely to regain custody than mothers with an offense (Wertheimer & Wiener, 2020). Additional participants in a follow up study read the same vignettes with the addition of parental fitness information indicating that a mental health professional deemed the parent fit or unfit to regain custody. A positive evaluation elevated scores more on the custody determination for single mothers without an offense than for single fathers without an offense. This finding suggests that people view single fathers without criminal histories as less deserving of custody than non-offending single mothers, even after receiving a positive parental fitness evaluation (Wertheimer & Wiener, 2020).

To better understand the stereotypes related to fathering, Troilo and Coleman (2008) examined college students' attitudes towards seven different types of fathers (e.g., married, divorced, and never married) using an open response item-generation measure, an adjective checklist, and a rating scale procedure. Few participants perceived single fathers as good parents. Participants further viewed never-married single fathers more negatively than all other types of fathers on nearly all of the parenting traits studied. Participants also perceived this group of fathers as having more negative personal characteristics than any other group. These results replicated previous findings that people consider never-married single fathers to be impatient, irresponsible, selfish, immoral, unhappy, and unstable (Bennett & Jamieson, 1999).

However, more recent research has documented a possible shift in attitudes towards holding fathers in "high positive regard" (Haire & McGeorge, 2012). Valiquette-

Tessier et al. (2016) conducted a systematic review of research on stereotyped attitudes related to parenting status published between 2003 and 2013 in order to determine whether family structure constitutes a cue for stereotyping. Though married parents continue to be the most highly evaluated type of caretaker, divorced and never-married single fathers were stereotyped more positively than their female counterparts. The researchers theorized that these positive evaluations of single fathers arose from the view that these fathers have stepped up to fulfil a role that they normally should not have to fill. The finding that single mothers were stereotyped as having failed at their primary responsibility of raising children in an intact family supports this theory (Valiquette-Tessier et al., 2016).

Ultimately, the unique negative attitudes towards ex-offenders and single parents may compound when one person holds both the identities of “ex-offender” and “single parent” (and perhaps also “single mother or “single father”). Negative attitudes towards prospective rental applicants holding these identities may result in housing discrimination in violation of the Fair Housing Act. Even though the FHA allows landlords to discriminate based on an applicant’s prior criminal history, it prohibits them from discriminating because of gender or family status. Prior research documents the explicit housing discrimination against ex-offender applicants based on the perception that ex-offenders are dangerous, cold, and incompetent (Berry & Wiener, 2020; Hirschfield & Piquero, 2010). However, discrimination against single parents may operate more subtly, particularly if the impermissible family status discrimination hides behind permissible ex-offender discrimination. It is therefore necessary to address the influence of both implicit

and explicit attitudes towards ex-offender parents to reduce discrimination and promote their successful reentry.

## **CHAPTER 5: CURRENT RESEARCH**

This dissertation study consisted of two experiments that examined the effects of negative attitudes towards ex-offender parents on those parents' ability to access housing. Experiment 1 was an experimental audit study which collected data in response to inquiries from alleged single parent ex-offender rental applicants. Experiment 1 sought to provide real world evidence of current rates of housing discrimination because of criminal history and family status in the United States. Experiment 2 expanded on the findings of Experiment 1 by exploring how attitudes influence hypothetical housing decisions. Experiment 2 measured participants' implicit and explicit attitudes towards ex-offenders and single parents and then asked them whether they would rent to an applicant with children and/or with a criminal history. Together, both experiments explored the process by which implicit and explicit attitudes influence housing discrimination against ex-offender parents.

## **CHAPTER 6: EXPERIMENT 1**

Experiment 1 was an experimental audit study of housing providers in response to inquiries from alleged single parent and/or ex-offender rental applicants. Researchers commonly employ audit studies to measure actual experiences of housing discrimination based on race (Hanson et al., 2011), gender (Evans et al., 2019), sexual orientation (Murchie & Pang, 2018), family status (Lauster & Easterbrook, 2011), and criminal history (Evans & Porter, 2015). However, no prior audit study has explored discrimination based on both family status and criminal history. Therefore, Experiment 1

assessed the rates of both legal ex-offender housing discrimination and illegal family status housing discrimination in the U.S., with a particular emphasis on the effect that having both children and a criminal record has on access to housing.

### **6.1 Experiment 1 Hypotheses**

Experiment 1 tested the following hypotheses:

**Hypothesis 1.** Because the FHA permits discrimination on the basis of criminal history but not family status, housing providers will more strongly discriminate against applicants with criminal histories than applicants with children. However, both types of applicants will have more difficulty finding housing than non-offender applicants without children.

**Hypothesis 2.** There will be an interaction between criminal background and family status. Because ex-offender parents hold two stigmatized identities (as both ex-offenders and single parents), landlords will be significantly less willing to rent to ex-offenders and significantly more willing to rent to non-offenders without children compared to applicants who only hold one stigmatized identity.

### **6.2 Experiment 1 Methods**

#### ***Participants***

I contacted 1,000 providers of single housing units posted on apartment search websites (e.g., apartments.com) in the 20 most populated U.S. cities to ostensibly inquire about an apartment that is listed as available for rent (World Population Review, 2020). Table 6.1 displays the 20 cities chosen for this study, the number of housing providers who were contacted in each city, and the number of returned responses. An a priori power analysis showed that this study required 988 apartment rental emails to detect an

odds ratio effect size of 1.30 at 95% power, as calculated using the G\*Power program (Faul et al., 2007), for a logistic regression predicting a positive return response vs. a no return or negative return response. Table 6.1 shows that, in total, I sent out 1000 inquiries to achieve this level of power.

**Table 6.1**

*Cities and Providers Contacted*

| <b>City</b>  | <b>Number of Providers Contacted</b> | <b>Number of Responses</b> |
|--------------|--------------------------------------|----------------------------|
| Austin       | 51                                   | 42 (82.4%)                 |
| Charlotte    | 50                                   | 37 (74%)                   |
| Chicago      | 50                                   | 36 (72%)                   |
| Columbus     | 50                                   | 39 (78%)                   |
| Dallas       | 50                                   | 33 (66%)                   |
| Denver       | 50                                   | 41 (82%)                   |
| Fort Worth   | 50                                   | 36 (72%)                   |
| Houston      | 50                                   | 38 (76%)                   |
| Indianapolis | 50                                   | 38 (76%)                   |
| Jacksonville | 50                                   | 39 (78%)                   |
| Los Angeles  | 49                                   | 28 (57.1%)                 |
| New York     | 50                                   | 18 (36%)                   |
| Philadelphia | 50                                   | 33 (66%)                   |
| Phoenix      | 50                                   | 36 (72%)                   |
| San Antonio  | 50                                   | 40 (80%)                   |

|               |              |                  |
|---------------|--------------|------------------|
| San Diego     | 50           | 24 (48%)         |
| San Francisco | 50           | 30 (60%)         |
| San Jose      | 46           | 30 (65%)         |
| Seattle       | 54           | 48 (88.9%)       |
| Washington DC | 50           | 34 (68%)         |
| <b>Total</b>  | <b>1,000</b> | <b>700 (70%)</b> |

Finally, it is worth noting that by nature, an audit study requires that the housing providers not know they are part of an experiment. Thus, the housing provider participants were not able to give informed consent to participate in this study. However, that is standard practice for these kinds of designs (see Evans & Porter, 2015; Hanson et al., 2011; Lauster & Easterbrook, 2011). Subject recruitment and participation in this study received full review and approval from the University of Nebraska/Lincoln Institutional Review Board, including approval of a waiver for informed consent.

### ***Materials***

**Manipulated Factors.** Using a false Gmail account (samanthaclark147@gmail.com), I posed as a fictitious female, Samantha Clark, and appeared as an interested applicant with variations in criminal history and family status. “Samantha” sent emails to the providers of single housing units in cities across the U.S. to ostensibly inquire about an apartment that was listed as available for rent.

The 2 (offense status) by 3 (family status) manipulation occurred in the body of the email, where “Samantha” explained that she either had a prior felony theft conviction (offense condition) or no criminal history (no offense condition). I chose theft as the

target offense because it is a non-violent felony offense that could be relevant to the rental decision but would not trigger the unique rules and incentives related to housing people convicted of sex or drug crimes (Kanovsky, 2016). Samantha then stated that she lives with her two-year-old daughter (parent condition), her older sister (adult sibling condition), or alone (single adult condition). Though the research is mixed on whether or how gender discrimination operates on the housing market (Ahmed & Hammarstedt, 2008; Evans et al., 2019; Evans & Porter, 2015, Massey & Lundy, 2001), this field study held constant the gender of the applicant (female) because most single parents and formerly incarcerated parents are women (Casey & Maldonado, 2012; Dermott & Pomati, 2016; Maruschak et al., 2016). Holding gender constant allowed a reduction in the required sample size without significantly reducing the generalizability of the results. Finally, the email also held constant the age (25) and monthly income (\$2,270) of the potential applicant.

Random assignment determined the order in which the participants (landlords and property) managers in each city were contacted, and participants (the landlords and property managers) were randomly assigned to conditions within each city. See Appendix A for the text of the emails.

**Landlord Response.** At the end of the email, “Samantha” asked if she could apply for the apartment and, if so, if the landlord or property manager could send along an application. The landlord’s response constituted the primary outcome variable for Experiment 1. Though the question was written to elicit a dichotomous yes/no response, the responses from the housing providers were ultimately much more varied. Responses were coded into 6 categories:



- 1) **No** ( $N = 48$ , 4.8%). These responses clearly indicated that the applicant could not apply or that, if the applicant did apply, their application would definitely be rejected.
- 2) **Yes** ( $N = 76$ , 7.6%). These responses clearly indicated that the applicant could apply, with no caveats or additional information about disqualifying criteria.
- 3) **Neutral** ( $N = 419$ , 41.9%). These responses could not be coded as yes or no because they did not directly answer the applicant's inquiry. Responses in this category included standard form emails, requests for additional information, advertisements, and messages from AI leasing agents.
- 4) **Discourage** ( $N = 152$ , 15.2%). These responses acknowledged income requirements, an applicant background check or credit score, or some other reason why the applicant might not be approved. Responses were included in this category if they mentioned any factors that might disqualify the applicant (including in any email attachments), regardless of whether the leasing agent told (or even encouraged) the applicant to apply.
- 5) **Yes, But Caveat** ( $N = 5$ , 0.5%). These responses explicitly encouraged the applicant to apply because there would be no negative consequences for submitting an application (e.g., applicant would receive a complete refund for any fees paid). Responses were also included in this category if the leasing agent indicated that they had no apartments available but offered to put the applicant on the waitlist.

- 6) **No Response** ( $N = 300, 30\%$ ). A housing provider was considered nonresponsive if the applicant received no communication of any kind from the housing provider for two weeks (14 days) after the initial email inquiry.

To establish interrater reliability, two graduate research assistants independently coded a random sample of 60 responses using this coding scheme. Table 6.2 displays the interrater agreement and kappa measure of reliability between the primary researcher and the two graduate research assistants, showing moderate to substantial agreement between the three independent coders. Averaging across the tests of reliability produced an overall percent of agreement equal to 72.7%.

**Table 6.2**

*Interrater Reliability*

| <b>Interrater Pair</b> | <b>Percent Agreement</b> | <b>Kappa</b> | <b><i>p</i></b> |
|------------------------|--------------------------|--------------|-----------------|
| Raters 1 and 2         | 80%                      | 0.65         | < .001          |
| Raters 1 and 3         | 70%                      | 0.53         | < .001          |
| Raters 2 and 3         | 68.3%                    | 0.45         | < .001          |

**Lease Application.** For the participant housing providers who responded in any way other than “neutral,” another primary outcome variable was whether the response included an application to apply for the apartment. This dichotomous yes/no variable indicated whether the response included an application as an attachment or a link or provided instructions to apply on the website (Yes:  $N = 425, 66.9\%$ ) or no information about the lease application (No:  $N = 210, 33.1\%$ ).

**Response Length and Time.** Even though most housing audit studies examining ex-offender discrimination make phone call inquiries to the housing providers, which allows the caller to more explicitly push the provider to give a yes or no response (Evans et al., 2019), many housing audit studies have successfully used email to elicit a yes or no response (Hanson et al., 2011; Lauster & Easterbrook, 2011; Murchie & Pang, 2018). The use of email rather than phone provides greater flexibility and allows for the collection of additional kinds of data (Lauster & Easterbrook, 2011). For instance, response times and lengths were recorded to allow analyses of more subtle forms of disparate treatment (Hanson et al., 2011).

Response time was the number of days between the initial inquiry and the response ( $M = 1.96$ ,  $S.D. = 3.97$ , skewness = 7.39, kurtosis = 74.30). Because the skewness and kurtosis of the initial response time variable fell outside normal range, I created a corrected response length variable. I first Winsorized the variable by recoding all values greater than 14 (representing the few housing providers who did ultimately respond outside the typical 14-day response window) to equal 14 and then took the  $\log_{10}$  of 1 plus<sup>3</sup> the new Winsorized value. This log-transformed Winsorized variable conformed to typical assumptions of normality ( $M = 0.35$ ,  $S.D. = 0.26$ , skewness = 0.98, kurtosis = 1.5) and was used in all analyses involving response time described below.

Response length was the number of words in the email response ( $M = 116.52$ ,  $S.D. = 96.81$ , skewness = 2.26, kurtosis = 7.53). Because the skewness and kurtosis of the initial response length variable also fell outside normal range, I created a new response time variable by taking the square root of each response length value. This square-root

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<sup>3</sup> A value of 1 was added to each Winsorized value prior to taking the  $\log_{10}$  because some housing providers responded in less than 1 day, and a  $\log_{10}$  cannot operate on a value of 0.

response length variable conformed to typical assumptions of normality ( $M = 10.06$ ,  $S.D. = 3.92$ , skewness = 0.99, kurtosis = 1.32) and was used in all analyses involving response length described below.

**Apartment Characteristics.** The apartment's location (city), average number of bedrooms available ( $M = 1.44$ ,  $S.D. = 0.55$ ), average rental price per month ( $M = 2,608.78$ ,  $S.D. = 2,155.68$ ), and provider type (large housing complex vs single or limited units) were recorded to use as statistical controls in the analyses.

### 6.3 Experiment 1 Results

#### *Overview*

Experiment 1 examined real world rates of housing discrimination on the basis of criminal history and family status in the United States. To test Hypothesis 1, a series of logistic and multinomial regressions first tested the effects of family status and offense status on the housing provider's response, which was recoded into four different response variables:

1. **Response.** A dichotomous response variable: 0 = no response ( $N = 300$ , 30%), 1 = any kind response ( $N = 700$ , 70%).
2. **Response Valence.** A dichotomous response valence variable for only the inquiries that received a response: 0 = negative response ("no" or "discourage") ( $N = 200$ , 71.2%), 1 = positive response ("yes" or "yes but caveat") ( $N = 81$ , 28.8%).
3. **Collapsed Response (4 levels).** A collapsed response variable keeping only the primary response categories: 0 = "no," ( $N = 48$ , 8.3%) 1 = "discourage,"

( $N = 152$ , 26.4%) 2 = “yes” ( $N = 76$ , 13.2%), and 3 = “no response.” ( $N = 300$ , 52.1%).

4. **Application.** A dichotomous response variable for inquiries that received a rental application in response: 0 = no application received ( $N = 425$ , 66.9%), 1 = yes application received ( $N = 210$ , 33.1%).

A series of logistic regressions then tested the effect of family and offense status on the application variable. To test Hypothesis 2, a multivariate General Linear Model and follow up univariate Analyses of Variance (ANOVAs) examined whether family and offense status affected the measures of more subtle discrimination, response time and length.

The manipulated offense variable was coded so that 0 indicated no offense ( $N = 498$ , 49.8%) and 1 indicated the presence of an offense ( $N = 502$ , 50.2%). The manipulated family status variable was coded so that 0 indicated that the applicant lived alone ( $N = 328$ , 32.8%), 1 indicated that the applicant lived with her older sister ( $N = 338$ , 33.8%), and 2 indicated that the applicant lived with her young child ( $N = 334$ , 33.4%). For all the regression analyses reported below the “living alone condition” served as the reference condition. A third manipulated parent status variable created from the family status variable collapsed the “living alone or with a sister categories” to indicate simply whether the applicant was a parent or not (0 = no child, i.e., living alone or with an older sister ( $N = 666$ , 66.6%) or 1 = presence of child ( $N = 334$ , 33.4%)). The dichotomous predictor variables were dummy coded, and the three-level variable was “indicator” coded.

### *Analysis of Explicit Discrimination Variables*

A series of binary and multinomial logistic regression models tested the two manipulated factors (applicant offense status and family status) as predictors of the three response variables: the dichotomous response variable, the dichotomous response valence variable, and the collapsed response variable.

**Dichotomous response.** Table 6.3 displays the binary logistic regression using offense status and family status to predict the dichotomous yes/no response variable. The model for the regression included a three-level family status factor, a two-level offense status factor, and their interaction as predictors. Contrary to Hypothesis 1, neither factor significantly predicted the dichotomous response variable.

**Table 6.3**

*Binary Logistic Regression with Offense Status and Family Status Predicting Response (No Response vs. Response)*

| <b>Predictor</b>                  | <b>B</b> | <b>S.E.</b> | <b>Wald</b> | <b>df</b> | <b>p</b> | <b>Odds Ratio</b> |
|-----------------------------------|----------|-------------|-------------|-----------|----------|-------------------|
| Family Status                     | --       | --          | .32         | 2         | .852     | --                |
| Offense Status                    | -.21     | .25         | .70         | 1         | .403     | 0.82              |
| Family Status x<br>Offense Status | --       | --          | .00         | 2         | 1        | --                |
| Constant                          | 1.02     | .19         | 32.73       | 1         | < .001   | 2.77              |

A second analysis added provider type as a predictor to the model. Table 6.4 shows that only provider type significantly predicted the housing providers' response such that small single or limited unit providers were less likely to respond to a potential applicant than larger apartment complexes. The odds ratio shows that small units were

about one quarter as likely (Odds Ratio,  $O.R. = .26$ ) as larger complexes to respond the potential applicants.

**Table 6.4**

*Binary Logistic Regression with Offense Status, Family Status, and Provider Type Predicting Response (No Response vs. Response)*

| Predictor                      | B            | S.E.       | Wald         | df       | p                | Odds Ratio |
|--------------------------------|--------------|------------|--------------|----------|------------------|------------|
| Family Status                  | --           | --         | .42          | 2        | .810             | --         |
| Offense Status                 | -.19         | .25        | .55          | 1        | .457             | .83        |
| Family Status x Offense Status | --           | --         | .03          | 2        | .984             | --         |
| <b>Provider Type</b>           | <b>-1.34</b> | <b>.27</b> | <b>25.34</b> | <b>1</b> | <b>&lt; .001</b> | <b>.26</b> |
| Constant                       | 2.46         | .34        | 52.44        | 1        | < .001           | 11.65      |

A third analysis added the interactions of provider type with the applicant's offense status and family status as predictors to the model. Table 6.5 shows that this model produced significant main effects of provider type and family status, as well as an interaction between the two variables. Once again, small single or limited unit providers were less likely to respond to a potential applicant than larger apartment complexes ( $O.R. = .032$ ). Of greater interest, Table 6.5 also shows that applicants living with a small child were significantly less likely to receive a response than applicants living alone ( $O.R. = .047$ ). A two-way family status by provider type interaction qualified these main effects. Figure 6.1 and Table 6.6 show that single or limited unit housing providers were less likely to respond to applicants living alone or with a child than larger apartment complexes ( $O.R. = .044$ ). However, small and large housing providers were equally likely to respond to applicants living with an adult sibling.

**Table 6.5**

*Binary Logistic Regression with Offense Status, Family Status, Provider Type, and All Interactions Predicting Response (No Response vs. Response)*

| <b>Predictor</b>                               | <b>B</b>     | <b>S.E.</b> | <b>Wald</b>  | <b>df</b> | <b>p</b>        | <b>Odds Ratio</b> |
|--|--------------|-------------|--------------|-----------|-----------------|-------------------|
| <b>Family Status</b>                           | --           | --          | <b>9.87</b>  | <b>2</b>  | <b>.007</b>     | --                |
| Sister vs Alone                                | .51          | 1.59        | .10          | 1         | .748            | 1.66              |
| <b>Child vs Alone</b>                          | <b>-3.06</b> | <b>1.32</b> | <b>5.35</b>  | <b>1</b>  | <b>.021</b>     | <b>.047</b>       |
| Offense Status                                 | -2.34        | 1.31        | 3.18         | 1         | .074            | .10               |
| <b>Provider Type</b>                           | <b>-3.44</b> | <b>1.07</b> | <b>10.31</b> | <b>1</b>  | <b>&lt;.001</b> | <b>.03</b>        |
| Family Status x Offense Status                 | --           | --          | 2.02         | 2         | .364            | --                |
| Sister x Offense Status                        | -.09         | 1.87        | .002         | 1         | .963            | .916              |
| Child vs Offense Status                        | 1.95         | 1.70        | 1.32         | 1         | .251            | 7.06              |
| Provider Type x Offense Status                 | 2.03         | 1.23        | 2.74         | 1         | .098            | 7.63              |
| <b>Provider Type x Family Status</b>           | --           | --          | <b>10.14</b> | <b>2</b>  | <b>.006</b>     | --                |
| Provider Type x Sister                         | -.31         | 1.52        | .04          | 1         | .836            | .731              |
| <b>Provider Type x Child</b>                   | <b>2.97</b>  | <b>1.25</b> | <b>5.70</b>  | <b>1</b>  | <b>.017</b>     | <b>19.55</b>      |
| Family Status x Provider Type x Offense Status | --           | --          | 2.15         | 2         | .342            | --                |
| Sister x Provider Type x Offense Status        | .07          | 1.76        | .002         | 1         | .968            | 1.07              |



|  |       |      |       |   |        |        |
|--|-------|------|-------|---|--------|--------|
| Child x Provider<br>Type x Offense<br>Status | -1.87 | 1.59 | 1.39  | 1 | .239   | 1.54   |
| Constant                                     | 4.69  | 1.12 | 17.39 | 1 | < .001 | 108.41 |

**Table 6.6**

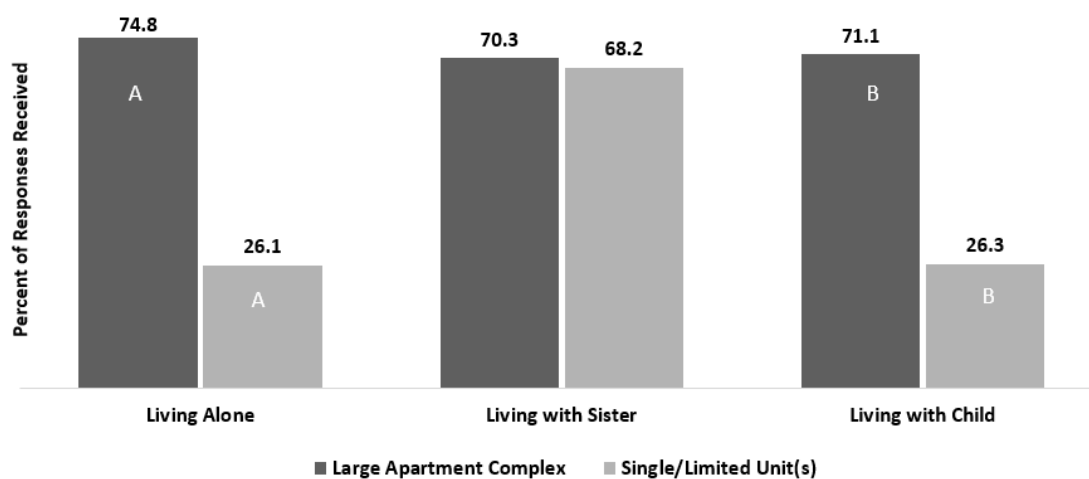
*Family Status by Housing Provider Type Interaction on Response (No Response vs. Response)*

| <b>Factors</b>                    | <b>B</b>     | <b>S.E.</b> | <b>Wald</b>  | <b>df</b> | <b>p</b>    | <b>Odds Ratios</b> |
|-----------------------------------|--------------|-------------|--------------|-----------|-------------|--------------------|
| Applicant Living Alone            |              |             |              |           |             |                    |
| Offense Status                    | -2.34        | 1.31        | 3.18         | 1         | .074        | .097               |
| <b>Provider Type</b>              | <b>-3.44</b> | <b>1.07</b> | <b>10.31</b> | <b>1</b>  | <b>.001</b> | <b>.032</b>        |
| Provider Type x<br>Offense Status | 2.03         | 1.23        | 2.74         | 1         | .098        | 7.63               |
| Constant                          | 4.69         | 1.12        | 17.39        | 1         | < .001      | 108.41             |
| Applicant Living with Sister      |              |             |              |           |             |                    |
| Offense Status                    | -.30         | 1.05        | .08          | 1         | .779        | .744               |
| Provider Type                     | -.155        | .63         | .06          | 1         | .804        | .856               |
| Provider Type x<br>Offense Status | .09          | .96         | .01          | 1         | .926        | 1.09               |
| Constant                          | 1.12         | .70         | 2.57         | 1         | .109        | 3.07               |

| Applicant Living with Child       |             |             |             |          |             |             |
|-----------------------------------|-------------|-------------|-------------|----------|-------------|-------------|
| Offense Status                    | -2.25       | 1.34        | 2.83        | 1        | .093        | .11         |
| <b>Provider Type</b>              | <b>3.13</b> | <b>1.08</b> | <b>8.45</b> | <b>1</b> | <b>.004</b> | <b>.044</b> |
| Provider Type x<br>Offense Status | 1.96        | 1.27        | 2.40        | 1        | .121        | 7.11        |
| Constant                          | 4.18        | 1.12        | 13.88       | 1        | < .001      | 65.15       |

**Figure 6.1**

*Interaction of family status and provider type on response (no response vs response).*



Note: Bars sharing letters are significantly different ( $p < .05$ )

A fourth analysis added response length and time as additional predictors to the model. Table 6.7 shows that neither of the manipulated factors, provider type, or response length or time predicted whether or not the provider responded to the applicant's inquiry. This model produced no significant results with or without the provider type interactions included in the model.

**Table 6.7**

*Binary Logistic Regression with Offense Status, Family Status, Provider Type, and All Interactions Predicting Response (No Response vs. Response) with Response Length and Time as Covariates*

| <b>Predictor</b>                                     | <b>B</b> | <b>S.E.</b> | <b>Wald</b> | <b>df</b> | <b>p</b> | <b>Odds Ratio</b> |
|--|----------|-------------|-------------|-----------|----------|-------------------|
| Family Status  | --       | --          | .000        | 2         | 1        | --                |
| Offense Status                                       | -.49     | 45,139.49   | .000        | 1         | 1        | .62               |
| Provider Type  | -.33     | 40,375.11   | .000        | 1         | 1        | .72               |
| Family Status x<br>Offense Status                    | --       | --          | .000        | 2         | 1        | --                |
| Provider Type x<br>Family Status                     | --       | --          | .000        | 2         | 1        | --                |
| Provider Type x<br>Offense Status                    | .34      | 44,116      | .000        | 1         | 1        | 1.41              |
| Provider Type x<br>Family Status x<br>Offense Status | --       | --          | .000        | 2         | 1        | --                |
| Response Time  | 1.42     | 4.84        | .09         | 1         | .769     | 4.15              |
| Response Length                                      | -.14     | .17         | .63         | 1         | .426     | .87               |

An additional binary logistic regression examined whether the dichotomous offense status and parent status (i.e., collapsing the two “no child” conditions compared to the “child” condition) variables predicted the dichotomous response variable. Table 6.8 shows that, once again, neither of the manipulated variables predicted whether or not the applicant would receive a response. Thus, partially supporting Hypothesis 1, only the applicant’s family status seemed to affect the housing providers’ overall response rate.

**Table 6.8**

*Binary Logistic Regression with Offense Status and Parent Status Predicting Response (No Response vs. Response)*

| <b>Predictor</b>               | <b>B</b> | <b>S.E.</b> | <b>Wald</b> | <b>df</b> | <b>p</b> | <b>Odds Ratio</b> |
|--------------------------------|----------|-------------|-------------|-----------|----------|-------------------|
| Parent Status                  | .10      | .20         | .25         | 1         | .620     | 1.11              |
| Offense Status                 | .20      | .24         | .68         | 1         | .410     | 1.22              |
| Parent Status x Offense Status | .01      | .29         | .00         | 1         | .983     | 1.01              |
| Constant                       | .68      | .16         | 17.42       | 1         | < .001   | 1.98              |

**Response valence.** Table 6.9 displays the binary logistic regression using offense status and family status to predict response valence. Only applicant offense status significantly predicted the response valence. Partially supporting Hypothesis 1, housing providers were less likely to respond positively (i.e., with a response indicating that the applicant could or should apply) when the applicant had an offense than when the applicant did not. More specifically, respondents were about one fourth less likely to support an application (O.R. = .22) when “Samantha” indicated that she had a prior offense record. Furthermore, adding parent status to model with offense status on response valence showed that, supporting Hypothesis 1, both the applicant’s disclosure of a prior offense and the existence of a child predicted the response valence. Table 6.10 and Figures 6.2 – 6.3 show that housing providers were again one fourth less likely to respond positively to applicants with a prior offense (Figure 6.2, O.R. = .25) and about half as likely to respond positively to applicants with a child (Figure 6.3, O.R. = .47), although the interaction of the two manipulated factors was not significant.

**Table 6.9**

*Binary Logistic Regression with Offense Status and Family Status Predicting Response Valence*

| <b>Predictor</b>               | <b>B</b>     | <b>S.E.</b> | <b>Wald</b> | <b>df</b> | <b>p</b>    | <b>Odds Ratio</b> |
|--------------------------------|--------------|-------------|-------------|-----------|-------------|-------------------|
| Family Status                  | --           | --          | 3.85        | 2         | .146        | --                |
| <b>Offense Status</b>          | <b>-1.53</b> | <b>.49</b>  | <b>9.76</b> | <b>1</b>  | <b>.002</b> | <b>.218</b>       |
| Family Status x Offense Status | --           | --          | 1.91        | 2         | .385        | --                |
| Constant                       | -.13         | .30         | .20         | 1         | .655        | .875              |

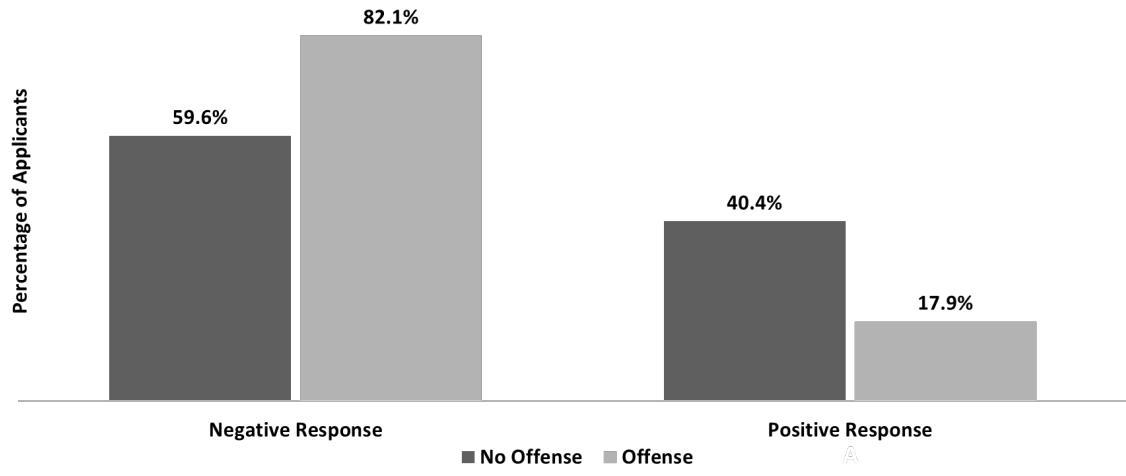
**Table 6.10**

*Binary Logistic Regression with Offense Status and Parent Status Predicting Response Valence*

| <b>Predictor</b>               | <b>B</b>     | <b>S.E.</b> | <b>Wald</b>  | <b>df</b> | <b>p</b>         | <b>Odds Ratio</b> |
|--------------------------------|--------------|-------------|--------------|-----------|------------------|-------------------|
| <b>Parent Status</b>           | <b>-.75</b>  | <b>.38</b>  | <b>3.85</b>  | <b>1</b>  | <b>.050</b>      | <b>.472</b>       |
| <b>Offense Status</b>          | <b>-1.40</b> | <b>.34</b>  | <b>16.72</b> | <b>1</b>  | <b>&lt; .001</b> | <b>.247</b>       |
| Parent Status x Offense Status | .79          | .59         | 1.79         | 1         | .181             | 2.22              |
| Constant                       | -.14         | .21         | .41          | 1         | .523             | .872              |

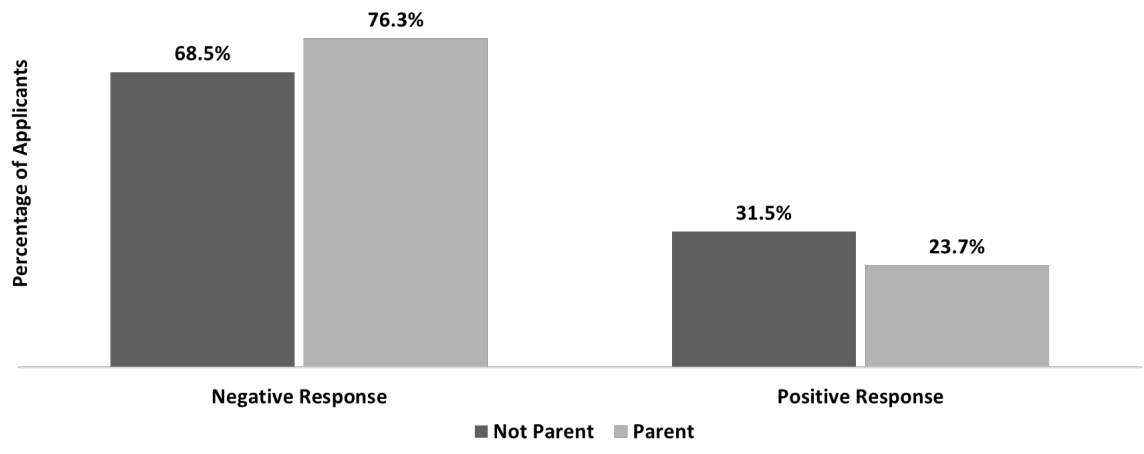
**Figure 6.2**

*Effect of offense status on response valence.*



**Figure 6.3**

*Effect of parent status on response valence.*



**Collapsed response.** A series of multinomial logistic regressions tested family status and offense status as predictors of the collapsed response type variable. First, two multinomial logistic regressions examined whether, first, family status and, second, offense status independently predicted housing provider response type. The overall model

using offense status as a predictor was significant,  $\chi^2(3) = 24.38, p < .001$ , but not the model using family status as a predictor,  $\chi^2(6) = 2.75, p = .840$ .

Combining both family status and offense status as predictors of housing provider response type produced an overall model that was not significant,  $\chi^2(6) = 2.55, p = 0.863$ , but did show a significant effect of offense status on housing provider response type ( $B = 1.41, p = .033$ ). Table 6.11 shows that an applicant without an offense was 6.20 times more likely to receive a “yes” response than a “no” response (95% CI for the odds ratio: 2.78 – 13.85), 2.85 times more likely to receive a “yes” response than a “discourage” response (95% CI for the odds ratio: 1.59 – 5.11), and 2.67 times more likely to get a “yes” response than to not receive a response at all (95% CI for the odds ratio: 0.63 – 1.39).

**Table 6.11**

*Multinomial Logistic Regression with Offense Status Predicting Response Type*

| <b>Response Comparison</b>   | <b>B</b>    | <b>S.E.</b> | <b>Wald</b>  | <b>df</b> | <b>p</b>         | <b>Odds Ratio</b> |
|------------------------------|-------------|-------------|--------------|-----------|------------------|-------------------|
| <b>“Yes” vs “No”</b>         | <b>1.83</b> | <b>.41</b>  | <b>19.85</b> | <b>1</b>  | <b>&lt; .001</b> | <b>6.20</b>       |
| <b>“Yes” vs “Discourage”</b> | <b>1.05</b> | <b>.30</b>  | <b>12.30</b> | <b>1</b>  | <b>&lt; .001</b> | <b>2.85</b>       |
| <b>“Yes” vs No Response</b>  | <b>.98</b>  | <b>.28</b>  | <b>12.72</b> | <b>1</b>  | <b>&lt; .001</b> | <b>2.67</b>       |

The same pattern of analyses with the 2-level parent status variable as a predictor instead of the 3-level family status variable still failed to produce a significant effect on housing provider response type,  $\chi^2(3) = 2.19, p = 0.534$ . The overall model containing both parent status and offense status, along with the parent status by offense status

interaction, also failed to reach significance ( $\chi^2(3) = 2.03, p = 0.568$ ). Thus, while Figures 6.2 and 6.3 show main effects of offense status and parental status on response valence, the analyses failed to find a significant interaction as Hypothesis 2 predicted.

**Application Sent.** Table 6.12 displays the binary logistic regression using offense status and family status to predict whether or not the housing provider sent a lease application to the applicant. Partially supporting Hypothesis 1, only applicant offense status significantly predicted the response valence such that responses from “Samantha” with an offense status were about one-third as likely to receive an application as compared to those without a prior offense (O.R. = .34). Figure 6.4 depicts the relationship graphically.

**Table 6.12**

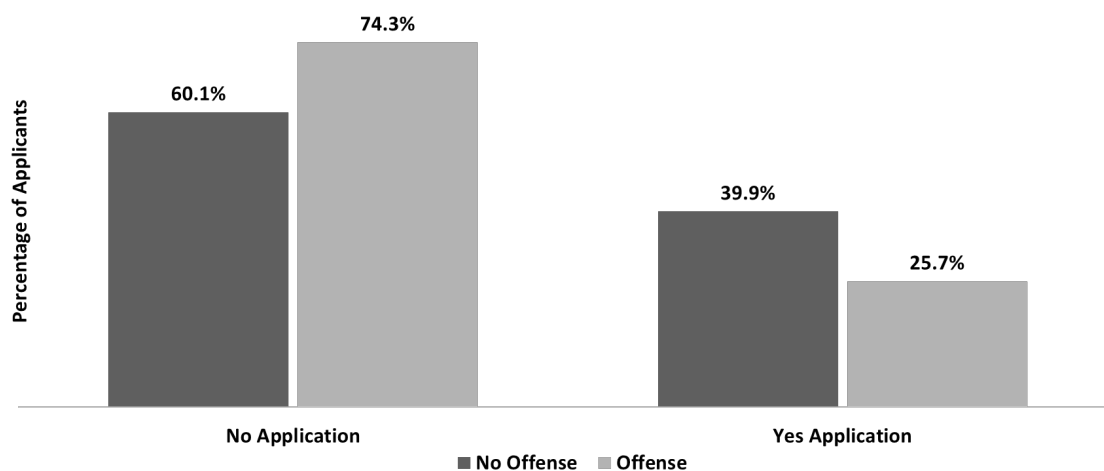
*Binary Logistic Regression with Offense Status and Family Status Predicting Application Sent*

| Predictor                      | B            | S.E.       | Wald         | df       | p                | Odds Ratio |
|--------------------------------|--------------|------------|--------------|----------|------------------|------------|
| Family Status                  | --           | --         | 2.24         | 2        | .326             | --         |
| <b>Offense Status</b>          | <b>-1.08</b> | <b>.30</b> | <b>12.70</b> | <b>1</b> | <b>&lt; .001</b> | <b>.34</b> |
| Family Status x Offense Status | --           | --         | 3.09         | 2        | .213             | --         |
| Constant                       | -.18         | .19        | .89          | 1        | .345             | .84        |



**Figure 6.4**

*Effect of offense status on application sent.*



A second regression replacing the 3-level family status variable with the 2-level parent status variable produced the same result. Table 6.13 shows that, once again, landlords were significantly less likely to provide an application to applicants with an offense than those with no criminal history. Contrary to Hypothesis 1, whether or not the applicant had a child did not affect whether the landlord sent an application.

**Table 6.13**

*Binary Logistic Regression with Offense Status and Parent Status Predicting Application Sent*

| Predictor                      | B           | S.E.       | Wald         | df       | p                | Odds Ratio |
|--------------------------------|-------------|------------|--------------|----------|------------------|------------|
| Parent Status                  | -.22        | .24        | .81          | 1        | .369             | .80        |
| <b>Offense Status</b>          | <b>-.78</b> | <b>.21</b> | <b>13.49</b> | <b>1</b> | <b>&lt; .001</b> | <b>.46</b> |
| Parent Status x Offense Status | .39         | .37        | 1.12         | 1        | .29              | 1.47       |
| Constant                       | -.34        | .14        | 6.14         | 1        | .013             | .71        |

### *Analysis of Subtle Discrimination Variables*

To test Hypothesis 2, a multivariate General Linear Model (GLM) and follow up univariate Analyses of Variance (ANOVAs) examined whether family and offense status affected the measures of more subtle discrimination, response time and length.

**Multivariate analyses.** A 3 (family status: living alone vs. living with sister vs. living with a child) x 2 (offense status: no prior criminal history vs. yes, prior criminal history) multivariate GLM tested the effects of family status and offense status on response length and response time with the apartment characteristics (average number of bedrooms, average rent, and provider type) included as covariates in the model. As shown in Table 6.14, this model did not produce multivariate effects of family status or offense status, nor did it produce a multivariate family status by offense status interaction. However, average rent amount and provider type did produce significant multivariate effects. Table 6.15 further shows that even without the covariates included in the model, family status and offense status did not produce any multivariate effects. Replacing the 3-level family status variable with the 2-level parent status variable also did not produce any significant multivariate effects (see Table 6.16).

**Table 6.14**

*Multivariate GLM with Family Status and Offense Status Predicting Response Length and Time, with Apartment Characteristics as Covariates*

| <b>Independent Variable</b> | <b>Multi. F</b> | <b>Wilks' <math>\lambda</math></b> | <b>df</b>     | <b>p</b>    | <b><math>\eta^2</math></b> |
|-----------------------------|-----------------|------------------------------------|---------------|-------------|----------------------------|
| Average # of Bedrooms       | 2.62            | .99                                | 2, 567        | .074        | .009                       |
| <b>Average Rent</b>         | <b>4.67</b>     | <b>.98</b>                         | <b>2, 567</b> | <b>.010</b> | <b>.016</b>                |
| <b>Provider Type</b>        | <b>3.00</b>     | <b>.99</b>                         | <b>2, 567</b> | <b>.050</b> | <b>.101</b>                |

|                                   |      |     |         |      |      |
|-----------------------------------|------|-----|---------|------|------|
| Family Status                     | 1.06 | .99 | 4, 1134 | .377 | .004 |
| Offense Status                    | 1.82 | .99 | 2, 567  | .164 | .006 |
| Family Status x<br>Offense Status | .32  | .99 | 4, 1134 | .867 | .001 |

**Table 6.15**

*Multivariate GLM with Family Status and Offense Status Predicting Response Length and Time*

| <b>Independent Variable</b>       | <b>Multi. F</b> | <b>Wilks' <math>\lambda</math></b> | <b>df</b> | <b>p</b> | <b><math>\eta^2</math></b> |
|-----------------------------------|-----------------|------------------------------------|-----------|----------|----------------------------|
| Family Status                     | 1.25            | .99                                | 4, 1210   | .287     | .004                       |
| Offense Status                    | 2.18            | .99                                | 2, 605    | .114     | .007                       |
| Family Status x<br>Offense Status | .211            | .99                                | 4, 1210   | .932     | .001                       |

**Table 6.16**

*Multivariate GLM with Parent Status and Offense Status Predicting Response Length and Time*

| <b>Independent Variable</b>       | <b>Multi. F</b> | <b>Wilks' <math>\lambda</math></b> | <b>df</b> | <b>p</b> | <b><math>\eta^2</math></b> |
|-----------------------------------|-----------------|------------------------------------|-----------|----------|----------------------------|
| Parent Status                     | 1.99            | .99                                | 2, 607    | .138     | .007                       |
| Offense Status                    | 1.61            | .99                                | 2, 607    | .202     | .005                       |
| Parent Status x<br>Offense Status | .24             | .99                                | 2, 607    | .788     | .001                       |

**Response length.** A univariate ANOVA tested the effects of family status and offense status on response length alone. Once again, neither family status nor offense status produced significant main effects or an interaction (see Table 6.17). A second

univariate ANOVA replacing family status with parent status also failed to produce any significant effects (see Table 6.18).

**Table 6.17**

*Univariate ANOVA with Family Status and Offense Status as Predictors of Response Length*

| <b>Independent Variable</b>    | <b><i>F</i></b> | <b><i>df</i></b> | <b><i>p</i></b> | <b><math>\eta^2</math></b> |
|--------------------------------|-----------------|------------------|-----------------|----------------------------|
| Family Status                  | 1.66            | 2, 613           | .191            | .005                       |
| Offense Status                 | 1.01            | 1, 613           | .316            | .002                       |
| Family Status x Offense Status | .23             | 2, 613           | .792            | .001                       |

**Table 6.18**

*Univariate ANOVA with Parent Status and Offense Status as Predictors of Response Length*

| <b>Independent Variable</b>    | <b><i>F</i></b> | <b><i>df</i></b> | <b><i>p</i></b> | <b><math>\eta^2</math></b> |
|--------------------------------|-----------------|------------------|-----------------|----------------------------|
| Parent Status                  | 2.31            | 1, 613           | .129            | .004                       |
| Offense Status                 | .55             | 1, 613           | .457            | .001                       |
| Parent Status x Offense Status | .32             | 1, 613           | .574            | .001                       |

**Response time.** The same series of univariate ANOVAS was then performed on response time. The first univariate model testing the effects of offense status and family status on response time produced a significant offense effect. Partially supporting Hypothesis 1, Table 6.19 and Figure 6.5 show that housing providers took significantly longer to respond to applicants with a criminal history than those without. However,

Table 6.20 shows that the offense effect disappears when parent status replaces family status in the model, so this effect may be a spurious finding.

**Table 6.19**

*Univariate ANOVA with Family Status and Offense Status as Predictors of Response Time*

| <b>Independent Variable</b>    | <b><i>F</i></b> | <b><i>df</i></b> | <b><i>p</i></b> | <b><math>\eta^2</math></b> |
|--------------------------------|-----------------|------------------|-----------------|----------------------------|
| Family Status                  | 1.03            | 2, 618           | .359            | .003                       |
| <b>Offense Status</b>          | <b>3.89</b>     | <b>1, 618</b>    | <b>.049</b>     | <b>.006</b>                |
| Family Status x Offense Status | .21             | 2, 618           | .814            | .001                       |

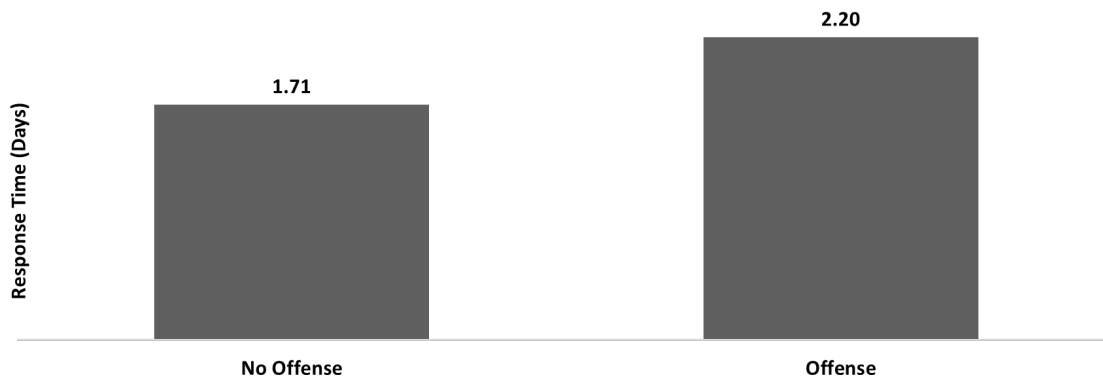
**Table 6.20**

*Univariate ANOVA with Parent Status and Offense Status as Predictors of Response Time*

| <b>Independent Variable</b>    | <b><i>F</i></b> | <b><i>df</i></b> | <b><i>p</i></b> | <b><math>\eta^2</math></b> |
|--------------------------------|-----------------|------------------|-----------------|----------------------------|
| Parent Status                  | 2.04            | 1, 618           | .154            | .003                       |
| Offense Status                 | 3.14            | 1, 618           | .077            | .005                       |
| Parent Status x Offense Status | .082            | 1, 618           | .775            | .000                       |

**Figure 6.5**

*Effect of offense status on response time.*



Note: This figure uses the uncorrected means in order to better conceptualize the data. The corrected means are .33 (no offense) and .37 (offense) days.

### ***Follow-Up Analyses on Average Rent and Provider Type***

I conducted a series of follow up correlation and independent sample-tests to further explore the significant multivariate effects of average rent and provider type on response length and time. Average rent and response length were positively and significantly correlated, meaning that housing providers promoting more expensive rental units tended to write significantly longer email responses than housing providers promoting cheaper rental units ( $r = .12, p = .003$ ). However, average rent and response time were not significantly correlated ( $r = -.05, p = .26$ ). Further, two independent samples t-tests showed that provider type marginally influenced response length,  $t(611) = 1.86, p = .06, Cohen's d = .38$ , but not response time,  $t(30.78) = 1.08, p = .29, Cohen's d = .26$  (equal variances not assumed). Large apartment complexes ( $M = 117.9, S.D. =$

97.73) sent somewhat longer email responses than providers renting single or limited unit housing ( $M = 84.88$ ,  $S.D. = 65.33$ ).<sup>4</sup>

## 6.4 Experiment 1 Discussion

Experiment 1 tested the real-world effects of housing discrimination for single parent and/or ex-offender rental applicants through an experimental single-contact audit study of housing providers across the United States.

### *Ex-Offender Housing Discrimination*

Supporting Hypothesis 1, housing providers discriminated against alleged ex-offender applicants across several different outcome variables. First, housing providers were more likely to respond negatively (i.e., with a response indicating that that applicant could not or should not apply) when the applicant had an offense than when the applicant did not. Second, housing providers were significantly more likely to respond that alleged applicants definitely could apply to rent the available apartment when the applicant did not disclose a criminal history than when she did disclose a prior offense. Third, housing providers were significantly less likely to send an application to an applicant with a criminal history than to one without a criminal history. Finally, housing providers took significantly longer to respond to inquiries from applicants with criminal histories compared to those without.

These findings support prior research showing that housing providers frequently discriminate on the basis of criminal history (Evans & Porter, 2015; Evans et al., 2019; Hanson et al., 2011; Leasure & Martin, 2017). Experiment 1 tested the effects of a non-

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<sup>4</sup> This analysis reports the uncorrected means to better conceptualize the data. The corrected means are 10.12 ( $S.D. = 3.93$ ) words for large apartment complexes and 8.64 ( $S.D. = 3.27$ ) words for single/limited unit housing providers.

violent felony theft conviction on access to housing. However, the finding that housing providers acted less favorably toward applicants with felony theft convictions replicates prior email audit studies evidencing similar discrimination towards applicants with convictions for child molestation, statutory rape, or drug trafficking (Evans & Porter, 2015; Evans et al., 2019). The fact that housing providers across the U.S. similarly refused to accept applications from those with non-violent felony theft convictions further supports the research showing that, while landlords are somewhat more willing to rent to applicants with certain misdemeanors compared to felonies, the type of conviction matters much less than the existence of the conviction itself (Clark, 2007; Evans & Porter, 2015; Leasure & Martin, 2017).

Additionally, some research suggests that landlords are hesitant to overtly deny applicants on the basis of their criminal history (Furst & Evans, 2017; Reosti, 2020). The finding that landlords took significantly longer to respond to inquiries from applicants with criminal histories compared to applicants without supports research showing the existence of this subtler form of discrimination. (Note: the significance of this effect depended upon whether the model included the full or collapsed family status factor.) Even when landlords refused to name the criminal background as a reason for rejecting an applicant, the disproportionate number of rejected ex-offender applicants suggests evidence of a potentially discriminatory practice (Furst & Evans, 2017; Reosti, 2020). Notably, however, many of the housing providers who did respond negatively to applicants with a criminal history in this experiment straightforwardly acknowledged that the felony conviction disqualified them from consideration. For example, one housing provider's response stated, "I understand you have a felony [*sic*] unfortunately we would



not be able to approve you.” This kind of overt rejection supports Hypothesis 1’s prediction that the Fair Housing Act’s failure to prohibit discrimination on the basis of criminal history would promote housing discrimination against ex-offender applicants (Kanovsky, 2016).

### ***Single Parent Housing Discrimination***

As predicted in Hypothesis 1, Experiment 1 found some evidence of housing discrimination on the basis of family status, albeit to a lesser extent than on the basis of criminal history. Applicants living with a small child were significantly less likely to receive a response than applicants living alone. Further, housing providers were significantly more likely to respond negatively to applicants with a child than those who lived alone or with an adult sibling. Although the three-level family status factor produced mostly equivocal findings, comparing applicants with children to those without (not including applicants living with a sister), did show more negative reactions to the application inquiry.

Where some housing providers were willing to openly state that a felony conviction would disqualify an applicant from approval for a lease, none of the housing providers indicated that living with a child could disqualify the applicant. Of the housing providers who provided a reason for rejecting single parent applicants, most (if not all) stated that the applicant’s income was too low to qualify for approval. For example, one response stated, “In order to qualify, the total GROSS monthly income of the residents must equal or surpass 3 times the rent which equals \$3,477 per month. Your present income would not qualify.” It comes as no surprise that housing providers would not openly state that the applicant could not live in the apartment with her child as the Fair

Housing Act expressly prohibits housing discrimination on the basis of family status (Kanovsky, 2016).

### ***Housing Discrimination Against Ex-Offender Single Parents***

Contrary to Hypothesis 2, the main effects of offense status and parent status did not interact to influence any of the outcome variables. Given that criminal history affected the housing provider's response much more robustly than parent status, it is possible that housing providers relied solely on the existence of a criminal history where present and did not further consider any disproportionate impact that criminal history discrimination might have on an ex-offender single parent's ability to find safe and affordable housing for her family. Experiment 2 used an analogue study to further explore how people acting as rental agents consider these various cues (prior offense history, family status, income, etc.) when making simulated rental determinations.

## **CHAPTER 7: EXPERIMENT 2**

Experiment 2 was a two-phase online experimental community survey that examined how implicit and explicit attitudes predict housing rental decisions when the applicant was an ex-offender and/or a single parent. Phase 1 employed a measure of participants' attitudes towards ex-offenders and single parents, while Phase 2 employed a fractional factorial design (see Holloway & Wiener, 2021) to assess which cues participants considered when making rental decisions. Within a psycho-legal context, researchers have used fractional factorial designs to examine (among others) judicial decision-making (Dhami & Ayton, 2001), attitudes toward the death penalty (O'Neil et al., 2004), juror use of scientific evidence (Smith et al., 1996), and voting behavior (Holloway & Wiener, 2021). While the fractional factorial design allows an assessment of

how individuals acting as rental decision-makers weigh a series of factors including the applicant's race, gender, income, criminal history, and family status, it does so at the expense of higher order interactions among the factual cues (Stolle et al., 2002). Future research using fully crossed experimental designs can examine those interactions for any significant factors that shaped the participants' decisions in Experiment 2.

### 7.1 Experiment 2 Hypotheses

Experiment 2 tested the following hypotheses:

**Hypothesis 3.** There will be main effects for each of the fractional factorial manipulations such that:

- **Hypothesis 3a:** Participants will be more likely to rent to an applicant who is White as compared to one who is Black.
- **Hypothesis 3b:** Participants will be more likely to rent to an applicant who is male as compared to female. However, some prior research suggests that female applicants experience more difficulty accessing housing than male applicants (see Massey & Lundy, 2001), while other research suggests that female applicants may experience less discrimination than men on the housing market (see Ahmed & Hammarstedt, 2008; Evans & Porter, 2015). Some research even finds that gender does not affect landlord decision-making (see Evans & Porter, 2019). Thus, Hypothesis 3b is meant to be an exploratory assessment of whether and how housing providers discriminate on the basis of gender.
- **Hypothesis 3c:** Participants will be more likely to rent to an applicant who has a high as compared to low income.

- **Hypothesis 3d:** Participants will be more likely to rent to an applicant who has no criminal history as compared to one with a criminal history.
- **Hypothesis 3e:** Participants will be more likely to rent to an applicant who has no children as compared to one who is a single parent with one child.

**Hypothesis 4.** Explicit negative attitudes towards ex-offenders will predict rental decisions related to ex-offenders, such that those who hold explicit negative attitudes towards ex-offenders will be less likely to rent to one. The explicit attitudes will be predictive because the Fair Housing Act allows for discrimination against ex-offenders and there is no need to hide one's prejudice. Implicit attitudes toward ex-offenders will also predict rental decisions but will not add to the predictive value of explicit attitudes.

**Hypothesis 5.** Implicit negative attitudes towards single parents will predict rental decisions related to single parents, such that those who hold implicit negative attitudes towards single parents will be less likely to rent to one. The explicit attitudes will not be predictive because the Fair Housing Act prohibits discrimination against single parents so that there is a need to hide one's prejudice. Explicit attitudes toward single parents will not predict rental decisions beyond the predictive value of implicit attitudes.

**Hypothesis 6.** There will be a significant interaction between the fractional factorial manipulation of criminal background and explicit attitudes toward ex-offenders. Participants with stronger as compared to weaker explicit negative attitudes toward ex-offenders will be more likely to rent to an applicant who has no criminal history as compared to one with a criminal history. It is possible that the implicit attitude will also interact with criminal history, but that interaction will attenuate and possibly disappear after controlling for the explicit attitude measure.

**Hypothesis 7.** There will be a significant interaction between the fractional factorial manipulation of single parent status and implicit attitudes toward single parents. Participants with stronger as compared to weaker implicit negative attitudes toward single parents will be more likely to rent to an applicant who has no children as compared to one with a young child. It is possible that the explicit attitude will also interact with single parent status, but that interaction will attenuate and possibly disappear after controlling for the implicit attitude measure.

## **7.2 Experiment 2 Methods**

### ***Participants***

Experiment 2 recruited adult participants from Amazon Mechanical Turk (“MTurk”), an online participant pool run by Amazon.com. The site offers a participant pool that is as diverse, if not more so, than undergraduate participant pools or other internet crowdsourcing research pools (Buhrmester et al., 2011). Participants earned \$1 for completing Phase 1 and \$1 for completing Phase 2.

Five hundred and forty-four participants completed both Phase 1 and Phase 2, but 19 participants completed Phase 1 in under 5 minutes or Phase 2 in under 1.5 minutes. An additional 47 stopped their IATs on or after 25 seconds. Dropping these 66 participants left a final sample of 478 participants with median completion times of 9.91 minutes for Phase 1 and 4.54 minutes for Phase 2. Each of the 10 conditions contained between 25 and 32 participants. Subject recruitment and participation in this study received full review and approval from the University of Nebraska/Lincoln Institutional Review Board.

The sample was predominantly female ( $N = 258$ , 54.1%), with 214 male participants (44.8%), 3 participants (1.6%) identifying as non-binary, 1 participant (0.2%) identifying as “Other,” and 2 not reporting their gender. Participants’ ages ranged from 19 through 78 years old ( $M = 43.79$ ,  $S.D. = 13.0$ ). As is usual with an MTurk sample, the participants were primarily White ( $N = 358$ , 74.9%), with 61 (12.8%) African American participants, 38 (7.9%) Asian or Pacific Islander participants, 19 (4%) Hispanic participants, 5 (1%) American Indian participants, and 11 (2.3%) participants who identified as “Other.”<sup>5</sup> The sample was well educated, with 88.9% having at least some college education.

Finally, a post-hoc power analysis showed that Phase 2 of this study with 477 participants achieved 84% power to detect a partial eta-square effect size of .04, as calculated using the G\*Power program (Faul et al, 2007), for a multiple regression analysis entering each of the five factor cue vectors as predictors, four attitude measures as continuous measures, and the interaction of the attitudes with the relevant offense and parenting status factors – a total of 13 predictors.

### ***Materials***

**Explicit Attitudes.** The Attitudes Towards Prisoners (ATP) scale (Melvin et al., 1985) measured participants’ explicit attitudes towards ex-offenders. The ATP is a 36-item scale designed to measure fundamental aspects of human nature and specific attitudes about offenders’ prospects for success. Though the ATP originally referred to attitudes towards “prisoners,” Melvin et al. (1986) developed the scale with a diverse sample of people involved with the criminal justice system (e.g., prison guards, parole

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<sup>5</sup> Participants were able to select multiple racial and ethnic identities, so the total number of responses is greater than the total number of participants.

officers, and people who currently are or previously were incarcerated). Researchers have since modified scale to refer to “offenders” or “ex-offenders” without sacrificing the scale’s reliability or validity (Schaible et al., 2021).

In a validation study, Melvin et al. (1985) found that the scale loaded onto one substantive factor (23% of variance, eigenvalue = 16.62) reflecting the general positive or negative attitudes towards prisoners. The ATP also demonstrated good test-retest reliability ( $r = .82$ ) and high split-half reliability ( $r = .84$  to  $r = .92$ ) among populations of students, correction officers, law enforcement officers, prisoners, and people involved in prison reform work. Further, the ATP differentiated among populations likely to experience positive attitudes towards prisoners (e.g., people involved in prison reform work) and those likely to experience negative attitudes towards prisoners (e.g., law enforcement officers). Finally, responses on the ATP did not significantly correlate with measures of social desirability.

More recent research supports the sound psychometric properties of the ATP. For instance, Ireland and Quinn (2007) measured the internal consistency of the ATP on a sample of 162 prison officers to find it reliable ( $\alpha = .81$ ). They further found that the ATP items loaded onto 3 factors: interpersonal qualities of prisoners and willingness to engage with them (15.3% of variance, eigenvalue = 5.50), treatment of prisoners and appreciation of their feelings (9.7% of variance, eigenvalue = 3.49), and excusing the behavior of offenders (5.8% of the variance, eigenvalue = 2.08). Most recently, Schaible et al. (2021) gave a 7-item version of the ATP to 118 law enforcement officers, modified

to replace the word “prisoners” with the word “ex-offenders.” This version again loaded onto 3 factors ( $\alpha = .63$  to  $.69$ , eigenvalue = 1.2 to 1.8).<sup>6</sup>

The current research used the full 36-item scale with Schaible et al. (2021)’s modified language but, following Melvin et al. (1985), treated the outcome as a single factor. Participants rated their agreement on a 1 (*strongly disagree*) to 5 (*strongly agree*) Likert-type scale to statements such as “You never know when an ex-offender is telling the truth” and “I wouldn’t mind living next door to an ex-offender.” The full ATP scale appears in Appendix B. Scores on this measure formed a reliable scale ( $\alpha = .95$ ,  $M = 3.40$ ,  $S.D. = 0.64$ , skewness =  $.004$ , kurtosis =  $.30$ ). After reverse coding the appropriate factors, higher scores indicate more positive attitudes towards ex-offenders.

The Attitudes Towards Working Single Parents (ATWSP) scale (Noble et al., 2004) measured participants’ explicit attitudes towards single parents. The ATWSP is a 20-item scale designed to capture attitudes towards the effects of single parent status on work (9 items,  $\alpha = .73$ , eigenvalue = 1.76) and children (11 items,  $\alpha = .85$ , eigenvalue = 2.38; Noble et al., 2004). The ATWSP shows good reliability among undergraduate and community samples, and factor analyses established two discriminable subscales (i.e., the effects on work and the effects on children).

The current research used the full 20-item scale and treated the outcome as a single factor with a substructure of two factors, but I modified those items to refer to “single parents” rather than “single working parents.” Therefore, participants rated their agreement on a 1 (*strongly disagree*) to 5 (*strongly agree*) Likert-type scale to statements such as “A child is more likely to struggle if raised by a single parent” and “Being a good

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<sup>6</sup> Though the scale loaded on three factors, Schaible et al. (2021) only reported eigenvalues for two of the factors. Further, one item loaded by itself so no alpha value could be reported for that factor.



employee is a lower priority for single parents.” The full ATWSP scale appears in Appendix B. Scores on this measure formed a reliable scale ( $\alpha = .91$ ,  $M = 2.82$ ,  $S.D. = 0.67$ , skewness = .01, kurtosis = -.49). After reverse coding the appropriate factors, higher scores on the subscale indicate more negative attitudes towards single parents.

**Implicit Attitudes.** To measure participants’ implicit attitudes towards ex-offenders and single parents, participants completed two “paper and pencil” Implicit Association Tests (“IAT”; Greenwald et al., 1998). The IAT is a widely used, primarily computer-based, task designed to measure the relative association between two concepts, each with two different categories, by measuring the amount of time it takes to categorize stimuli associated with each of the four categories resulting from completely crossing the sub-categories identified with two response options (Lemm et al., 2008). For this experiment, the participants completed two IATs, one associating stimuli related to pleasant/unpleasant categories with offenders/law-abiding citizens and a second associating the pleasant/unpleasant categories with single parents/single persons.

When completing a paper IAT, participants see a mixed list of specific stimuli representing four types of categories (e.g., pleasant, unpleasant, law-abiding citizens, and offenders) centered between two labeled columns. One of the columns represents one combination of the concept classification – the congruent match (e.g., “offender/unpleasant” on the left and “law-abiding citizen”/pleasant” on the right) and they have a set amount of time (e.g., 30 seconds) to correctly categorize as many of the specific stimuli into the appropriate columns as possible. Participants then repeat the task with the opposite combination of concept classification – the incongruent match (e.g., “offender/pleasant” vs “law-abiding citizen”/unpleasant”). A closer association between

two concepts should make the task easier for one match (congruent vs. incongruent), leading to more correct responses for the more closely associated pairing (Lemm et al., 2008).

Results of the paper-format IAT generally replicate the results found when using similar computerized IATs. For instance, both Lowery et al. (2001) and Sinclair et al. (2005) used the paper-format IAT to examine implicit bias towards White versus Black names. Replicating the results of computerized IATs, participants in both experiments showed strong pro-White (relative to Black) implicit preferences by categorizing more names in the congruent phase (i.e., Black-negative/White-positive) than in the incongruent phase (i.e., Black-positive/White-negative). Likewise, Teachman and Brownwell (2001) and Teachman et al. (2003) both used the paper-format IAT to examine anti-fat implicit bias. In both experiments, the researchers replicated computerized IAT results by more quickly and accurately categorizing “fat people” with negative words and “thin people” with positive words than with incongruent (fat/good and thin/bad) pairings.

Though the IAT is most often utilized as a computer-based task, Lemm et al. (2008) compared the results and psychometric properties of the paper format IAT to the computer IAT and found that, while the paper IAT produced smaller effect sizes than the computer version, the results and test-retest reliability of the paper IAT replicated those of the computer IAT. Because the current study recruited a community sample of participants from MTurk to maximize the generalizability of the experiment, and MTurk is not easily compatible with the traditional computer IAT due to the fact that the traditional measure relies on a strong and stable internet connection, it was both more

feasible and logical to use a “paper” IAT for this research.<sup>7</sup> In addition, MTurk enabled data collection of the larger sample size needed to account for the smaller effect sizes that result from the paper format IAT (Lemm et al., 2008).

***IAT pilot test.*** No prior research has utilized an IAT in either paper or computer format to measure implicit attitudes towards ex-offenders or single parents. Therefore, a pilot study tested the words included in the offender, single parent, law-abiding citizen, and single person categories to ensure a lack of overlap between categories. The purpose of this pilot study was to establish 5 words that are associated with each of the six categories. The stimuli for the pilot test were 120 words that could be associated with one of six categories: “offender,” “law-abiding citizen,” “single parent,” “single person,” “pleasant,” and “unpleasant.” The list of stimuli came from collaboration with colleagues, the thesaurus, and (for the pleasant and unpleasant categories) prior research.

After removing one participant for incorrectly completing the task, 99 Mturk worker participants supplied pilot data. Approximately half of the participants identified as female ( $N = 51$ , 51.5%) and most identified as White ( $N = 72$ , 72.7%). Seventeen (17.2%) participants identified as Black, 5 (5%) as Asian/Pacific Islander, 4 (4%) as Multiracial, and 1 (1%) as Native American/Alaskan Native. Participants’ ages ranged from 19 to 77 years, with a mean age of 41.5 years. Participants were asked to categorize each stimulus into the category they believed most accurately characterized the stimulus. Participants were able to categorize one stimulus into multiple categories if they believed it appropriate to do so. The 5 most common words in each category with the smallest

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<sup>7</sup> For this experiment, the “paper and pencil” IAT was modified for use on a computer so that participants saw the paper-formatted version of the IAT on a computer screen and clicked boxes next to the word on the computer screen instead of physically checking the box next to the word on a piece of paper.

overlap constituted the words used in the main study IATs. Participants received \$1 for completing this pilot study. Appendix C shows the lists of words used in the pilot study and identifies those chosen for the main study IATs. Appendix D shows the final lists of words representing each of the six categories and the resulting IAT congruent blocks for the Offender vs. Law Abiding Citizen and the Single Parent vs. Single Person instruments. Each pleasant word (e.g., cookies and smile) appears 2 times and each unpleasant word (e.g., ridicule and vomit) appears 2 times in each congruent and incongruent block for both IATs. In addition, each target sub-category for Offender (e.g., criminal and thief) appears 2 times and each target sub-category for Law-Abiding Citizen (e.g., do-gooder and lawful) appears 2 times in each of the congruent and incongruent blocks of the Offender vs. Law Abiding Citizen IAT. Finally, each target sub-category for the Single Parent (e.g., single dad and single) appears 2 times and each target sub-category for Single Person (e.g., bachelorette and unmarried) appears 2 times in each of the congruent and incongruent blocks of the Single Parent vs. Single Person IAT. Appendix D displays these IAT measures.

**Scoring the IAT measures.** Both IATs in the main study were scored using the product: square root difference approach described in Lemm et al. (2008). The square root difference is calculated with the following formula:  $(XY*\sqrt{X-Y})$ , where X is the greater of the two IAT block scores and Y is smaller of the two IAT block scores. This produced an implicit attitude measure for ex-offenders ( $M = 5.07$ ,  $S.D. = 5.10$ , range = 0 to 56.12, skewness = 4.46, kurtosis = 32.21) and single parents ( $M = 1.79$ ,  $S.D. = 1.50$ , range = 0 to 12.44, skewness = 3.27, kurtosis = 16.38). Higher scores reflect stronger implicit preference for the congruent pairing (offender/unpleasant; single

parent/unpleasant) over the incongruent pairing (offender/pleasant; single parent/pleasant). In other words, higher scores indicate greater levels of implicit bias against ex-offenders and single parents.

**Knowledge of Fair Housing Act.** Participants read a statement that summarized the Fair Housing Act (FHA), which prohibits housing discrimination “on the basis of race, color, religion, sex, disability, familial status or national origin” (Kanovsky, 2016). To measure the extent to which participants understood the law, participants then responded to a statement that read, “According to federal law, rental agents are prohibited from discriminating against which of the following applicants? Select all that apply.” (Options: Black applicants, White applicants, Jewish applicants, Christian applicants, applicants with criminal histories, unemployed applicants, single adults with child, married applicants, male applicants, female applicants, and poor applicants). One hundred and fifty-one participants (31.6%) incorrectly indicated that the FHA prohibits discrimination against applicants who have criminal records, and 177 participants (37%) incorrectly indicated that the FHA allows discrimination against single adults with children.

**Manipulated Factors.** Participants were randomly assigned to read one of 16 vignettes (modified from Berry and Wiener, 2020) describing a single person’s search for a one-bedroom apartment to rent. Using a  $2^{5-1}$  fractional factorial design, the vignettes manipulated the applicant’s offense status (felony theft [ $N = 244$ , 51%] vs no offense [ $N = 234$ , 49%]), parenting status (single parent [ $N = 232$ , 48.5%] vs single person [ $n = 245$ , 51.5%]), gender (male [ $N = 241$ , 50.4%] vs female [ $N = 237$ , 49.6%]), income (low [ $N = 236$ , 49.4%] vs high [ $N = 242$ , 50.6%]), and race (Black [ $N = 239$ , 50%] vs White [ $N =$

239, 50%]). At the end of the vignette, participants read that another potential renter was also interested in renting the apartment. The respondent's task was to rate the suitability of the applicants. See Appendix E for the design matrix and Appendix F for the vignettes.

**Rental Index.** After reading the vignette, all participants indicated the likelihood that they would rent an apartment to the individual described in the vignette on a 9-point Likert scale anchored at 1 (*not at all likely*), 5 (*somewhat likely*), and 9 (*very likely*).

Participants also indicated the likelihood that they would rent an apartment to someone other than the individual described in the vignette on the same 9-point Likert scale. To create an index of disparate judgment, the researchers subtracted the likelihood that the participant would rent to the target applicant from the likelihood that the applicant would rent to the non-target applicant as described in Berry and Wiener (2020). This rental index ( $M = -1.07$ ,  $S.D. = 2.93$ , range = -8 to 8, skewness =  $-.08$ , kurtosis =  $.41$ ) establishes a baseline of the likelihood of renting to a typical person rather than the likelihood of renting to the target applicant (Berry & Wiener, 2020). A positive value on the index indicates that the participants favored the nondescript "other" applicant, and a negative value indicates that the participants favored the target applicant. A value of zero indicates no preference between applicants.

### ***Procedure***

In Phase 1, participants completed both the ATP scale (Melvin et al., 1985) and ATWSP scale (Noble et al., 2004) to measure their explicit attitudes towards ex-offenders and single parents, respectively, in a randomized order. They then completed two "paper" versions of the Implicit Association Task (Lemm, et al., 2008) to measure their implicit

attitudes towards ex-offenders and single parents.<sup>8</sup> The implicit and explicit measures were presented in a randomized order to control the effects of explicitly priming the implicit measures and implicitly priming the explicit measures.

Participants were sent an invitation to complete the experiment 1 week after completing Phase 1. In Phase 2, participants first read the statement summarizing the FHA anti-discrimination law and then completed the knowledge assessment. Participants were then randomly assigned to read 1 of the 16 vignettes before indicating the likelihood that they would rent to the target applicant over an unknown other applicant. Participants then provided their demographic information before being paid and debriefed.

### **7.3 Experiment 2 Results**

#### ***Overview***

Experiment 2 examined how implicit and explicit attitudes predicted housing rental decisions when the applicant was an ex-offender and/or a single parent. A series of linear regression models tested Hypotheses 3 through 7. These models used varying combinations of the five manipulated, 1 degree of freedom, factors (applicant offense status, applicant parent status, applicant gender, applicant race, and applicant income) as well as implicit and explicit attitudes towards ex-offenders and single parents as predictors of the rental index (i.e., the likelihood that the participant would rent to the target applicant compared to the unknown other applicant).

Dummy coded manipulated independent variables were represented as follows: a) offense status: 0 = no offense, 1 = presence of offense; b) parent status: 0 = no child, 1 = presence of child; c) applicant gender: 0 = male, 1 = female; d) applicant race: 0 = Black,

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<sup>8</sup> The IATs used in Experiment 2 followed the format, timing, and scoring procedures used for the paper version of the IAT, even though participants completed the task on a computer of their choosing.

1 = White; and e) applicant income: 0 = low, 1 = high. Positive numbers on the rental index indicated that the participants favored the nontarget applicant, while negative numbers indicated favoring the target applicant, and zero indicated no preference. Higher scores on the implicit attitude measures indicated more negative implicit attitudes towards ex-offenders or single parents. Finally, lower scores on the Attitudes Towards Prisoners scale indicated more negative explicit attitudes towards ex-offenders, while higher scores on the Attitudes Towards Single Working Parents scale indicated more negative attitudes towards single parents.

### ***Applicant Characteristic Manipulation Check***

After reading the vignette, participants answered a series of multiple-choice questions about the race, gender, income, and parental status of the applicant described in the vignette. Three hundred and forty participants (71.1%) correctly answered all four manipulation check questions. An additional 85 participants (17.9%) correctly answered three of the four manipulation check questions. The remaining 53 participants (11.1%) answered between two and four of the manipulation check questions incorrectly. These results were surprising, as similar work using an online fractional factorial design found that 84% of the participants correctly identified 4 of the 5 cues, and only 4% of the participants missed all or all but one of the cues (Holloway & Wiener, 2021). However, the results of the primary analyses did not change after removing the participants who failed the manipulation checks from the data set. Therefore, data from the 29.9% of participants who failed the manipulation checks remained in the data analyses to maintain the integrity of the experiment's random assignment process.



### *Primary Analyses*

A series of linear regression models tested the five manipulated factors (applicant offense status, applicant parent status, applicant gender, applicant race, and applicant income) as well as implicit and explicit attitudes towards ex-offenders and single parents as predictors of the rental index (i.e., the likelihood that the participant would rent to the target applicant compared to the unknown other applicant).

**Manipulated factors.** Table 7.1 displays the linear regression using the five manipulated factors to predict the rental index. The overall model was significant,  $F(476) = 10.96$ ,  $p < .001$ . However, only applicant offense status significantly predicted the rental index. Supporting Hypothesis 3d, Figure 7.1 shows that participants were more likely to rent to an unknown other applicant over the target applicant when the target applicant had a prior felony conviction (vs no prior felony conviction).

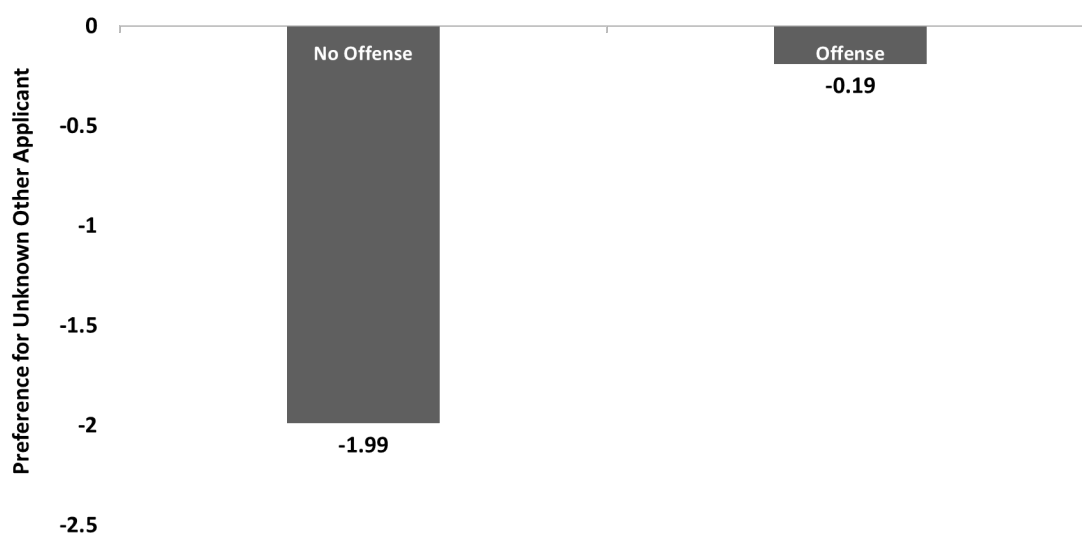
**Table 7.1**

*Linear Regression with Five Manipulated Factors Predicting Rental Index*

| Predictor             | <i>B</i>    | <i>S.E.</i> | $\beta$    | <i>t</i> (476) | <i>p</i>         |
|-----------------------|-------------|-------------|------------|----------------|------------------|
| <b>Offense Status</b> | <b>1.79</b> | <b>.26</b>  | <b>.31</b> | <b>7.00</b>    | <b>&lt; .001</b> |
| Parent Status         | -.17        | .26         | -.03       | -.66           | .510             |
| Gender                | .29         | .26         | .05        | 1.13           | .257             |
| Race                  | .24         | .26         | .04        | .93            | .353             |
| Income                | -.42        | .26         | -.07       | -1.64          | .102             |

**Figure 7.1**

*Effect of offense status on preference to rent to unknown other applicant.*



Note: Higher (more positive) scores indicate stronger preference of the unknown applicant over the targeted applicant.

A follow-up analysis added a variable accounting for the number of failed manipulation checks to the same model,  $F(476) = 10.49, p < .001$ . Table 7.2 again shows that the applicant's offense status is the only manipulated factor to predict the rental index. Even with the failed manipulation check variable included in the model, participants were more likely to rent to the unknown other applicant than the target applicant when the target applicant had a prior offense. However, the failed manipulation check variable also significantly predicted the rental index such that participants who failed a greater number of the manipulation checks were more likely to rent to the unknown other applicant than participants who failed fewer (or none) of the manipulation checks. This unpredicted finding will be taken up in the limitations section in the discussion below.

**Table 7.2**

*Linear Regression with Five Manipulated Factors and Failed Manipulation Check Variable Predicting Rental Index*

| Predictor                              | <i>B</i>    | <i>S.E.</i> | $\beta$    | <i>t</i> (476) | <i>p</i>         |
|--|-------------|-------------|------------|----------------|------------------|
| <b>Offense Status</b>                  | <b>1.73</b> | <b>.26</b>  | <b>.30</b> | <b>6.81</b>    | <b>&lt; .001</b> |
| Parent Status                          | -.13        | .25         | -.02       | -.53           | .600             |
| Gender                                 | .28         | .25         | .05        | 1.08           | .279             |
| Race                                   | .17         | .26         | .03        | .67            | .506             |
| Income                                 | -.45        | .25         | -.08       | -1.76          | .080             |
| <b>Failed Manipulation Checks (MC)</b> | <b>.40</b>  | <b>.15</b>  | <b>.12</b> | <b>2.72</b>    | <b>.007</b>      |

To assess whether the participants who failed the manipulation checks uniquely influenced the results of the primary analyses, a univariate ANOVA tested the interactions of the five manipulated factors with the failed manipulation check measure, controlling for the effect of the failed manipulation checks. As shown in Table 7.3, this model produced the same offense and failed manipulation check main effects found in the previous analyses, as well as an interaction of the applicant offense and the failed manipulation check variable.

**Table 7.3**

*Univariate ANOVA Model Displaying the Effect of the Five Manipulated Factors, the Failed Manipulation Check Variable, and the Factor x Failed Manipulation Check Interaction on the Rental Index*

| Factor                                 | F            | df            | p                | $\eta_p^2$  |
|--|--------------|---------------|------------------|-------------|
| <b>Offense Status</b>                  | <b>50.96</b> | <b>1, 476</b> | <b>&lt; .001</b> | <b>.099</b> |
| Parent Status                          | .66          | 1, 476        | .417             | .001        |
| Gender                                 | .96          | 1, 476        | .327             | .002        |
| Race                                   | 1.10         | 1, 476        | .295             | .002        |
| Income                                 | 3.69         | 1, 476        | .055             | .008        |
| <b>Failed Manipulation Checks (MC)</b> | <b>8.11</b>  | <b>1, 476</b> | <b>.005</b>      | <b>.017</b> |
| <b>Offense x Failed MC</b>             | <b>5.57</b>  | <b>1, 476</b> | <b>.019</b>      | <b>.012</b> |
| Parent x Failed MC                     | .45          | 1, 476        | .505             | .001        |
| Gender x Failed MC                     | .02          | 1, 476        | .897             | .000        |
| Race x Failed MC                       | 1.14         | 1, 476        | .292             | .002        |
| Income x Failed MC                     | .48          | 1, 476        | .491             | .001        |

Moderation analysis using Hayes (2020) Process 3.5 macro for SPSS further explored the applicant offense by failed manipulation check interaction on the rental

index. This analysis used Hayes Process Model 1 with 50,000 bootstraps. Table 7.4 shows significant main effects for applicant offense and failed manipulation checks such that participants favored the nondescript “other” applicant both when the target applicant had a criminal history and when the participants failed more manipulation checks. Further, the offense by failed manipulation check interaction was significant, indicating that the participants’ failure rate on the manipulation check measures moderated the effect of applicant offense on the rental index. Table 7.4 and Figure 7.2 show that the effect of the applicant’s offense status on the rental decision was significant for participants who failed the manipulation checks at low, moderate, and high rates. However, the effect of offense status on the rental index was strongest for participants who failed no manipulation checks and weakest for participants who failed the manipulation checks at a high rate. Further, the rate of manipulation check failure only influenced the rental decision for participants who read about an applicant with no criminal history.

**Table 7.4**

*Results of the Moderation Analysis for the Rental Index as a Function of Applicant Offense Status and Participant Failure of Manipulation Checks*

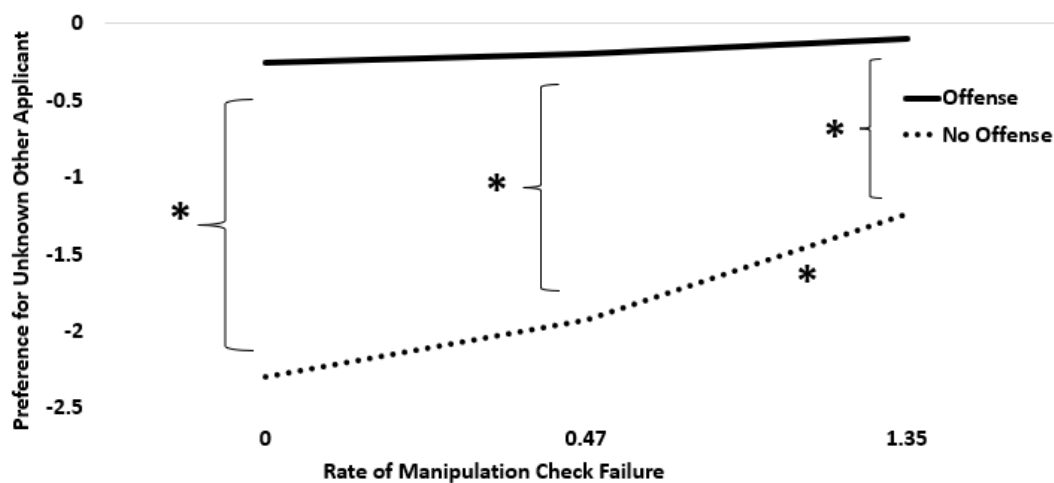
| Predictor                              | <i>B</i>    | <i>S.E.</i> | <i>t</i> (473) | <i>p</i>         | 95% CI <i>B</i>    |
|--|-------------|-------------|----------------|------------------|--------------------|
| Main Effects and Interactions          |             |             |                |                  |                    |
| <b>Offense Status</b>                  | <b>2.06</b> | <b>.29</b>  | <b>7.19</b>    | <b>&lt; .001</b> | <b>1.49 – 2.62</b> |
| <b>Failed Manipulation Checks (MC)</b> | <b>.79</b>  | <b>.22</b>  | <b>3.62</b>    | <b>&lt; .001</b> | <b>.36 – 1.22</b>  |

| Offense Status<br>x MC | -.69 | .29  | -2.36 | .019   | -1.26 – -.11 |
|------------------------|------|------|-------|--------|--------------|
| Conditional Effects    |      |      |       |        |              |
| Low Failure Rate       | 2.06 | .29  | 7.19  | < .001 | 1.49 – 2.62  |
| Moderate Failure Rate  | .47  | 1.74 | .25   | < .001 | 1.24 – 2.23  |
| High Failure Rate      | 1.13 | .36  | 3.12  | .002   | .42 – 1.84   |

$F(3,473) = 21.41, p < .001$

**Figure 7.2**

*Effect of offense status on preference to rent to unknown other applicant at different rates of manipulation check factors.*



\*  $p < .05$

Note: Higher (more positive) scores indicate stronger preference of the unknown applicant over the targeted applicant.

Ultimately, the effect of failing the manipulation checks did not significantly impact the effects of the five manipulated factors on the rental index. Even though participants' manipulation check failure did influence the effect of the applicant's offense status on the rental decision, the effect of offense status on the rental index was strongest for participants who failed few or no manipulation checks. Further, the rate of manipulation check failure seems to only have influenced the effect of applicant offense on the rental index when the applicant did not have a prior criminal history. This effect, which will be taken up the discussion section, suggests that the participants considered the offense information in their rental decision when it was provided to them and perhaps acted more sporadically when they did not have such discriminatory cues to weigh in their decision. Further, the main effect of offense status, and the non-significant effects of the other four manipulated factors, on the rental index did not change after controlling for the failed manipulation check variable.

**Implicit and explicit attitudes.** A linear regression on the rental index with both explicit attitude measures as predictors was significant,  $F(476) = 17.15, p < .001$ . Table 7.5 shows that both explicit attitudes towards ex-offenders and explicit attitudes towards single parents significantly predicted the rental index. Partially supporting Hypothesis 4, participants with more negative attitudes towards ex-offenders and single parents were more likely to prefer renting to the unknown applicant over the target applicant. Next, a linear regression on the rental index with both implicit attitude measures as predictors was not significant,  $F(459) = .22, p = .801$ . Table 7.6 shows that, contrary to Hypothesis 5, neither implicit attitudes towards ex-offenders, nor implicit attitudes towards single parents, significantly predicted participants' rental decisions.

**Table 7.5**

*Linear Regression with Explicit Attitudes Towards Ex-Offenders and Single Parents Predicting Rental Index*

| Predictor                             | <i>B</i>    | <i>S.E.</i> | $\beta$     | <i>t</i> (476) | <i>p</i>         |
|---------------------------------------|-------------|-------------|-------------|----------------|------------------|
| <b>Explicit Offender (ATP)</b>        | <b>-.80</b> | <b>.23</b>  | <b>-.18</b> | <b>-3.48</b>   | <b>&lt; .001</b> |
| <b>Explicit Single Parent (ATSWP)</b> | <b>.56</b>  | <b>.22</b>  | <b>.13</b>  | <b>2.51</b>    | <b>.012</b>      |

**Table 7.6**

*Linear Regression with Implicit Attitudes Towards Ex-Offenders and Single Parents Predicting Rental Index*

| Predictor                 | <i>B</i> | <i>S.E.</i> | $\beta$ | <i>t</i> (459) | <i>p</i> |
|---------------------------|----------|-------------|---------|----------------|----------|
| Implicit Offender (IAT-O) | .06      | .09         | .03     | .66            | .505     |
| Implicit Parent (IAT-P)   | .00      | .03         | .00     | -.01           | .996     |

**Offense status and attitude interactions.** A series of linear regressions tested the interactions predicted in Hypotheses 6 and 7. Hypothesis 6 predicted a two-way interaction between offense status and explicit attitudes towards ex-offenders such that participants with stronger negative explicit attitudes towards ex-offenders would be more likely to rent to an applicant without a criminal history than one with a prior felony conviction. In contrast, Hypothesis 7 predicted a two-way interaction between single parent status and implicit attitudes towards single parents such that participants with



stronger implicit negative attitudes towards single parents would be more likely to rent to an applicant without children than one with a child.

Table 7.7 displays the results of a significant linear regression in which the applicant's offense status, participants' explicit attitudes towards ex-offenders, and the interaction of the two predicted the rental index,  $F(476) = 30.02, p < .001$ . Partially supporting Hypothesis 4, the model revealed only a main effect of the Attitudes Towards Prisoners (ATP) scale. Participants who scored higher on the ATP scale (held more positive attitudes towards ex-offenders) were more likely to rent to the target applicant over the unknown other applicant than participants who held more negative views towards ex-offenders. The main effect of offense status on the rental index approached significance, such that participants were marginally more likely to rent to the unknown other applicant over the target applicant when the applicant had a prior felony conviction. However, contrary to Hypothesis 6, the interaction of the applicant's offense status with the participants' attitudes towards ex-offenders was not significant.

**Table 7.7**

*Linear Regression with Applicant's Offense Status, Participants' Explicit Attitudes Towards Ex-Offenders, and the Offense x Explicit Attitude Interaction Predicting Rental Index*

| Predictor                      | <i>B</i>     | <i>S.E.</i> | $\beta$     | <i>t</i> (476) | <i>p</i>         |
|--------------------------------|--------------|-------------|-------------|----------------|------------------|
| Offense Status                 | 2.54         | 1.34        | .43         | 1.89           | .060             |
| <b>Explicit Offender (ATP)</b> | <b>-1.08</b> | <b>.28</b>  | <b>-.23</b> | <b>-3.86</b>   | <b>&lt; .001</b> |
| Offense x ATP                  | -.19         | .39         | .11         | -.48           | .629             |

Table 7.8 displays the results of a significant linear regression in which the applicant's offense status, participants' implicit attitudes towards ex-offenders, and the interaction of the two predicted the rental index,  $F(465) = 16.93, p < .001$ . Partially supporting Hypothesis 3, the model revealed only a main effect of the applicant's offense status. Participants were again significantly more likely to rent to the unknown other applicant over the target applicant when the applicant had a prior felony conviction. The fact that implicit attitudes towards ex-offenders did not predict the rental decision partially supports Hypothesis 4, which predicted that explicit attitudes would better predict the rental decision than implicit attitudes when the applicant had a prior felony conviction.

**Table 7.8**

*Linear Regression with Applicant's Offense Status, Participants' Implicit Attitudes Towards Ex-Offenders, and the Offense x Implicit Attitude Interaction Predicting Rental Index*

| Predictor                 | <i>B</i>    | <i>S.E.</i> | $\beta$    | <i>t</i> (465) | <i>p</i>         |
|---------------------------|-------------|-------------|------------|----------------|------------------|
| <b>Offense Status</b>     | <b>1.99</b> | <b>.37</b>  | <b>.34</b> | <b>5.39</b>    | <b>&lt; .001</b> |
| Implicit Offender (IAT-O) | .01         | .04         | .01        | .19            | .847             |
| Offense x IAT-O           | -.03        | .05         | 0.04       | -.51           | .612             |

**Parental status and attitude interactions.** Table 7.9 displays the results of a significant linear regression in which the applicant's parental status, participants' explicit attitudes towards single parents, and the interaction of the two predicted the rental index,  $F(476) = 7.31 p < .001$ . Contrary to Hypothesis 5, the model revealed a main effect of the

Attitudes Towards Single Working Parents (ATSWP) scale. Participants who scored higher on the ATSWP scale (held more negative attitudes towards single parents) were more likely to rent to the unknown other applicant over the target applicant than participants who held more positive attitudes towards single parents.

**Table 7.9**

*Linear Regression with Applicant's Parental Status, Participants' Explicit Attitudes Towards Single Parents, and the Parent x Explicit Attitude Interaction Predicting Rental Index*

| Predictor                      | <i>B</i>   | <i>S.E.</i> | $\beta$    | <i>t</i> (476) | <i>p</i>         |
|--------------------------------|------------|-------------|------------|----------------|------------------|
| Parent Status                  | -.20       | 1.16        | -.03       | -.17           | .863             |
| <b>Explicit Parent (ATSWP)</b> | <b>.92</b> | <b>.28</b>  | <b>.21</b> | <b>3.32</b>    | <b>&lt; .001</b> |
| Parent x ATSWP                 | .02        | .40         | .01        | .05            | .964             |

**Table 7.10**

*Linear Regression with Applicant's Parental Status, Participants' Implicit Attitudes Towards Single Parents, and the Parent x Implicit Attitude Interaction Predicting Rental Index*

| Predictor               | <i>B</i> | <i>S.E.</i> | $\beta$ | <i>t</i> (466) | <i>p</i> |
|-------------------------|----------|-------------|---------|----------------|----------|
| Parent Status           | -.06     | .43         | -.01    | -.14           | .892     |
| Implicit Parent (IAT-P) | .10      | .15         | .05     | .66            | .510     |
| Parent x IAT-P          | -.06     | .19         | -.03    | -.29           | .770     |

Table 7.10 displays the results of a linear regression in which the applicant's parental status, participants' implicit attitudes towards single parents, and the interaction of the two predicted the rental index. However, this model was not significant,  $F(466) = .282, p = .839$ . Contrary to Hypotheses 5 and 7, the applicant's single parent status and the participants' implicit attitudes towards single parents did not affect the ultimate rental decision.

Table 7.11 displays a final significant linear regression model containing the applicant's manipulated offense and parental status, the four implicit and explicit attitude measures, and the four interactions between applicant status and participant attitudes,  $F(459) = 9.98, p < .001$ . Only the applicant's offense status and the participants' explicit attitudes towards ex-offenders and single parents predicted the rental index. Replicating the findings from the earlier models, participants were significantly more likely to rent to the unknown other applicant over the target applicant when the applicant had a prior felony conviction. Similarly, participants who scored higher on the ATP scale (held more positive attitudes towards ex-offenders) were more likely to rent to the target applicant over the unknown other applicant than participants who held more negative views towards ex-offenders. Conversely, participants who scored higher on the ATSWP scale (held more negative attitudes towards single parents) were more likely to rent the unknown other applicant over the target applicant than participants who held more positive attitudes towards single parents. However, the manipulated variables did not interact with participants' implicit or explicit attitudes to predict the rental decision as hypothesized.

**Table 7.11**

*Linear Regression with Applicant Offense and Parental Status, Participants' Implicit and Explicit Attitudes, and All Factor x Attitude Interactions Predicting Rental Index*

| Predictor                      | <i>B</i>    | <i>S.E.</i> | $\beta$     | <i>t</i> (459) | <i>p</i>    |
|--------------------------------|-------------|-------------|-------------|----------------|-------------|
| <b>Offense Status</b>          | <b>3.39</b> | <b>1.40</b> | <b>.58</b>  | <b>2.43</b>    | <b>.015</b> |
| Parent Status                  | .54         | 1.16        | .09         | .46            | .643        |
| <b>Explicit Parent (ATSWP)</b> | <b>.63</b>  | <b>.28</b>  | <b>.14</b>  | <b>2.23</b>    | <b>.026</b> |
| <b>Explicit Offense (ATP)</b>  | <b>-.76</b> | <b>.31</b>  | <b>-.17</b> | <b>-2.48</b>   | <b>.014</b> |
| Implicit Parent (IAT-P)        | .07         | .14         | .04         | .53            | .596        |
| Implicit Offense (IAT-O)       | .01         | .04         | .02         | .38            | .702        |
| Parent x IAT-P                 | .03         | .17         | .02         | .18            | .861        |
| Offense x IAT-O                | -.04        | .05         | -.06        | -.81           | .418        |
| Parent x ATSWP                 | -.22        | .39         | -.11        | -.57           | .566        |
| Offense x ATP                  | -.35        | .39         | -.21        | -.89           | .372        |

#### **7.4 Experiment 2 Discussion**

Experiment 2 built on Experiment 1's findings by exploring the mechanisms by which rental agents decide whether and when to rent applicants with children and/or criminal histories. In a two-phase online experimental community survey, Experiment 2

measured the participants' implicit and explicit attitudes towards ex-offenders and single parents and then employed a fractional factorial design (see Holloway & Wiener, 2021) to assess how individuals acting as rental agents weigh a series of factors (i.e., the applicant's race, gender, income, criminal history, and family status) in the decision-making process.

### ***Main Effects of Manipulated Factors on Rental Outcome***

Hypothesis 3 predicted main effects of all five fractional factorial manipulations, such that participants would be more likely to rent to an applicant who is/has White (vs Black), male (vs female), high income (vs low income), no criminal history (vs criminal history), and no children (vs single parent with one child). Supporting Hypothesis 3d, participants were more likely to rent to an unknown other applicant over the target applicant when the applicant had a prior felony conviction (vs no prior felony conviction). This finding supports Experiment 1's conclusion that housing providers discriminated against alleged ex-offender applicants across several different outcome variables. It also replicates prior research showing landlords and rental agents are much less likely to provide housing to applicants with criminal histories (Clark, 2007; Evans, 2016; Furst & Evans, 2017; Helfgott, 1997).

Contrary to the rest of Hypothesis 3, none of the other manipulated factors (race, gender, family status, or income) affected the likelihood that the participants would rent to the target applicant over an unknown other applicant. It is noteworthy that participants did not appear to discriminate against single parent applicants, contrary to Hypothesis 3e and prior research showing similar rates of discrimination against racial minorities and families with children (Lauster & Easterbrook, 2011; Murchie & Pang, 2018).

Though prior research suggests that race does influence rental decisions so that housing providers tend to treat White applicants more favorably than applicants of color (Ondrich et al., 1998; Yelnosky, 1998; Yinger et al., 1986), it can be more difficult to effectively reproduce racial bias in online vignette studies (see Berry & Wiener, 2020; Wertheimer & Wiener, 2020). Thus, the lack of any significant race effects in this experiment indicates only that the participants in this controlled experiment did not uniquely weigh applicant race in their rental determination and thus does not discredit prior evidence of race-based housing discrimination. The fact that many of the participants did not pay careful attention to the fact description as shown by the manipulation check questions supports this interpretation.

Additionally, prior research has not reached a clear consensus on the role applicant gender plays in discriminatory housing decisions (Evans & Porter, 2015; Hanson et al., 2011). Therefore, while exploratory Hypothesis 3b failed to find support (as gender did not influence the participants' rental decisions in any way), the results do align with Evans and Porter (2019)'s finding that landlords and property managers were equally willing to consider male and female applicants. It is also worth noting that the Fair Housing Act expressly prohibits housing discrimination because of race, gender, and family status, but not criminal history. It is therefore possible that the reminder of the Fair Housing Act's anti-discrimination policy that participants read prior to making their housing decisions persuaded against relying on illegal cues. However, the fact that a substantial number of people incorrectly said that the FHA does not protect applicants against family status discrimination suggests that the FHA statement did not significantly influence the rental decision.

One additional explanation for the fact that the five manipulated factors did not have the hypothesized effects on the rental decision is that an unfortunately large proportion of the participants did not read the vignettes closely enough to accurately answer the factual manipulation check questions. Only 71% of the participants correctly answered all 4 manipulation check questions and 11% of the participants failed at least half of them. An online MTurk study necessarily reduces control over where, when, and how participants complete the experiment. While previous MTurk studies have found much lower manipulation check failure rates (see Berry & Wiener, 2020; Holloway & Wiener, 2021), it is possible that the reliability of MTurk participants has decreased over time. Future research should consider moving to other online data collection platforms, paying participants at a higher rate, or incentivizing accurate responses to improve participant performance. Participant compliance is essential to online data collection because if the participants did not read and remember the facts of the scenario presented to them, they could not weigh the applicant's characteristics before making their rental decision. Here it is possible that had all participants read the fact patterns more closely, they would have used the manipulated factors in their decision as hypothesized.

Of greater concern is the fact that the failed manipulation check variable did significantly predict the rental index such that participants who failed more manipulation checks tended to favor the nondescript "other" applicant over the applicant described in the vignette. Because they did not read and rely on the information provided, it seems that some other unmeasured factor drove the rental decision for the participants who failed more manipulation checks. Perhaps because they saw but did not read the information provided in the fact pattern, the participants who failed more manipulation



checks felt that they should have received more information about the applicant and therefore did not have enough information to warrant renting to that applicant.

More importantly, the rate of manipulation check failure interacted with the effect of applicant offense status on the rental decision such that the effect of applicant offense status on the rental index was strongest for participants who failed few or no manipulation checks and weakest for the participants who failed the most manipulation checks. This finding suggests that the participants who read the material more closely (and therefore failed fewer manipulation checks) relied more heavily on the available information about the applicant than the participants who did not closely read and remember the information (and therefore failed more manipulation checks). Thus, the participants who failed fewer manipulation checks were more likely to have noticed and relied on the applicant's offense information and used that information accordingly.

This interpretation is supported by the fact that the main effect of failing manipulation checks on the rental decision only occurred when participants read about an applicant who did *not* have a criminal history. This finding supports the interpretation that participants noticed the offense information when it was available and used it in their rental decision, acting less intentionally when they had less information on the target applicant. In other words, it seems that the participants noticed when an applicant had a prior criminal history and weighed that information accordingly, but the participants did not notice or rely on less stigmatizing information about the applicant (e.g., the applicant's race, gender, income, family status). Because the participants did not pay much attention to the target applicant's characteristics, they took less care in differentiating between two potential applicants about which they knew very little.

Additionally, I repeated the primary analyses after removing the participants who failed the manipulation checks from the data set, and the results did not change. This provides some assurance that, while retaining those participants who did not closely read the fact pattern in the data set may have precluded finding true effects of the manipulated factors (e.g., a Type 1 error), it did not erroneously produce effects that would not have otherwise occurred (e.g., a Type 2 error).

### ***Main Effects of Negative Attitudes on Rental Outcome***

Partially supporting Hypothesis 4, explicit attitudes towards the target groups significantly predicted the participants' rental decisions. In 6 different linear regression models, participants with more negative explicit attitudes towards ex-offenders were more likely to prefer renting to an unknown "other" applicant over the target applicant. This finding supports prior research showing that people generally hold negative attitudes towards people with criminal histories, believing ex-offenders to be members of a deviant sub-class, who as a group are generally dangerous, dishonest, and disreputable (Denver et al., 2017; Hirschfield & Piquero, 2010; LeBel, 2012a).

Though not hypothesized, participants who held explicit negative attitudes towards single parents were also more likely to prefer renting to an unknown "other" applicant over the target applicant. An exploratory correlational analysis showed that the ATP and the ATSWP scales were strongly and significantly correlated ( $r = -.472, p < .001$ ). Given that people generally view both ex-offenders and single parents as negatively impacting society (Denver et al., 2017; Hirschfield & Piquero, 2010; LeBel, 2012a; Usdansky, 2009), it is possible that holding explicit negative attitudes towards stigmatized groups in general uniquely impacted the participants' rental preferences.

However, contrary to Hypothesis 5, neither implicit attitudes towards ex-offenders nor single parents significantly predicted participants' rental decisions. Even so, the lack of implicit attitudes found in this experiment can be supported by prior research. Explicit attitudes tend to guide behavior when people possess the opportunity and motivation to engage in effortful processing. Implicit attitudes, then, guide behavior when the actor lacks the opportunity and motivation for controlled processing (Briñol et al., 2019; Friese et al., 2009; Glock & Kleen, 2020). Comparing the relative merits of one applicant over another requires some amount of effortful processing, which may reduce the effect of implicit bias on that behavior. However, it is also possible that the "paper and pencil" measure of implicit attitudes used in this experiment did not accurately capture participants' actual levels of implicit bias.

#### ***Interactions of Manipulated Factors and Attitudes on Rental Outcome***

Contrary to Hypotheses 6 and 7, neither the applicant's criminal history nor family status interacted with the participants' implicit or explicit attitudes to predict the rental decision. The fact that the participants' explicit attitudes generally influenced the likelihood that they would rent to the applicant but did not interact with the applicant's criminal history or family status suggests that merely holding negative attitudes towards specific groups may have mattered more in this situation than which groups those attitudes were directed towards. That this experiment did not produce the predicted interactions may also have occurred in part because a significant number of participants did not pay close attention to the facts manipulated in the vignette (as demonstrated by the 30% of participants who failed the manipulation checks). Without properly reading

and understanding the facts of the presented scenario, the participants were not able to use the informational cues as hypothesized.

It is also possible that a particular attitude component may influence housing decisions more concretely than the overall attitude. This experiment measured the participants' overall negative attitudes towards the two target groups rather than more specific attitude components. For example, in a similar experiment, Berry and Wiener (2020) found that participants' stereotypes of ex-offenders as being low in competence predicted the likelihood that they would rent to an ex-offender applicant compared to a nondescript "other" applicant. Future research exploring just the cognitive or affective components of attitudes towards ex-offenders and single parents, rather than attitudes generally, may help identify the mechanism by which attitudes towards these groups influence discriminatory behavior.

## **CHAPTER 8: GENERAL DISCUSSION**

While the Fair Housing Act prohibits housing discrimination on the basis of race, gender, religion, sex, disability, family status, and national origin, it allows housing providers to discriminate on the basis of criminal history (Kanovsky, 2016). Prior research provides compelling evidence that housing providers disproportionately deny housing to ex-offender applicants (Clark, 2007; Evans, 2016; Furst & Evans, 2017; Helfgott, 1997) and single parent applicants with young children (Lauster & Easterbrook, 2011; Jones & Teixeira, 2015; Murchie & Pang, 2018; Reosti, 2020). This dissertation consisted of two experiments that examined the effects of negative attitudes towards ex-offender parents on those parents' ability to access safe and affordable housing. Experiment 1 was an experimental audit study which collected data in response to

inquiries from an alleged single parent ex-offender rental applicant. Experiment 2 was an analogue study that expanded on Experiment 1's findings by measuring participants' implicit and explicit attitudes towards ex-offenders and single parents before asking them whether they would rent to a hypothetical applicant with children and/or with a criminal history. Together, these experiments showed real world and experimental evidence of criminal history and family status housing discrimination.

### **8.1 Ex-Offender Housing Discrimination**

Both experiments provided clear evidence of housing discrimination against applicants with criminal histories. The housing provider participants in Experiment 1 discriminated against alleged ex-offender applicants across several different outcome variables. The housing providers were more likely to respond negatively and less likely to send an application to an applicant with a criminal history than one who did not disclose a prior offense. They also took significantly longer to respond to inquiries from ex-offender applicants than non-offender applicants. The results of Experiment 2 further supported Experiment 1's finding of criminal history housing discrimination. Experiment 2's participants were more likely to rent to an unknown other applicant over the target applicant when the applicant had a prior felony conviction (vs no prior felony conviction).

Though these results reflect those found in prior research (Clark, 2007; Evans, 2016; Furst & Evans, 2017; Helfgott, 1997), the Experiment 1 findings are especially concerning because the participants in Experiment 1 were real housing providers responding in real time to inquiries from an alleged applicant disclosing a criminal history. Housing discrimination like that displayed in this dissertation contributes to the

disproportionately high rates of homelessness among those who have been recently released from prison (Couloute, 2018). The lack of affordable housing for released offenders creates a “revolving door of homelessness,” whereby homelessness increases the likelihood of re-incarceration, which in turn increases the risk of homelessness (Couloute, 2018, pp. 2-3; Walter et al., 2014).

Had “Samantha” been one of the 5 million formerly incarcerated people living in the United States (Couloute, 2018), she would have had a more difficult time finding safe and affordable housing in 20 large cities across the United States than a similar applicant without a criminal history. Though this dissertation only explored housing in large U.S. cities, some research has suggested that living in an urban environment can soften attitudes towards ex-offenders and that residents of rural environments may hold more punitive attitudes towards offenders (Hirschfield & Piquero, 2010). Samantha may therefore have experienced similar, if not increased, difficulty finding housing in smaller towns and cities. Without safe and permanent housing, Samantha would have risked impairments to her physical and mental health, increased difficulty finding secure stable employment, an increased risk of re-offending, the potential loss of her parental rights, and limited ability of her friends and family to provide support (Couloute, 2018; Evans et al., 2019; Walker et al., 2014).

## **8.2 Family Status Housing Discrimination**

While the FHA allows for criminal history discrimination, it expressly prohibits discrimination on the basis of family status. However, existing research suggests that single mothers and single fathers face significantly more barriers on the housing market than do heterosexual couples (Jones & Teixeira, 2015; Lauster & Easterbrook, 2011).

The hesitancy to rent to single parents may stem from the stigmatizing belief that single parents are less responsible or less able to pay rent than married couples or single adults without children (Noble et al., 2004) or more rationally from the understanding that children can be loud and may be more likely to damage property (Murchie & Pang, 2018). This dissertation therefore sought to measure real world rates of family status housing discrimination and to better understand how housing providers would treat single parents who also had criminal histories. This interaction matters because the FHA only allows for criminal history discrimination if doing so does not disparately impact members of a protected class (Kanovsky, 2016). Thus, housing discrimination on the basis of criminal history would become illegal under the FHA if it disproportionately impacted single parents.

Though real-world housing providers (Experiment 1) and lay people acting as housing providers (Experiment 2) openly and obviously discriminated on the basis of criminal history, this dissertation found much less evidence of family status discrimination. For instance, Experiment 1's housing providers were significantly less likely to respond, but more likely to respond negatively, to applicants with a child than those who lived alone or with an adult sibling. However, Experiment 2 did not replicate these findings, as the applicant's family status did not affect the likelihood that the participant would rent to the target applicant over an unknown other applicant. Perhaps the participants intentionally refused to discriminate against single parent applicants because they read about the FHA's prohibition on family status discrimination prior to making their rental decisions. However, one must be cautious in accepting this interpretation because a substantial number of people who read the FHA summary did

not understand that the law does protect applicants against family status discrimination (Kanovsky, 2016).

Though unexpected in light of prior research suggesting such that landlords implicitly or explicitly make it more difficult for single parents to find accessible housing (Lauster & Easterbrook, 2011; Jones & Teixeira, 2015; Murchie & Pang, 2018; Reosti, 2020), the lack of family status discrimination found in this dissertation was disappointing from a research point of view but encouraging from an equal housing perspective. While the lack of significant family status effects in Experiment 2 may have more to do with methodological limitations of that study (which will be addressed more fully in the “Limitations” portion of this discussion section), it is encouraging that the single parent version of “Samantha” did not meet much resistance from the housing providers in Experiment 1. However, Experiment 1 only measured the landlord’s response to an initial inquiry from a single parent applicant. Single parents may not experience family status discrimination until later in the housing rental process. For example, Reosti (2020) interviewed rental housing industry experts, independent landlords, and property managers about how anti-discrimination housing requirements influence rental decisions. Some of these participants acknowledged that landlords do sometimes make improper judgment calls if applicants bring their children to the screening (Reosti, 2020). Future research should explore experiences of family status housing discrimination at later stages of the housing rental process.

Another encouraging, albeit unexpected, finding was that neither experiment found the intersectional offense status by parent status interaction predicting that holding two stigmatized identities would make access to housing uniquely more difficult than



holding one or no stigmatized identities (see LeBel, 2012). Given that criminal history affected the housing provider's response much more robustly than parent status, it is possible that housing providers relied solely on the existence of a criminal history where present and did not further consider any impact that criminal history might have on an ex-offender single parent's ability to fit their schemas of suitable tenants. It is also possible, at least in Experiment 2, that the experiment did not produce the predicted interactions because a significant number of participants did not pay close enough attention to the facts manipulated in the vignette to use the informational cues as hypothesized. However, without the hypothesized interactions, this dissertation produced no evidence that housing discrimination on the basis of criminal history disproportionately impacted single parent applicants.

### **8.3 Negative Attitudes and Housing Discrimination**

This dissertation intended to first measure the rates of ex-offender and family status housing discrimination across the U.S. in Experiment 1 and then to explore the mechanisms by which that housing discrimination occurred, namely by examining how negative implicit and explicit attitudes towards ex-offenders and single parents influenced housing rental decisions in Experiment 2. Prior criminal justice research demonstrated that regardless of the seriousness of the crime (e.g., violent murder or minor drug offense), people view offenders and ex-offenders as members of a deviant sub-class, who as a group are generally dangerous, dishonest, and disreputable (Denver et al., 2017; Hirschfield & Piquero, 2010; LeBel, 2012a). A meta-analysis of public attitudes towards ex-offenders found that people in general (regardless of their age, race, education, religious beliefs, or household income) hold these negative attitudes towards ex-offenders

(Rade et al., 2016). Prior research also shows that when people hold more than one stigmatized identity (LeBel, 2012b), it can augment the effects of negative attitudes towards ex-offenders who are also single parents (Wertheimer & Meier, 2020).

Supporting this prior research, Experiment 2 found that negative explicit attitudes towards ex-offenders consistently predicted the participants' rental decisions. Participants with more negative explicit attitudes towards ex-offenders were consistently more likely to prefer renting to an unknown "other" applicant over the target applicant. In addition, participants who held explicit attitudes towards single parents were also more likely to prefer renting to an unknown "other" applicant over the target applicant. However, Experiment 2 did not provide any evidence that explicit attitudes towards ex-offenders impact the likelihood of renting to an ex-offender nor that implicit attitudes towards single parents impact the likelihood of renting to a single parent as predicted. Instead, the participants who held negative attitudes towards ex-offenders and single parents were generally more likely to rent to an unknown "other" applicant, regardless of whether or not the target applicant held the particular attitude characteristics (e.g., having a criminal history or being a single parent).

Given prior research showing that people act in accordance with their attitudes (Briñol et al., 2019; Glock & Kleen, 2020; Schaible et al., 2021), it is surprising that neither implicit nor explicit attitudes interacted with the manipulated factors in any meaningful way. The interactions may not have occurred in part because a significant number of participants did not pay close attention to the facts manipulated in the vignette (as demonstrated by the 30% of participants who failed the manipulation checks).

Without properly reading and understanding the facts of the presented scenario, the participants were not able to use the informational cues as hypothesized.

It is also possible that the novel implicit attitude measures used in this dissertation failed to properly measure the participants' negative attitudes towards ex-offenders and single working parents—perhaps because the participants found it difficult to assign the newly created words to distinct categories. Prior research has affirmed the reliability and validity of the Attitudes Towards Prisoners scale (see Ireland & Quinn, 2007; Melvin et al., 1985; Schaible et al., 2021) and the Attitudes Towards Single Working Parents scale (see Noble et al., 2004). However, this dissertation used a novel measure of implicit attitudes. Both the traditional computerized Implicit Association Test (“IAT”) and the related “paper and pencil” version have been used in research for decades (Greenwald et al., 1998; Lemm et al., 2008). However, no IAT has ever measured implicit attitudes towards ex-offenders or single parents, requiring the creation of a new IAT measure to capture negative implicit attitudes towards those two groups. Even though a pilot test of the new IAT measure showed positive results, the participants in the main study may still have struggled to properly place the words into the newly created categories (offender, law-abiding citizen, single parent, and single person). The fact that Experiment 2 only produced attitude effects for the more commonly used explicit attitude measures supports the suggestion that the novel IAT measures did not properly assess the participants' implicit attitudes towards ex-offenders and single parents. Future research should continue to develop and test measures of implicit attitudes towards these groups, as there is presently no valid or reliable means of measuring implicit attitudes towards ex-offenders or single parents. Future research will also need to further explore the correlates

of the biases against ex-offenders and single parents that produced a tendency to reject applications regardless of the attributes of the applicant in the current investigation.

#### **8.4 Limitations**

This dissertation builds upon existing research examining real world occurrences of housing discrimination and the ways in which negative attitudes towards ex-offenders and single parents contribute to housing discrimination against those populations. Though prior research has examined both family status and criminal history discrimination separately, no previous experimental audit studies have explored the interaction of family status and criminal history on housing rental decisions. Nor has any prior research measured implicit attitudes towards ex-offenders and/or single parents. The novelty of this research adds to an important conversation at the intersection of behavioral sciences and the law about how and when landlords should be allowed to discriminate against vulnerable communities. However, the novelty of this research also created its own limitations.

The primary limitation is this dissertation's reliance on technology as a means of data collection. Though online data collection can be easier, cheaper, more diverse than undergraduate participant pools or other internet crowdsourcing research pools (Buhrmester et al., 2011), reliance on online data collection can create its own set of data collection problems. For example, while email audit studies are commonly used to measure housing discrimination (e.g., Evans et al., 2019; Evans & Porter, 2015), and collecting email responses from the housing providers in Experiment 1 allowed for measures of subtle means of discrimination like response length and time, the use of email communication did not allow for the collection of any further clarifying

information. Landlords are oftentimes hesitant to overtly reject a potential applicant (Furst & Evans, 2017; Reosti, 2020), so the housing providers may have refrained from overtly saying no to “Samantha’s” inquiry over email (especially because that rejection would have been in writing). However, they may have answered more directly in a conversation where the applicant could press for more information.

Technology also caused data collection issues in Experiment 2. For instance, a glitch in the Qualtrics platform compromised the random assignment in the first round of data collection, requiring the collection of a second round of data. However, budgetary restraints limited the ability to re-collect the complete dataset needed for full power. As a result, Experiment 2 was somewhat underpowered, which perhaps contributed to its limited findings.

Further, nearly 30% of the remaining participants in Experiment 2 did not pay close attention to the facts manipulated in the vignette and subsequently failed at least one manipulation check. Although including these participants in the dataset for the full analyses does not seem to have produced any meaningful spurious effects (as the results of the primary analyses did not change after removing those participants from the dataset), it contributed to the underpowering of Experiment 2 and perhaps masked effects that may have been occurred if all participants had read the scenario more closely.

## **CHAPTER 9: CONCLUSION**

Nearly 2.2 million people are currently incarcerated in United States jails and prisons (Sawyer & Wagner, 2020). The vast majority of these incarcerated individuals (nearly 95%) will eventually return to their communities (Muhlhausen, 2018). When they do, these ex-offenders will face a multitude of barriers to securing welfare benefits,

employment, education, voting rights, handgun licenses, military service, and, perhaps most importantly, housing after release from prison (Pinard & Thompson, 2006). The barriers to access affordable housing after release from incarceration increase even further for single parents who must provide for their children (Jones & Teixeira, 2015). The Fair Housing Act (FHA) prohibits housing discrimination on the basis of family status, but not criminal history. Therefore, landlords across the country can legally deny housing to the disproportionate number of formerly incarcerated people looking for safe and affordable housing, so long as it doesn't disparately impact one of the enumerated protected classes.

This dissertation consisted of two experiments that examined the effects of negative attitudes towards ex-offender parents on those parents' ability to access housing. Across both experiments, real-world housing providers and laypeople acting as landlords systematically denied housing to people with criminal histories. Similarly, although the effects were less drastic, Experiment 1 also found evidence of family status housing discrimination, as housing providers were less likely to respond (but more likely to respond negatively) to applicants living with children compared to those living alone or with an adult sibling. Though Experiment 2 failed to find the expected evidence to show that negative attitudes drove housing discrimination against ex-offenders and single parents, future research should continue to explore the mechanisms driving housing discrimination in order to promote policies and practices to eliminate it.

## References

- Ahmed, A. M., & Hammarstedt, M. (2008). Discrimination in the rental housing market: A field experiment on the Internet. *Journal of Urban Economics*, *64*, 362-372.  
doi:10.1016/j.jue.2008.02.004
- Alper, M., & Durose, M. R. (2018). *2018 update on prisoner recidivism: A 9-year follow-up period (2005-2014)*. U.S. Department of Justice.  
<https://www.bjs.gov/content/pub/pdf/18upr9yfup0514.pdf>
- Bennett, M., & Jamieson, L. (1999). Perceptions of parents as a function of their marital status and sex. *Infant and Child Development*, *8*, 149-154.
- Berry, M. C., Wiener, R. L. (2020). Exoffender housing stigma and discrimination. *Psychology, Public Policy, & Law*, *26*, 213-232.  
<http://dx.doi.org/10.1037/law0000225>
- Brank, E. (2019). *The psychology of family law*. NYU Press.
- Briñol, P., Petty, R. E., Stavraki, M. (2019). Structure and function of attitudes. In *Oxford Research Encyclopedia*. Oxford University Press. DOI:  
0.1093/acrefore/9780190236557.013.320
- Bryan, L. R., Coleman, M., Ganong, L. H., & Bryan, S. H. (1986). Person perception: Family structure as a cue for stereotyping. *Journal of Marriage and the Family*, *48*, 169–174. doi:10.2307/352241
- Cain, H. (2003). Housing our criminals: Finding housing for the ex-offender in the twenty-first century. *Golden Gate University Law Review*, *33*, 131-171.
- Caragata, L. (2009). Good welfare moms: Stories of caring labour. *Journal of the Association for Research on Mothering*, *10*, 66-81.

Carson, E. A. (2020). *Prisoners in 2019*. Washington, DC: Bureau of Justice Statistics.

Retrieved from <https://bjs.ojp.gov/library/publications/prisoners-2019>.

Casey, T., & Maldonado, L. (2012). *Worst off – Single-parent families in the United*

*States*. Legal Momentum. <https://www.legalmomentum.org/library/worst-single-parent-families-united-states>

Child Welfare Information Gateway (2020). *Determining the best interests of the child*.

Retrieved from [https://www.childwelfare.gov/pubPDFs/best\\_interest.pdf](https://www.childwelfare.gov/pubPDFs/best_interest.pdf).

Child Welfare Information Gateway (2021). *Grounds for involuntary termination of parental rights*. Retrieved from

<https://www.childwelfare.gov/pubPDFs/groundtermin.pdf>.

Clark, L. M. (2007). Landlord attitudes toward renting to released offenders. *Federal*

*Probation, 71*, 20-30.

Couloute, L. (2018). *Nowhere to go: Homelessness among formerly incarcerated people*.

Northampton, MA: Prison Policy Initiative.

DeJean, S. L., McGeorge, C. R., & Carlson, T. S. (2012). Attitudes toward never-married single mothers and fathers: Does gender matter? *Journal of Feminist Family*

*Therapy, 24*, 121-138. doi: 10.1080/08952833.2012.648121

Denver, M., Pickett, J. T., & Bushway, S. D. (2017). The language of stigmatization and

the mark of violence: Experimental evidence on the social construction and use of criminal record stigma. *Criminology, 55*, 664-690. doi: 10.1111/1745-

9125.12145.

Department of Housing and Urban Development v. Rucker, 535 U.S. 125 (2002).



- Dermott, E., & Pomati, M. (2016). The parenting and economizing practices of lone parents: Policy and evidence. *Critical Social Policy, 36*, 62-81. DOI: 10.1177/0261018315602198
- Dhami, M. K., & Ayton, P. (2001). Bailing and jailing the fast and frugal way. *Journal of Behavioral Decision Making, 14*, 141–168. <https://doi.org/10.1002/bdm.371>
- Dichter, M. E., & Osthoff, S. (2015). Women’s experiences of abuse as a risk factor for incarceration: A research update. *National Resource Center on Domestic Violence*. [https://vawnet.org/sites/default/files/materials/files/2016-09/AR\\_IncarcerationUpdate.pdf](https://vawnet.org/sites/default/files/materials/files/2016-09/AR_IncarcerationUpdate.pdf)
- Eagly, A. H., & Mladinic, A. (1989). Gender stereotypes and attitudes toward women and men. *Personality and Social Psychology Bulletin, 15*, 543-558.
- Evans, D. N. (2016). The effect of criminal convictions on real estate agent decisions in New York City. *Journal of Crime and Justice, 39*, 363-379. <https://doi.org/10.1080/0735648X.2016.1166068>
- Evans, D. N., Bount-Hill, K., & Cubellis, A. (2019). Examining housing discrimination across race, gender, and felony history. *Housing Studies, 34*, 761-778. doi: 10.1080/02673037.2018.1478069
- Evans, D. N., & Porter, J. R. (2015). Criminal history and landlord rental decisions: A New York quasi-experimental study. *Journal of Experimental Criminology, 11*, 21-42. DOI 10.1007/s11292-014-9217-4
- Fair Housing Act, 42 U.S.C. § 3604.

- Flens, J. R. (2005). The responsible use of psychological testing in child custody evaluations: Selection of tests. *Journal of Child Custody*, 2, 3-29. Retrieved from [https://doi.org/10.1300/J190v02n01\\_02](https://doi.org/10.1300/J190v02n01_02).
- Friese, M., Hofmann, W., & Schmitt, M. (2009). When and why do implicit measures predict behaviour? Empirical evidence for the moderating role of opportunity, motivation, and process reliance. *European Review of Social Psychology*, 19, 285-338. <https://doi.org/10.1080/10463280802556958>
- Furst, R. T., & Evans, D. N. (2017). Renting apartments to felons: Variations in real estate agent decisions due to stigma. *Deviant Behavior*, 38, 698-708. <https://doi.org/10.1080/01639625.2016.1197635>
- Ganong, L. W., & Coleman, M. (1995). The content of mother stereotypes. *Sex Roles*, 32, 495–512. doi:10.1007/BF01544185
- Glock, S., & Kleen, H. (2020). Preservice teachers' attitudes, attributions, and stereotypes: Exploring the disadvantages of students from families with low socioeconomic status. *Studies in Educational Evaluation*, 67, 1-9. <https://doi.org/10.1016/j.stueduc.2020.100929>
- Goldsheider, F., & Kaufman, G. (2006). Single parenthood and the double standard. *Fathering*, 4, 191-208. doi: 10.3149/fth.0402.191
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102, 4-27.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. *Journal of Personality and Social Psychology*, 74, 1464–1480.

- Haire, A. R., & McGeorge, C. R. (2012). Negative perceptions of never-married custodial single mothers and fathers: Applications of a gender analysis for family therapists. *Journal of Feminist Family Therapy, 24*, 24-51. DOI: 10.1080/08952833.2012.629130
- Hakovirta, M., Kallio, J., & Salin, M. (2021). Is it possible for single parents to successfully raise children? Multilevel analysis of attitudes toward single parents in 22 welfare states. *Journal of Comparative Family Studies, 52*, 117-143. DOI: 10.3138/jcfs.52.1.008
- Hanson, A., Hawley, Z., & Taylor, A. (2011). Subtle discrimination in the rental housing market: Evidence from e-mail correspondence with landlords. *Journal of Housing Economics, 20*, 276-284. doi:10.1016/j.jhe.2011.09.003
- Hayes, A. F. (2020). *Statistical methods for communication science*. Routledge.
- Helfgott, J. (1997). Ex-offender needs versus community opportunity in Seattle, Washington, *Federal Probation, 61*, 12-24.
- Hirschfield, P. J., & Piquero, A. R. (2010). Normalization and legitimization: Modeling stigmatizing attitudes towards ex-offenders. *Criminology, 48*, 27-55.
- Hofmann, W., Gschwendner, T., Castelli, L., & Schmitt, M. (2008). Implicit and explicit attitudes and interracial interaction: The moderating role of situationally available control resources. *Group Processes & Intergroup Relations, 11*, 69-87. doi: 10.1177/1368430207084847
- Holloway, C. P., & Wiener, R. L. (2021, October 14). Incorporating emotion into cue-based political judgment modeling. *Psychology, Public Policy, and Law*. Advance online publication. <http://dx.doi.org/10.1037/law0000330>

Housing Opportunity Program Extension Act, 24 C.F.R. § 5.855(a)(1)

Imhoff, R., & Jahnke, S. (2018). Determinants of punitive attitudes toward people with pedophilia: Dissecting effects of the label and intentionality ascriptions. *Archives of Sexual Behavior, 47*, 353-361. <https://doi.org/10.1007/s10508-017-1048-8>

Jones, A., & Teixeira, C. (2015). Housing experiences of single mothers in Kelowna's rental housing market. *Canadian Journal of Urban Research, 24*, 117-137.

Kanovsky, H. (2016). *Office of general counsel guidance on application of fair housing act standards to the use of criminal records by providers of housing and real estate-related transactions*. Washington, DC: U. S. Department of Housing and Urban Development.

Kim, H. (2000). In defense of single-parent families. *Journal of Law & Family Studies, 2*, 229-240.

Lauster, N., & Easterbrook, A. (2011). No room for new families? A field experiment measuring rental discrimination against same-sex couples and single parents. *Social Problems, 58*, 389-409. DOI: 10.1525/sp.2011.58.3.389.

Leasure, P., & Martin, T. (2017). Criminal records and housing: An experimental study. *Journal of Experimental Criminology, 13*, 527-535. DOI 10.1007/s11292-017-9289-z

LeBel, T. P. (2012a). "If one doesn't get you another one will": Formerly incarcerated persons' perceptions of discrimination. *The Prison Journal, 92*, 63-87. doi: 10.1177/0032885511429243

- LeBel, T. P. (2012b). Invisible stripes? Formerly incarcerated persons' perceptions of stigma. *Deviant Behavior, 33*, 89-107.  
<https://doi.org/10.1080/01639625.2010.538365>
- Lemm, K. M., Lane, K. A., Sattler, D. N., Khan, S. R., Nosek, B. A. (2008) Assessing implicit cognitions with a paper-format implicit association test. In Melanie A. Morrison and Todd G. Morrison (Eds.), *The psychology of modern prejudice*. Nova Science Publishers, Inc.
- Lhamon, C. E. (2019). *Collateral consequences, the crossroads of punishment, redemption, and the effects on communities*. United States Commission on Civil Rights. Retrieved from <https://www.usccr.gov/files/pubs/2019/06-13-Collateral-Consequences.pdf>.
- Liegghio, M., & Caragata, L. (2016). "Why are you talking to me like I'm stupid?": The micro-aggressions committed within the social welfare system against lone mothers. *Journal of Women & Social Work, 31*, 7-23. DOI: 10.1177/0886109915592667
- Lowery, B. S., Hardin, C. D., and Sinclair, S. (2001). Social influence effects on automatic racial prejudice. *Journal of Personality and Social Psychology, 81*, 842-855. doi: 10.1037//0022-3514.81.5.842
- Lu, Y., Walker, R., Richard, P., & Younis, M. (2020). Inequalities in poverty and income between single mothers and fathers. *International Journal of Environmental Research and Public Health, 17*, 1-15. 7, doi:10.3390/ijerph17010135
- Luttrell, A., Petty, R. E., & Wagner, B. C., Briñol, P., & Wagner, B. C. (2016). Making it moral: Merely labeling an attitude as moral increases its strength. *Journal of*

*Experimental Social Psychology*, 65, 82-93.

<http://dx.doi.org/10.1016/j.jesp.2016.04.003>

MacLin, M. K., & Herrera, V. (2006). The criminal stereotype. *North American Journal of Psychology*, 8, 197-208.

Mancini, C., Baker, T., Sainju, K. D., Golden, K., Bedard, L. E., & Gertz, M. (2016).

Examining external support received in prison and concerns about reentry among incarcerated women. *Feminist Criminology*, 11, 163-190. DOI:

10.1177/1557085115579483

Maruschak, L. M., & Bronson, J. (2016). *Parents in prison and their minor children*. U.S.

Department of Justice. Retrieved from

<https://bjs.ojp.gov/content/pub/pdf/pptmcspi16st.pdf>

Massey, D. S., & Lundy, G. (2001). Racial discrimination in urban housing markets: New methods and findings. *Urban Affairs Review*, 36, 452-469.

McWilliams, E. R., & Hunter, B. A. (2021). The impact of criminal record stigma on quality of life: A test of theoretical pathways. *American Journal of Community Psychology*, 67, 89-102. Doi: 10.1002/ajcp.12454

Melvin, K. B., Lorraine K. G., & William M. G. (1985). A scale to measure attitudes toward prisoners. *Criminal Justice and Behavior*, 12, 241-53.

Moore, K. E., Stuewig, J. B., & Tangney, J. P. (2016). The effect of stigma on criminal offenders' functioning: A longitudinal mediational model. *Deviant Behavior*, 37, 196-218. DOI: 10.1080/01639625.2014.1004035

Morani, N. M., Wikoff, N., Linhorst, D. M., & Bratton, S. (2011). A description of the self-identified needs, service expenditures, and social outcomes of participants of

a prison-reentry program. *The Prison Journal*, 91, 347-365. doi:  
10.1177/0032885511409896

Muhlhausen, D. B. (2018). *An overview of offender reentry*. National Institute of Justice.

Retrieved from <https://www.ojp.gov/pdffiles1/nij/251554.pdf>.

Murchie, J., & Pang, J. (2018). Rental housing discrimination across protected classes: Evidence from a randomized experiment. *Regional Science & Urban Economics*, 73, 170-179. <https://doi.org/10.1016/j.regsciurbeco.2018.10.003>

Neal Conan (Host). (February 24, 2011). *For single mothers, stigma difficult to shake* [Audio Podcast]. National Public Radio.

<https://www.npr.org/2011/02/24/134031175/For-Single-Mothers-Stigma-Difficult-To-Shake>

Neumann, R., Hüsenbeck, K., & Seibt, B. (2003). Attitudes towards people with AIDS and avoidance behavior: Automatic and reflective bases of behavior. *Journal of Experimental Social Psychology*, 40, 543-550. doi:10.1016/j.jesp.2003.10.006

Noble, C. L., Eby, L. T., Lockwood, A., & Allen, T. D. (2004). Attitudes towards working single parents: Initial development of a measure. *Educational and Psychological Measurement*, 64, 1030-1052. doi: 10.1177/0013164404264844

O'Neil, K. M., Patry, M. W., & Penrod, S. D. (2004). Exploring the effects of attitudes toward the death penalty on capital sentencing verdicts. *Psychology, Public Policy, and Law*, 10, 443-470. <https://doi.org/10.1037/1076-8971.10.4.443>

Ondrich, J., Stricker, A., & Yinger, J. (1998) Do real estate brokers choose to discriminate? Evidence from the 1989 housing discrimination study. *Southern Economic Journal*, 64, 880-901.

- Oyama, R. (2009). Do not (re)enter: The rise of criminal background tenant screening as violation of the Fair Housign Act. *Michigan Journal of Race & Law*, 15, 181-222.
- Payne, B. K., Vuletich, H. A., & Lundberg, K. B. (2017). The bias of crowds: How implicit bias bridges personal and systemic prejudice. *Psychological Inquiry*, 28, 233-248. <https://doi.org/10.1080/1047840X.2017.1335568>
- Pew Research Center. (2010). *The decline of marriage and rise of new families*. Retrieved from <https://www.pewresearch.org/social-trends/2010/11/18/the-decline-of-marriage-and-rise-of-new-families/>
- Pfaff v. U.S. Department of Housing and Urban Development, 88 F.3d 739 (9<sup>th</sup> Cir. 1996).
- Pinard, M., & Thompson, A. C. (2006). Offender reentry and the collateral consequences of criminal convictions: An introduction. *N.Y.U. Review of Law and Social Change*, 30, 585-620.
- Prguda, E., & Burke, K. (2020). All eyes on me as a parent: Professionals' and offenders' views on parenting challenges and barriers to accessing parenting services. *Child Abuse & Neglect*, 99, 1-13. <https://doi.org/10.1016/j.chiabu.2019.104226>
- Rade, C. B., Desmarais, S. L., & Mitchell, R. E. (2016). A meta-analysis of public attitudes toward ex-offenders. *Criminal Justice & Behavior*, 43, 1260-1280. DOI: 10.1177/0093854816655837
- Reosti, A. (2020). "We go totally subjective": Discretion, discrimination, and tenant screening in a landlord's market. *Law & Social Inquiry*, 45, 618-657.



- Rhodes, R., & Johnson, M. M. (2000). Students' perceptions of single parents and social injustice: A women's issue. *Affilia, 15*, 434–446.  
doi:10.1177/08861090022094038
- Roberts, S. O., Ho, A. K., Rhodes, M., & Gelman, S. A. (2017). Making boundaries great again: Essentialism and support for boundary-enhancing initiatives. *Personality and Social Psychology Bulletin, 43*, 1643–1658.
- Rocklage, M. D., & Fazio, R. H. (2018). Attitude accessibility as a function of emotionality. *Personality and Social Psychology Bulletin, 44*, 508-520.  
<https://doi.org/10.1177/0146167217743762>
- Rydell, R. J., McConnell, A. R., & Mackie, D. M. (2008). Consequences of discrepant explicit and implicit attitudes: Cognitive dissonance and increased information processing. *Journal of Experimental Social Psychology, 44*, 1526-1532.  
doi:10.1016/j.jesp.2008.07.006
- S.M. v. E.M.B.R., 414 S.W.3d 622 (Mo. Ct. App. 2013).
- Santosky v. Kramer, 455 U.S. 745 (1982).
- Sawyer, W., & Wagner, P. (2020). *Mass incarceration: The whole pie 2020*. Northampton, MA: Prison Policy Initiative.
- Schaible, L., Gant, L., Ames, S. (2021). The impact of police attitudes towards offenders on law-enforcement assisted diversion decisions. *Police Quarterly, 24*, 205-232.  
DOI: 10.1177/1098611120960714
- Sinclair, S. Lowery, B. S., Hardin, C. D., & Colangelo, A. (2005). Social tuning of automatic racial attitudes: The role of affiliative motivation. *Journal of*

*Personality and Social Psychology*, 89, 583-592. doi: 10.1037/0022-3514.89.4.583

Smith, B. C., Penrod, S. D., Otto, A. L., & Park, R. C. (1996). Jurors' use of probabilistic evidence. *Law and Human Behavior*, 20, 49–82.

<https://doi.org/10.1007/BF01499132>

Stark, T. H., Flache, A., Veenstra, R. (2013). Generalization of positive and negative attitudes toward individuals to outgroup attitudes. *Personality and Social Psychology Bulletin*, 39, 608-622. doi: 10.1170146167213480890

Stolle, D. P., Robbennolt, J. K., Patry, M., & Penrod, S. D. (2002). Fractional factorial designs for legal psychology. *Behavioral Sciences & the Law*, 20, 5–17.

<https://doi.org/10.1002/bsl.475>

Teachman, B., & Brownell, K. (2001). Implicit associations toward obese people among treatment specialists: Is anyone immune? *International Journal of Obesity*, 25, 1525-1531.

Teachman, B. A., Gapinski, K. D., Brownell, K. D., Rawlins, M., & Jeyaram, S. (2003). Demonstrations of implicit anti-fat bias: The impact of providing causal information and evoking empathy. *Health Psychology*, 22, 68-78. doi:

10.1037/0278-6133.22.1.68

The Sentencing Project (2021). *Trends in US Corrections*. Retrieved from

<https://www.sentencingproject.org/publications/trends-in-u-s-corrections/>

Troilo, J., & Coleman, M. (2008). College student perceptions of the content of father stereotypes. *Journal of Marriage and Family*, 70, 218–227. doi:10.1111/j.1741-

3737.2007.00473.x

- Uzdansky, M. L. (2009). A weak embrace: Popular and scholarly depictions of single parent families, 1900–1998. *Journal of Marriage and Family*, *71*, 209–225. doi:10.1111/j.1741-3737.2009.00592.x
- U.S. Department of Housing and Urban Development (2023, August 20). *Housing discrimination under the Fair Housing Act*. Fair Housing and Equal Opportunity. [https://www.hud.gov/program\\_offices/fair\\_housing\\_equal\\_opp/fair\\_housing\\_act\\_overview](https://www.hud.gov/program_offices/fair_housing_equal_opp/fair_housing_act_overview)
- Valiquette-Tessier, S., Vandette, M., & Gosselin, J. (2016). Is family structure a cue for stereotyping? A systematic review of stereotypes and parenthood. *Journal of Family Studies*, *22*, 162-181. <https://doi.org/10.1080/13229400.2015.1049955>
- Van Olphen, J., Eliason, M. J., & Barnes, M. (2009). Nowhere to go: How stigma limits the options of female drug users after release from jail. *Substance Abuse Treatment, Prevention, and Policy*, *4*, 1-10. doi:10.1186/1747-597X-4-10.
- Vel-Paumbo, M., Howarth, L., & Brewer, M. B. (2019). ‘Once a sex offender always a sex offender’? Essentialism and attitudes toward criminal justice police. *Psychology, Crime, & Law*, *25*, 421-439. <https://doi.org/10.1080/1068316X.2018.1529234>
- Viki, G.T., Fullerton, I., Raggett, H., Tait, F., & Wiltshire, S. (2012). The role of dehumanization in attitudes toward the social exclusion and rehabilitation of sex offenders. *Journal of Applied Social Psychology*, *42*, 2349-2367. doi: 10.1111/j.1559-1816.2012.00944.x
- Visher, C., La Vigne, N., & Travis, J. (2004) *Returning home: Understanding the challenges of prisoner reentry*. Washington, DC: Urban Institute.

- Walker, A., Hempel, L., Unnithan N. P., & Pogrebin, M. R. (2014). Parole reentry and social capital: The centrality of homelessness. *Journal of Poverty, 18*, 315-334. DOI: 10.1080/10875549.2014.923962
- Walter, R. J., Viglione, J., & Tillyer, M. S. (2017). One strike to second chances: Using criminal backgrounds in admission decisions for assisted housing. *Housing Policy Debate*. <http://dx.doi.org/10.1080/10511482.2017.1309557>
- Wertheimer, J. (2020). The statutory stigmatization of mentally ill parents in parental rights termination proceeds. *Nebraska Law Review, 98*, 746-776. Retrieved from <https://digitalcommons.unl.edu/nlr/vol98/iss3/7>
- Wertheimer, J., & Wiener, R. L. (2020). Custody judgments, ex-offender parents, and best interests of the child. *Analyses of Social Issues and Public Policy, 20*, 230-263. <https://doi.org/10.1111/asap.12199>
- Willis, G. M., Malinen, S., & Johnson, L. (2013). Demographic differences in public attitudes towards sex offenders. *Psychiatry, Psychology, and Law, 20*, 230-247. <https://doi.org/10.1080/13218719.2012.658206>
- Wittenbrink, B., Correll, J., & Ma, D.S. (2019). Implicit prejudice. In Kai Sassenberg & Michael L.W. Vliek (Eds.), *Social Psychology in Action: Evidence-Based Interventions from Theory to Practice*, 163-175. Springer. [https://doi.org/10.1007/978-3-030-13788-5\\_11](https://doi.org/10.1007/978-3-030-13788-5_11)
- World Population Review. (2020). *The 200 largest cities in the United States by population 2022*. <https://worldpopulationreview.com/us-cities>

- Wright, B. J., Zhang, S. X., Farabee, D., & Braatz, R. (2014). Prisoner reentry research from 2000 to 2010: Results of a narrative review. *Criminal Justice Review*, 39, 37-57. DOI: 10.1177/0734016813501192
- Yelnosky, M. J. (1998) What does “testing” tell us about the incidence of discrimination in housing markets?, *Seton Hall Law Review*, 29, 1488–1497.
- Yinger, J. (1986). Measuring racial discrimination with fair housing audits: Caught in the act. *The American Economic Review*, 76, 881–893.  
<https://www.jstor.org/stable/1816458>

## Appendix A: Experiment 1 Emails to Housing Providers

### Initial Inquiry Email:

Hello,

My name is Samantha, and I am interested in renting an apartment with \_\_\_\_\_ . I am 25 years old, I make about \$2,270/month, and I live [*with my 2-year-old daughter / with my older sister / alone*]. Additionally, I have no pets and [*my parole officer requires me to tell you that I have a prior felony theft conviction / no criminal history*]. I was wondering if I could submit an application for this apartment? If so, could you please send me an application?

Thank you,  
Samantha Clark

### Follow-Up to Responding Housing Providers

Thank you for your response! I am looking at other places and am no longer interested in this apartment. Samantha Clark

## Appendix B: Experiment 2 Explicit Attitude Measures

### Attitudes Towards Prisoners Scale

Melvin et al. (1985); modified by Schaible et al. (2021)

The statements listed below describe different attitudes towards offenders recently released from jails and prisons in the United States. **The term “ex-offender” refers to people who have been convicted of a crime, but who have been released from incarceration and now live in the community.**

There are no right or wrong answers, only opinions. You are asked to express *your* feelings about each statement by indicating whether you (1) Strongly Disagree, (2) Disagree, (3) Undecided, (4) Agree, or (5) Strongly Agree. Indicate your opinion by selecting the number that best describes your personal attitude. Please answer *every* item.

| 1                 | 2        | 3         | 4     | 5              |
|-------------------|----------|-----------|-------|----------------|
| Strongly Disagree | Disagree | Undecided | Agree | Strongly Agree |

1. Ex-offenders are different from most people. (R)
2. Only a few ex-offenders are really dangerous.
3. Ex-offenders never change. (R)
4. Most ex-offenders are victims of circumstance and deserve to be helped.
5. Ex-offenders have feelings like the rest of us.
6. It is not wise to trust an ex-offender too far. (R)
7. I think I would like a lot of ex-offenders.
8. Bad prison conditions just make an ex-offender more bitter.
9. Give an ex-offender an inch and he'll take a mile. (R)
10. Most ex-offenders are stupid. (R)
11. Ex-offenders need affection and praise just like anybody else.
12. You should not expect too much from an ex-offender. (R)
13. Trying to rehabilitate ex-offenders is a waste of time and money. (R)
14. You never know when an ex-offender is telling the truth. (R)
15. Ex-offenders are no better or worse than other people.
16. You have to be constantly on your guard with ex-offenders. (R)
17. In general, ex-offenders think and act alike. (R)
18. If you give an ex-offender your respect, he'll give you the same.
19. Ex-offenders only think about themselves. (R)
20. There are some ex-offenders I would trust with my life.
21. Ex-offenders will listen to reason.
22. Most ex-offenders are too lazy to earn an honest living. (R)
23. I wouldn't mind living next to door an ex-offender.
24. Ex-offenders are just plain mean at heart. (R)
25. Ex-offenders are always trying to get something out of somebody. (R)
26. The values of most ex-offenders are about the same as the rest of us.

27. I would never want one of my children dating an ex-offender. (R)
28. Most ex-offenders have the capacity for love.
29. Ex-offenders are just plain immoral. (R)
30. Ex-offenders should be under strict, harsh discipline. (R)
31. In general, ex-offenders are basically bad people. (R)
32. Most ex-offenders can be rehabilitated.
33. Some ex-offenders are pretty nice people.
34. I would like associating with some ex-offenders.
35. Ex-offenders respect only brute force. (R)
36. If a person does well in prison, he should be let out on parole.

(R) reverse scored items.



Attitudes Towards Working Single Mothers Scale

Noble et al. (2004)

The statements listed below describe different attitudes towards single parents in the United States. There are no right or wrong answers, only opinions. You are asked to express *your* feelings about each statement by indicating whether you (1) Strongly Disagree, (2) Disagree, (3) Undecided, (4) Agree, or (5) Strongly Agree. Indicate your opinion by selecting the number that best describes your personal attitude. Please answer *every* item.

| 1                    | 2        | 3         | 4     | 5              |
|----------------------|----------|-----------|-------|----------------|
| Strongly<br>Disagree | Disagree | Undecided | Agree | Strongly Agree |

1. Being a good employee is a lower priority for single parents.
2. A single parent can be just as productive of an employee as anyone else. (R)
3. Single parents can be among the most dependable employees because they really need a job. (R)
4. Single parents are too distracted by family concerns to be productive at work.
5. It is difficult for single parents to devote adequate energy to their work.
6. Single parent employees are a liability to an organization.
7. Single parent employees value their jobs more than other employees. (R)
8. Single parents make either good parents or good employees but not both.
9. Single parents often have high absenteeism from work because of their kids.
10. A child is more likely to struggle in life if raised by a single parent.
11. Children of single parents have to learn to do without a lot of things.
12. Children of single parents often feel neglected.
13. Children of single parents must be self-sufficient.
14. It is almost impossible for a single parent to raise a child as effectively as two parents.
15. Raising a child in a single parent household is asking for trouble.
16. Single parents don't have enough time to spend with their kids.
17. To be well adjusted, a child needs two parents (a mom and a dad) who both live at home.
18. Single parents do not get to spend sufficient time with their children.
19. Single parents are overloaded at home.
20. Single parents and their children develop closer relationships than children with two parents. (R)

(R) reverse scored items.

### Appendix C: Pilot Study Design

Please categorize each stimulus by checking the box that you believe most accurately characterizes the stimulus. You may check multiple boxes if you believe that stimulus may appropriately fit into two or more categories.

The categories are: “offender,” “law-abiding citizen,” “single parent,” “single person,” “pleasant,” and “unpleasant.”

| <b>Offender</b> | <b>Law-Abiding Citizen</b> | <b>Single Parent</b> |
|-----------------|----------------------------|----------------------|
| 1. Convict*     | 1. Good Samaritan          | 1. Father            |
| 2. Criminal*    | 2. Decent                  | 2. Mother            |
| 3. Culprit      | 3. Conscientious           | 3. Child             |
| 4. Delinquent   | 4. Honorable               | 4. Parenting*        |
| 5. Felon        | 5. Trustworthy             | 5. Kid               |
| 6. Lawbreaker*  | 6. Role model*             | 6. Mom               |
| 7. Crook*       | 7. Mr. Rodgers             | 7. Dad               |
| 8. Jailbird     | 8. Upstanding*             | 8. Single Mom*       |
| 9. Wrongdoer    | 9. Lawful*                 | 9. Single Dad*       |
| 10. Crook       | 10. Virtuous               | 10. Caretaker        |
| 11. Crime       | 11. Do-gooder*             | 11. Affection        |
| 12. Thief*      | 12. Helpful                | 12. Mommy            |
| 13. Jail        | 13. Good neighbor          | 13. Daddy            |
| 14. Prison      | 14. Average person         | 14. Matriarch        |
| 15. Probation   | 15. Lawful                 | 15. Patriarch        |
| 16. Illegal     | 16. Integrity              | 16. Child-bearer*    |
| 17. Lawless     | 17. Honest                 | 17. Guardian         |
| 18. Parole      | 18. Noble                  | 18. Responsible      |
| 19. Prison      | 19. Reliable               | 19. Childrearing*    |
| 20. Unlawful    | 20. Taxpayer*              | 20. Supervision      |

**Single Person**

1. Celibate
2. Individual\*
3. Independent
4. Free
5. Isolated
6. Unattached\*
7. Self-sufficient
8. Bachelor\*
9. Bachelorette\*
10. Unfettered
11. Spouseless
12. Unmarried\*
13. Unwed
14. Living alone
15. Companionless
16. Chaste
17. Stag
18. Loner
19. Separated
20. Solitary

**Pleasant**

1. Flower\*
2. Friend
3. Puppy
4. Sunshine
5. Kitten
6. Beauty
7. Cookies\*
8. Beach
9. Paradise
10. Heaven\*
11. Sunrise
12. Smile\*
13. Laughter
14. Love
15. Terrific
16. Joy\*
17. Good
18. Happy
19. Gentle
20. Healthy

**Unpleasant**

1. Spider
2. Cancer\*
3. Vomit\*
4. Heartburn\*
5. Itchy
6. Queasy
7. Snake
8. Diseased
9. Heartbreak
10. Insect
11. Hell
12. Infection\*
13. Poison
14. Crash
15. Failure
16. Brutal
17. Ridicule\*
18. Filthy
19. Rotten
20. Torture

\*The words chosen to be included in the final IATs

### Appendix D: Example of Paper Version of the Implicit Association Test

#### Fruits vs Vegetable Citizens (practice)

Please categorize each stimulus item by marking the appropriate box to the left or right of the item, beginning with the first item and working down. Try to avoid making mistakes, but if you do make a mistake, keep going. You will have 20 seconds to make as many categorizations as possible.

| <b>Fruits<br/>Unpleasant</b> |           | <b>Vegetables<br/>Pleasant</b> |
|------------------------------|-----------|--------------------------------|
|                              | Cookies   |                                |
|                              | Apple     |                                |
|                              | Smile     |                                |
|                              | Ridicule  |                                |
|                              | Vomit     |                                |
|                              | Lettuce   |                                |
|                              | Cancer    |                                |
|                              | Infection |                                |
|                              | Heartburn |                                |
|                              | Joy       |                                |
|                              | Pepper    |                                |
|                              | Orange    |                                |
|                              | Cucumber  |                                |
|                              | Broccoli  |                                |
|                              | Flower    |                                |
|                              | Kale      |                                |
|                              | Banana    |                                |
|                              | Grape     |                                |
|                              | Blueberry |                                |
|                              | Heaven    |                                |
|                              | Grape     |                                |
|                              | Joy       |                                |
|                              | Kale      |                                |
|                              | Heartburn |                                |
|                              | Vomit     |                                |
|                              | Orange    |                                |
|                              | Banana    |                                |
|                              | Ridicule  |                                |
|                              | Blueberry |                                |
|                              | Pepper    |                                |
|                              | Smile     |                                |
|                              | Cancer    |                                |
|                              | Cucumber  |                                |

|  |           |  |
|--|-----------|--|
|  | Apple     |  |
|  | Infection |  |
|  | Cookies   |  |
|  | Lettuce   |  |
|  | Heaven    |  |
|  | Broccoli  |  |
|  | Flower    |  |

Offender vs Law-Abiding Citizens

Please categorize each stimulus item by marking the appropriate box to the left or right of the item, beginning with the first item and working down. Try to avoid making mistakes, but if you do make a mistake, keep going. You will have 20 seconds to make as many categorizations as possible.

| <b>Offender<br/>Unpleasant</b> |                          | <b>Law-Abiding Citizen<br/>Pleasant</b> |
|--------------------------------|--------------------------|---|
|                                | Cookies                  |   |
|                                | Crook                    |   |
|                                | Smile                    |   |
|                                | Ridicule                 |   |
|                                | Vomit                    |   |
|                                | Do-Gooder                |   |
|                                | Cancer                   |   |
|                                | Infection                |   |
|                                | Heartburn                |   |
|                                | Joy                      |   |
|                                | Lawful                   |   |
|                                | Criminal                 |   |
|                                | Upstanding<br>Role-Model |   |
|                                | Flower                   |   |
|                                | Taxpayer                 |   |
|                                | Thief                    |   |
|                                | Convict                  |   |
|                                | Lawbreaker               |   |
|                                | Heaven                   |   |
|                                | Convict                  |   |
|                                | Joy                      |   |
|                                | Taxpayer                 |   |
|                                | Heartburn                |   |
|                                | Vomit                    |   |
|                                | Criminal                 |   |

|  |            |  |
|--|------------|--|
|  | Thief      |  |
|  | Ridicule   |  |
|  | Lawbreaker |  |
|  | Lawful     |  |
|  | Smile      |  |
|  | Cancer     |  |
|  | Upstanding |  |
|  | Crook      |  |
|  | Infection  |  |
|  | Cookies    |  |
|  | Do-Gooder  |  |
|  | Heaven     |  |
|  | Role-Model |  |
|  | Flower     |  |

Single Parent vs Single Person

Please categorize each stimulus item by marking the appropriate box to the left or right of the item, beginning with the first item and working down. Try to avoid making mistakes, but if you do make a mistake, keep going. You will have 20 seconds to make as many categorizations as possible.

| <b>Single Person<br/>Pleasant</b> |              | <b>Single Parent<br/>Unpleasant</b> |
|-----------------------------------|--------------|-------------------------------------|
|                                   | Bachelorette |                                     |
|                                   | Cancer       |                                     |
|                                   | Infection    |                                     |
|                                   | Ridicule     |                                     |
|                                   | Joy          |                                     |
|                                   | Heaven       |                                     |
|                                   | Single Dad   |                                     |
|                                   | Vomit        |                                     |
|                                   | Unmarried    |                                     |
|                                   | Flower       |                                     |
|                                   | Single Mom   |                                     |
|                                   | Childrearing |                                     |
|                                   | Heartburn    |                                     |
|                                   | Unattached   |                                     |
|                                   | Parenting    |                                     |
|                                   | Bachelor     |                                     |
|                                   | Individual   |                                     |
|                                   | Child-bearer |                                     |
|                                   | Cookies      |                                     |
|                                   | Smile        |                                     |

|  |              |  |
|--|--------------|--|
|  | Heaven       |  |
|  | Unmarried    |  |
|  | Child-bearer |  |
|  | Unattached   |  |
|  | Parenting    |  |
|  | Infection    |  |
|  | Individual   |  |
|  | Cookies      |  |
|  | Bachelor     |  |
|  | Vomit        |  |
|  | Smile        |  |
|  | Childrearing |  |
|  | Ridicule     |  |
|  | Bachelorette |  |
|  | Joy          |  |
|  | Single Dad   |  |
|  | Heartburn    |  |
|  | Single Mom   |  |
|  | Flower       |  |
|  | Cancer       |  |

\*Note that each pleasant word (e.g., cookies and smile) appears 2 times and each unpleasant word (e.g., ridicule and vomit) appears 2 times in each congruent and incongruent block for both IATs. In addition, each target sub-category for Offender (e.g., criminal and thief) appears 2 times and each target sub-category for Law-Abiding Citizen (e.g., do-gooder and lawful) appears 2 times in each of the congruent and incongruent blocks of the Offender vs. Law Abiding Citizen IAT. Finally, each target sub-category for the Single Parent (e.g., single dad and single) appears 2 times and each target sub-category for single person (e.g., bachelorette and unmarried) appears 2 times in each of the congruent and incongruent blocks of the Single Parent vs. Single Person IAT.

### Appendix E: Matrix for Fractional Factorial Design

The following matrix is adapted from Box et al. (1978, p. 410). The matrix identifies each of the five cues and indicates whether the vignette will suggest that the applicant characteristic will have a positive (+1) or negative (-1) impact on each cue. Under the following structure no main effects are confounded with any 2-way interactions or 3-way interactions; main effects are confounded with 4-way interactions.

|                    | <b>Offense<br/>(no/yes)</b> | <b>Parent<br/>(no/yes)</b> | <b>Gender<br/>(male/female)</b> | <b>Income<br/>(high/low)</b> | <b>Race<br/>(Black/White)</b> |
|--------------------|-----------------------------|----------------------------|---------------------------------|------------------------------|-------------------------------|
| <b>Vignette 1</b>  | -1 (no)                     | -1 (no)                    | -1 (male)                       | -1 (low)                     | +1 (White)                    |
| <b>Vignette 2</b>  | +1 (yes)                    | -1 (no)                    | -1 (male)                       | -1 (low)                     | -1 (Black)                    |
| <b>Vignette 3</b>  | -1 (no)                     | +1 (yes)                   | -1 (male)                       | -1 (low)                     | -1 (Black)                    |
| <b>Vignette 4</b>  | +1 (yes)                    | +1 (yes)                   | -1 (male)                       | -1 (low)                     | +1 (White)                    |
| <b>Vignette 5</b>  | -1 (no)                     | -1 (no)                    | +1 (female)                     | -1 (low)                     | -1 (Black)                    |
| <b>Vignette 6</b>  | +1 (yes)                    | -1 (no)                    | +1 (female)                     | -1 (low)                     | +1 (White)                    |
| <b>Vignette 7</b>  | -1 (no)                     | +1 (yes)                   | +1 (female)                     | -1 (low)                     | +1 (White)                    |
| <b>Vignette 8</b>  | +1 (yes)                    | +1 (yes)                   | +1 (female)                     | -1 (low)                     | -1 (Black)                    |
| <b>Vignette 9</b>  | -1 (no)                     | -1 (no)                    | -1 (male)                       | +1 (high)                    | -1 (Black)                    |
| <b>Vignette 10</b> | +1 (yes)                    | -1 (no)                    | -1 (male)                       | +1 (high)                    | +1 (White)                    |
| <b>Vignette 11</b> | -1 (no)                     | +1 (yes)                   | -1 (male)                       | +1 (high)                    | +1 (White)                    |
| <b>Vignette 12</b> | +1 (yes)                    | +1 (yes)                   | -1 (male)                       | +1 (high)                    | -1 (Black)                    |
| <b>Vignette 13</b> | -1 (no)                     | -1 (no)                    | +1 (female)                     | +1 (high)                    | +1 (White)                    |
| <b>Vignette 14</b> | +1 (yes)                    | -1 (no)                    | +1 (female)                     | +1 (high)                    | -1 (Black)                    |
| <b>Vignette 15</b> | -1 (no)                     | +1 (yes)                   | +1 (female)                     | +1 (high)                    | -1 (Black)                    |
| <b>Vignette 16</b> | +1 (yes)                    | +1 (yes)                   | +1 (female)                     | +1 (high)                    | +1 (White)                    |



## Appendix F: Experiment 2 Vignette

One day in June, [Tim/Tiffany/Tyrell/Tayesha] called the Springfield Apartments asking about the availability of an apartment. [Tim/Tiffany/Tyrell/Tayesha] said [she/he] wanted to set up an appointment to come to the apartment complex and check out a one-bedroom apartment to rent in the next month [Tim/Tiffany/Tyrell/Tayesha] had just returned to town after [being released from prison where [she/he] was serving time for a conviction of felony theft / spending a few years out of state].

[Tim/Tiffany/Tyrell/Tayesha] asked if apartments were available, about the number of bedrooms in the open apartments, and the amount of rent. [She/he] inquired whether there was an open or model apartment to show. [She/he] also asked about application fees and deposit fees. Finally, [she/he] asked whether amenities and utilities (sewer, water, trash, gas, and electricity) were included in the monthly rent and the availability of a garage or off the street parking.

[Tim/Tiffany/Tyrell/Tayesha] explained that [she/he] had limited time to view the apartment because [she/he] had a tight work schedule [to balance with visits to her parole officer]. [Tim/Tiffany/Tyrell/Tayesha] stated that [she/he] was doing well [both] at work [and in parole supervision]. The rental agent agreed to show [Tim/Tiffany/Tyrell/Tayesha] the apartment the next Saturday at 1pm.

[Tim/Tiffany/Tyrell/Tayesha] visited the complex and looked at a one-bedroom apartment that [she/he] liked. [Tim/Tiffany/Tyrell/Tayesha] is a 25 years old [White/Black] [man/woman], makes [\$2270 per month / \$4540 per month], has [no children / one child, a two-year old son], and plans to live with [her/his] [son / older sister]. [Tim/Tiffany/Tyrell/Tayesha] wanted to move in the next month because [her/his] current apartment was too small to comfortably fit both [Tim/Tiffany/Tyrell/Tayesha] and [her/his] [two-year old son / older sister].

[Tim/Tiffany/Tyrell/Tayesha] filled out an application form, left [her/his] phone number, address, and email with the rental agent. The rental agent said he would call back once he knew if it or similar one was available next month. The rental agent also informed [Tim/Tiffany/Tyrell/Tayesha] that he had several other people coming out to look at the apartment, in fact, another potential renter was waiting for the agent as [Tim/Tiffany/Tyrell/Tayesha] left.