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# Marriage and Offending among a Cohort of Disadvantaged African Americans

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# Abstract

**Objectives**—Drawing on Sampson and Laub's age-graded theory of informal social control, this research tests the generalizability of the marriage effect on desistance from crime. Specifically, do urban African American men and women living in the United States benefit from marriage similarly to Whites?

**Methods**—The authors use hierarchical linear modeling (HLM) to analyze the relationship between marriage and official arrest counts among African American male and female first graders from Woodlawn, an inner-city community in Chicago, first assessed in 1966 and followed up at three time points (ages 16, 32, and 42).

**Results**—The authors find strong evidence of a marriage effect for the males across crime type, with a reduction in offending between 21 percent and 36 percent when in a state of marriage. The findings for females were less consistent across crime type, a 10 percent reduction in the odds of a property arrest and a 9 percent increase in the odds of a drug arrest when in a state of marriage.

**Conclusions**—Their findings provide evidence in favor of the generality of Sampson and Laub's theory, at least for males. However, the authors were not able to evaluate the mechanisms of desistance and identify this as an area of future research.

# Keywords

race/ethnicity; life-course theory; developmental theories; criminological theory; desistance from crime

The notion that marriage produces benefits across a wide variety of domains is not a new one (see Waite and Gallagher 2000). Marriage and marital quality are related to improved mental and physical health, lower levels of alcohol-related problems and risk-taking behaviors, and improved financial well-being, to name a few (Duncan, Wilkerson, and England 2006; Gove, Hughes, and Style 1983; Horwitz, White, and Howell-White 1996; Umberson 1987; Waite 1995). Marriage has also been linked to desistance from crime (see

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Laub and Sampson 2001, 2003; Sampson and Laub 1993). Since much of the literature regarding marriage and desistance has focused on Whites, males, or older samples, research has begun to focus on the generalizability of the "marriage effect" with respect to race, gender, location, and period. While our knowledge of whether marriage impacts desistance across various conditions is increasing, one important population that has been understudied is urban African American men and women living in the United States.

This article examines three main research questions: Does marriage influence offending among an urban African American cohort? if so, does marriage influence offending similarly across crime type? and what, if any, are the gender differences in the influence of marriage on offending among an urban African American cohort?

# Marriage and Desistance

#### Theoretical Underpinnings

The concept of desistance from crime has a long history dating back to the Gluecks' research in the 1930s and 1940s (see e.g., Glueck and Glueck 1930, 1940, 1943). The 1990s sparked a renewed interest in desistance with Sampson and Laub's (1993) presentation of their age-graded theory of informal social control. In essence, Sampson and Laub draw on the life-course framework (see Elder 1985) and Hirschi's social control theory (1969) and suggest that people are more likely to commit crime and engage in deviance if their bonds to society are weakened or broken. Their theory also suggests that, among offenders, strong social bonds stemming from a variety of life events predict desistance from criminal offending in adulthood.

Using interview data from a sample of 52 of the Glueck juvenile delinquents from the *Unraveling Juvenile Delinquency* study (Glueck and Glueck 1950, 1968), Laub and Sampson (2003) found that marriage is a key event in the desistance process for violent, property, and alcohol/drug offenses, reducing offending by 20 percent to 40 percent. According to these researchers, the primary mechanism that underlies the impact of marriage on criminal desistance is the notion that marriage engenders social bonds and a sense of investment and obligation that is too costly to risk by committing crime (Sampson and Laub 1993). Laub and Sampson (2003) further posit that marriage also creates a change in routines, a change in peers, and introduction of new family members which can be inconsistent with crime. Finally, they contend that marriage provides direct supervision and can change a person's self-definition, which can facilitate desistance.

Empirical studies continuously find evidence that marriage can redirect someone from an offending pathway to one of nonoffending or at least reduced offending (e.g., Duncan et al. 2006; Farrington and West 1995; Horney, Osgood, and Marshall 1995; Maume, Ousey, and Beaver 2005; Warr 1998). Theoretically, Sampson and Laub's age-graded theory of informal social control is a general theory that is intended to apply to individuals from all genders, periods, cultures, and ethnicities. Research is beginning to test this generality assumption with a focus on the applicability of this theory across gender (e.g., Bersani, Laub, and Nieuwbeerta 2009; King, Massoglia, and MacMillan 2007), historical context (e.g., Bersani et al. 2009), and European (albeit White) populations that tend to have

different social contexts and marital patterns (e.g., Bersani et al. 2009; Blokland and Niewbeerta 2005; Savolainen 2009). Yet, there is little research on the impact of marriage on offending among U.S. African American males and females.

Using the 1991 National Household Survey on Drug Abuse, Nielsen (1999) found evidence that adult social bonds impact drinking for Whites but not non-Whites. Similarly, Mudar, Kearns, and Leonard (2002) found that alcohol-related problems among the African Americans in their sample actually increased in the first 2 years of marriage when compared with Whites. Piquero, MacDonald, and Parker (2002) examined the impact of marriage on arrests among a group of male parolees and found that there was a significant marriage effect for non-Whites for nonviolent arrests but not violent arrests.

With respect to gender, King et al. (2007) examined desistance among a national sample of males and females and found that although marriage led to a reduction in offending for males, this was not true for females. Upon further investigation, these researchers found that males with a low propensity to marry were particularly affected by their marriage. Bersani et al. (2009) examined gender differences in the influence of marriage among a sample of males and females from the Netherlands and found that marriage reduced offending across gender with a stronger effect for males. In contrast, Giordano, Cernkovich, and Rudolph (2002) examined the desistance process among serious adolescent White and African American males and females and found, in their quantitative work, that marriage did not impact offending for either males or females while the qualitative work showed a desistant effect that was similar for both genders.

#### The Generalizability of "The Marriage Effect"

Overall, there is some empirical evidence of racial and gender differences in the effect of marriage. However, it is still an open empirical question whether the marriage effect found among White populations can be generalized to offending for African American males and females in the United States, given the potential differences in social context, marital patterns, and offending patterns.

First, inner-city neighborhoods in the United States are characterized by joblessness, poverty, violence, and pervasive racial discrimination that permeate the lives of those living in them (Sampson 1987; Massey and Sampson 2009). As African Americans disproportionately reside in these neighborhoods, the capability of marriage to impact offending in these circumstances is questioned. Thus, the social control elements of marriage that can facilitate desistance may be overshadowed by such strong contextual influences.

Moreover, African Americans experience lower rates of marriage than Whites (Dixon 2009). This may reflect barriers to marriage resulting from these social contexts or reflect a low level of desirability of marriage (i.e., a low propensity toward marriage; South 1993). King et al. (2007) found that the effect of marriage on crime reduction was actually most salient among the men with the lowest propensity to marry. Thus, perhaps those African American men who do marry reap substantial benefits from marriage, regardless of adverse social contexts.

Second, one of the key mechanisms of change, according to Laub and Sampson (2003) is a knifing off from friends and a change in routine activities (see also,Warr 1998). The fact that marriage rates are lower in general among African Americans (Schoen 1995) means that African Americans will have fewer married friends than Whites. As South (1993) speculates, this fact, coupled with the fact that peer groups are more highly regarded than marriage for urban African American men, in particular (Anderson 1999), suggests that African American men might be less likely to alter their routine activities with respect to spending time with friends. On the other hand, African American women are more likely to desire marriage than men (South 1993). Moreover, these women value marriage highly, even if they do not enter into it often (Edin and Kefalas 2005), which suggests that women who do marry may reap many benefits from that marriage as well as exert strong social control over their husbands.

Third, several marital characteristics also differ between those African Americans and Whites who do marry. Married African Americans have shorter marriages and are more likely to divorce than Whites (Dixon 2009), which begs the question of whether the social control benefits have time to accumulate or be as strong as those for Whites. African Americans also have lower levels of marital happiness than their White counterparts (Broman 1993; Bulanda and Brown 2007) and are more likely than Whites to distrust their spouse (Goodwin 2003). Theoretically, if marital quality is lower for African Americans and the strength of the marital bond is important for reaping the benefits of marriage (Laub, Nagin, and Sampson 1998), then one might expect marriage among African Americans to be ineffective at reducing offending.

Finally, African Americans tend to marry later than their White counter-parts (Dixon 2009), introducing the timing of marriage as a potentially important consideration. The idea that the timing of transitions can affect future success in life domains is not a new one (Hogan 1978; Elder 1998; Rindfuss, Swicegood, and Rosenfeld 1987; Uggen 2000). There is recent evidence from the Cambridge Study of Delinquent Development, a sample of White males from South London, indicating that the impact of marriage on desistance is evident only for those who married before age 25 (Theobald and Farrington 2009). With only approximately 10 percent of African Americans married by age 24 (U.S. Census Bureau 2004), this finding brings into question the impact of marriage on offending for this population. One speculation from Theobald and Farrington is that older individuals may be less receptive to change their self-definition, which is one mechanism of desistance outlined by Laub and Sampson (2003). However, it is still an open question whether these findings regarding the timing of marriage apply to a population who tend to marry later as a whole.

Thus, although there has been a growing abundance of evidence of the marriage effect on crime among White males and females from different countries, there are several questions unanswered. Primarily, does the marriage effect apply to offending among urban African Americans? If so, does this relationship hold for all crime types and for both males and females? There are several distinctive characteristics about the experiences of African Americans with regard to offending, marriage, and social context that bring this marriage effect into question and make an investigation of this population important. The current

study uses the Woodlawn cohort, an epidemiologically defined community cohort of urban African American males and females followed from age 6 to 42, to investigate these issues.

# The Woodlawn Project

The Woodlawn Project is a longitudinal study initiated in the mid-1960s. It takes a lifecourse approach to studying lives through time, specifically focusing on the developmental patterns of substance use, crime, education, and physical and mental health across the life course and the correlates of these patterns. The study began in 1966 when all first-grade children in the nine public and three parochial schools in the Woodlawn community, an inner-city community in Chicago, were invited to participate. Thirteen families chose not to have their children participate, leaving a cohort size of 1,242 (98.9 percent; Kellam et al. 1975). The cohort was then followed up at three additional time points (ages 16, 32, and 42). Of the 1,242 original cohort members, 51 percent are female and 49 percent are male.

In 1966, the first graders' teachers and mothers were interviewed on a number of topics such as the child's classroom behavior, academic achievement, and social adaptation as well as family context and mental health. In 1975, 56 percent of the cohort (N = 705) were interviewed when the cohort members were 16 years old. The retention rate for this assessment was low due to funding constraints that restricted the follow-up interviews in adolescence to those living in the Chicago area. During this assessment, the adolescents and their mothers reported on their home life, school life, psychological well-being, crime and drug use using group-administered questionnaires. In 1992 (at age 32), 952 of the original cohort members (79 percent of those alive) were interviewed about a wide variety of topics such as their psychological well-being, education, employment, living arrangements, relationships, health, and religious practices, as well as their crime and drug use. Data on criminal involvement were also obtained in 1993 from criminal records from the Chicago Police Department and the Federal Bureau of Investigation (FBI). In 2002 (at age 42), 833 of the cohort members (72 percent of those alive) were interviewed using a similar interview schedule to that at the young adult interview.<sup>1</sup> Throughout the study, reports of mortality have been gathered from family members and neighbors as well as through searches of the National Death Index (Ensminger, Anthony, and McCord 1997).

#### Sample Size

Of the original cohort of 1,242, 470 (37.8 percent) were arrested between the ages of 17 and 32. Of those with no arrest record, we excluded those who died before age 17 (N = 7) and, to be conservative, those who self-reported being incarcerated for more than 6 months at age 32 but did not have any recorded arrests (N = 17) under the assumption that the lack of an official record might have been in error. This left a cohort size of 1,218 with criminal history information. An additional 39 people died by age 32, 150 people did not have a young adult or mid-adult interview to provide marriage information, and an additional 64 individuals did not have complete information on other key variables used in the analysis resulting in a final

<sup>&</sup>lt;sup>1</sup>The reasons for not being interviewed at ages 32 and 42, respectively, include death (N = 46 and 86), too incapacitated to be interviewed (N = 3 and 0), refusal (N = 39 and 135), and inability to locate (N = 202 and 185). Thirty-six cohort members and 18 cohort members were interviewed in jail or prison at ages 32 and 42, respectively.

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sample size of 965 respondents (461 males and 504 females), 78 percent of the original cohort.  $^{\rm 2}$ 

#### **Cohort Characteristics and Historical Context**

At the time of the initial study in 1966, Woodlawn was a socially disadvantaged, largely African American, inner-city community of Chicago. Overall, Woodlawn was the fifth poorest community among the 76 communities of Chicago at the time (Council for Community Services 1975). However, there was considerable diversity in economic and social structural backgrounds within this community due to the limited number of areas in which African Americans could live in Chicago at the time. Although few families would be considered wealthy or middle class at the start of the study, 68 percent of the Woodlawn study families were not on welfare and 47 percent were above poverty level.

Crime and drug use were prevalent within the community. During the period from 1966 to 1972, Woodlawn had the highest rate of male juvenile delinquents of the 76 community areas of Chicago (33.5 per 100 males between the ages of 12 and 16; Council for Community Services 1975). The 1970s, when the cohort was approximately aged 10 to 20, was a time of increased gang activity in the Woodlawn area with the neighborhood gang, the Blackstone Rangers, who developed into a young adult gang, the El Rukins. The violent crime boom of the late 1980s and early 1990s, which predominantly affected young African Americans (Blumstein and Rosenfeld 1998), occurred when the cohort was 20 to 30 years old.

By 1992 (age 32), although most of the cohort members had moved out of Woodlawn, they continued to represent urban dwellers enduring significant disadvantage. For instance, by age 32, 9 percent of the interviewed cohort (N = 952) still lived in Woodlawn and 65 percent remained in the city of Chicago. In addition, the rates of poverty were high, with over a third (39 percent) below the poverty level and 49 percent in relative poverty compared to the median national income. In addition, only 9 percent reported no drug trafficking in their neighborhood while 62 percent reported heavy or moderate drug trafficking. Similarly, 66 percent stated that there were gangs in their neighborhood at age 32.

#### Measures

#### Offending

The outcome of interest, adult criminal offending over the life course, is operationalized as annual arrest counts for ages 17 to 32. These arrest records are from the Chicago Police Department "rap sheets" and FBI data. The criminal history records contain arrests for each age categorized as one of several offense types. The three main crime types examined here are violent (e.g., homicide, assault, rape, and robbery), property (e.g., burglary, larceny, auto

 $<sup>^{2}</sup>$ We have conducted a number of general attrition analyses by comparing those who had at least one adult interview with those who did not and by comparing those who were interviewed at adolescence from those who were not. We found no differences on such key variables as gender, socioeconomic status, early childhood behavior, substance use, or being arrested. Differences of note include: Individuals not assessed in adolescence were more likely to have dropped out of high school, more likely to have low first grade math scores, and less likely to have an adult interview; individuals with an adult interview were more likely to have graduated from high school, less likely to be in poverty in first grade or adolescence, and more likely to have a violent or drug-related arrest compared to those not interviewed in adulthood (Doherty, Green, and Ensminger, 2008; Ensminger, Juon, and Green, 2007).

theft, fraud, criminal damage), and drug offenses (e.g., narcotics, both selling and possession, and driving under the influence).<sup>3</sup> Total offending is the sum of these three offense types along with other crimes such as public order crimes, nonviolent sex crimes, weapons offenses,<sup>4</sup> and traffic offenses (e.g., driving with a suspended license).

Mortality information was integrated into the longitudinal criminal histories to safeguard against presuming someone had stopped offending who had instead died. The negligence of incarceration time in the rate of offending could result in an underestimation of the actual offending trajectory in any given year, as recent research has found (Eggleston, Laub, and Sampson 2004; Piquero et al. 2001). Unfortunately, we do not have the exact number of days incarcerated at each age so we could not incorporate annualized exposure time on the street into the criminal histories. However, we are able to incorporate the sentencing data found in the arrest records into the criminal histories such that a person is considered incarcerated in any year where he or she has zero offenses and is known to have been sentenced to more than 1 year at that age.<sup>5</sup> Using this strategy, we attempt to reduce the chances of presuming someone has desisted from offending who in fact was incarcerated.

Over the ages of 17 to 32, 40.8 percent of the 965 cohort members were arrested for at least one offense (59.9 percent males and 23.4 percent females; see Table 1). Among the offenders, over half (59.1 percent) of the male offenders and close to a third of the female offenders (34.7 percent) were arrested for violence (data not shown). Figure 1 presents a general overview of the annualized mean offending rate for the Woodlawn men and women for ages 17 through 32 for total offending. On average, the male offenders committed between .25 and .30 offenses per year and the females committed close to .05 offenses per year. This difference in mean level of offending is consistent with the wealth of information that exists on gender differences in offending. An unexpected finding from Figure 1 is the fact that crime does not decline with age for this cohort, regardless of gender.<sup>6</sup>

#### Marriage

We draw upon the self-report interview data from the young adult (age 32) and mid-life (age 42) interviews to compile annualized information of whether someone was married or not at each age. At the young adult interview, each person was asked about his or her current marital status, the number of times he or she had been married, and the age of marriage for his or her current marriage. If the person was married more than once, the respondent was also asked the age his or her first marriage began, ended, and how that marriage ended. To increase the sample size, for those who did not have a young adult interview but did have a mid-life interview (N = 102), information from the mid-life interview was used. At the mid-

 $<sup>^{3}</sup>$ We include driving under the influence as a drug offense. Driving under the influence of alcohol (a type of drug) or another substance is an illegal activity that has serious public health consequences in terms of injury. Moreover, the vast majority of this category includes nonalcohol-related offenses with less than 5 percent of those arrested for a drug offense being arrested for driving

under the influence. <sup>4</sup>Weapons crimes were not included in the violent crime categorization to provide a conservative measure of violence. A weapons offense, while may be indicative of violence, is not in and of itself violent. These offenses include violations regarding licensing, such as failing to register a firearm, unlawful use of a weapon, and possession of a weapon. <sup>5</sup>This coding decision resulted in altering 14 percent of the 470 arrested cohort's criminal histories to reflect potential time in prison

<sup>(</sup>N = 67). <sup>6</sup>When the sample is restricted to offenders (278 males and 120 females), the trends in Figure 1 are inflated in their level for both

males (ranging from .36 to .54 mean offenses) and females (.13 to .27 mean offenses); yet, the patterns are identical.

life interview, each person was asked similar questions as well as about any changes in his or her marital status since the young adult interview and the details of any and all changes. From this information, annualized data on marriage were obtained by coding whether someone was married or not married at each age. A person was coded as not married in any given year if he or she had never been married, was living with a partner, divorced, separated, or widowed.<sup>7</sup>

Based on the 965 cases with marriage, criminal history, and covariate information, 49.0 percent were married *at some point* by age 32 with an average age of first marriage being 26.1, with relatively similar patterns for males and females. Using data from the National Household Survey of Drug Abuse from 1992, the year when the Woodlawn sample was 32, we calculate that 59 percent of African American men and 42 percent of African American women aged 30 to 34 were currently married (U.S. Department of Health and Human Services, 1992). As shown in Figure 2, the corresponding percentages are lower among the disadvantaged cohort of men and women from Woodlawn with approximately 30 percent currently married in their early thirties.

#### Covariates

In order to control for individual differences that may predict offending patterns over time, we include several covariates into the models. Both structural and family variables have been found to predict offending in adolescence and adulthood. Drawing from Sampson and Laub's (1994) work, we measure early disadvantage as a combination of structural components, family background, and parental disposition. Thus, *early disadvantage* is measured using a mean scale of 8 items ranging from one to four tapping into first grade disadvantage in the household (structural: mother's education, family income, and residential mobility; family background: adult supervision, household crowding, and mother's age at birth; and parental disposition: mother's anxiety and depressed feelings). This scale has a reliability of .62 with the males and females each averaging 2.4 on the scale. Aggression has also been continuously linked with future offending (Huesmann et al. 1984). Here we measure *aggression* in first grade as a dichotomous measure from teacher observations of children in their first grade classroom with a one equal to severe or moderately aggressive (37 percent males and 24 percent females).

*High school dropout* is also an indicator of risk of offending (Thornberry, Moore, and Christenson 1985), which is defined here as having dropped out of school prior to graduation (1) as opposed to being a high school graduate or receiving a general equivalency diploma (0). Males are more likely to be high school dropouts with 26 percent of males and 21 percent of females being high school dropouts (p < .05). Finally, we include a measure of *marital length* as a time-stable covariate, which is simply the number of years married

<sup>&</sup>lt;sup>7</sup>One limitation of the data is that we do not know specific dates of marriage, separation, divorce, and so on. Thus, a person is coded as married or not for the whole year at each age. There are two reasons for coding someone as "not married" who was living with a partner. First, some argue that marriage is a greater investment than cohabitation and marriage brings with it the social benefits under study that may be lacking in a cohabitating couple (Wilson 2002). Second, and more importantly, there is a data limitation in the Woodlawn data, in that, it lacks annualized data on cohabitation. Although living with a partner is a response option at the age 32 and 42 interviews, retrospective ages of change in marital status are only reported for *marital* changes (i.e., marriage and separation/ divorce).

between ages 17 and 32, regardless if it is a single marriage or multiple marriages. We discuss the rationale for inclusion of this covariate in the Analysis section.

# Analysis

The analysis tests whether marriage impacts offending, controlling for the covariates described earlier (e.g., first-grade aggressive behavior, high school dropout). We employ hierarchical linear modeling (HLM), which allows a simultaneous estimate of variations in crime within individuals over time and between-individual differences in offending patterns. To study individual change within the HLM framework, the crime counts for each individual by age are viewed as nested within that individual. There are two levels of analysis. Level 1 estimates each person's development with a unique individual growth trajectory that depends on a set of parameters. The growth parameters from level 1 become the outcome variables in level 2 of the model and are determined by person-level characteristics. Therefore, level 1 in the model estimates the within-individual change and level 2 in the model represents the between-individual analysis (Raudenbush and Bryk 2002).

The analysis used here is modeled closely after Laub and Sampson's analysis of marriage and offending among the Glueck males (Laub and Sampson 2003: chapter 9). At the withinindividual level, crime is modeled as a function of age and marriage. Specifically, a hierarchical Poisson model is used for the males while a hierarchical Bernoulli model is used for the females since over 50 percent of the women were only arrested once. In both of these models, we use the overdispersed model to account for the skewed nature of the data with the abundance of zeros at each age (Raudenbush et al. 2004).

The outcome variable for the male model is the log of offending per year and for females it is the log of the odds of offending per year. The basic elements of this within-person model are:

 $\operatorname{Crime}_{it} = \pi_{0i} + \pi_{1i} \operatorname{Age}_{it} + \pi_{2i} \operatorname{Age}_{it}^2 + \pi_{3i} \operatorname{Marriage}_{it} + e_{it},$ 

where *i* is the index for individuals and *t* stands for the longitudinal observations. The intercept,  $\pi_{0i}$ , is the estimated rate of arrest (males) or odds of arrest (females) when age is set to zero (i.e., initial status). The  $\pi_{1i}$  and  $\pi_{2i}$  parameters estimate the average rate of change and rate of acceleration or deceleration, respectively (Raudenbush and Bryk 2002:163). To increase the meaningfulness of the interpretation of the intercept term, researchers use the technique of centering their data. Centering at the mean provides a more meaningful anchor to better understand the variation around the mean. Here we center age at the mean of the observed age-person distribution (age 24.5).

The  $\pi_{3i}$  parameter indicates the change in offending due to being married. One concern is that the effect of marriage at level 1 will be biased if the relationship between marriage and offending is different in the aggregate (i.e., people will vary on the mean of the time-varying variable; Raudenbush and Bryk 2002:183). Two techniques recommended by Raudenbush and Bryk (2002:183) are employed to eliminate this bias. First, marriage at level 1 has been

group mean centered to allow an examination of the deviation in someone's overall mean level of marriage and its relationship to his or her offending. This allows for an examination of change in offending due to marriage within individuals. Second, we include the mean number of years married in the level 2 model to further safeguard against any threats to validity (see Horney et al. 1995; Laub and Sampson 2003: chapter 9 for examples of a similar strategy).

At the between-individual level, the parameters from level 1 are estimated from the level 2 equations. The basic elements of the between-individual model are:

$$\begin{split} &\pi_{0i} = \beta_{00} + \beta_{01} X_i + \beta_{02} W_i + \beta_{03} Z_i + r_{0i}, \\ &\pi_{1i} = \beta_{10} + r_{1i}, \\ &\pi_{2i} = \beta_{20}, \\ &\pi_{3i} = \beta_{30}, \end{split}$$

where *X*, *W*, and *Z* represent the various covariates described previously (Raudenbush and Bryk 2002:164).<sup>8</sup> These covariates are either included as safeguards against bias as mentioned earlier (i.e., marital length) or as childhood and adolescent risk factors for offending and marriage differences that predate the criminal offending trajectories estimated in HLM.

# Results

The generality of Sampson and Laub's theory will be supported if the Woodlawn men and women show a reduction in their offending when they are in a state of marriage, controlling for their propensity to marry (i.e., years married), early disadvantage, aggression, and educational achievement. The full conditional models for total crime and by crime type are shown in Tables 2 and 3 for the Woodlawn males and females, respectively. As shown in Table 2, model 1,<sup>9</sup> there is a 29 percent reduction in crime associated with being in a state of marriage for the males ((exp<sup>-.345</sup>) – 1) × 100). In other words, the same man, when married, is less likely to offend than when he is not married. While marriage reduces offending for total crime, the question remains whether this is true for all types of crimes. Model 2 of Table 2 presents the conditional model for violent arrests for males showing similar results. In fact, there is a 36 percent reduction in violent arrests when a man is married compared to when he is not married. Moreover, for men, each of the covariates was statistically significantly related to offending in all of the models.

<sup>&</sup>lt;sup>8</sup>According to the model used in this analysis, the slope parameters for age are allowed to vary across persons, as indicated by the error term but the acceleration parameter and marriage parameter are fixed. The model results reported are the population-average model parameters with robust standard errors.

<sup>&</sup>lt;sup>9</sup>The age-squared parameter was not statistically significant in the model for total crime and is thus excluded from this model. <sup>10</sup>Although Woodlawn is a high-risk community cohort with high rates of adolescent delinquency (83 percent of the Woodlawn males self-reported at least one of eight violent crimes in the past 3 years at the adolescent interview [e.g., getting into a serious fight at school, hurting someone until they need bandages, being in a gang fight]), we were interested in the impact of marriage on desistance among the offenders only. We reanalyzed the hierarchical linear modeling (HLM) models restricting the sample to male offenders (N = 278) and found similar results. All of the coefficients were negative and significant with the exception of drug arrests. These results bolster our confidence in our overall substantive conclusions.

The results for the females displayed in Table 3 show a somewhat different story. Again, model 1 shows the impact of marriage on offending for total crime, controlling for propensity for marriage, early disadvantage, childhood aggression, and educational achievement. In this model, a woman has a reduction in the odds of arrest when she is in the state of marriage; however, this reduction is not statistically significant for total arrests and the results appear to be crime-specific. As models 2 through 4 indicate, while being in a state of marriage for women reduces the odds of property arrests by 10 percent, it does not significantly impact violent arrests. Moreover, being in a state of marriage significantly increases the odds of a drug arrest by 9 percent.<sup>11</sup> All the covariates, except early disadvantage in the overall and the violent crime models, were significantly related to the between-individual differences in offending.

# Discussion

In this study, we tested the generalizability of Sampson and Laub's age-graded theory of social control with a specific focus on the impact of marriage on desistance from crime. It is an open empirical question whether the differences in social context, marital patterns, and offending patterns among urban African American males and females impact the capacity of marriage to influence offending as hypothesized by Laub and Sampson (2003).

Consistent with national data, only one third of the Woodlawn men were married by age 32, with an average age of marriage of 26. These men did not follow a typical age-crime curve in their offending patterns with stable patterns throughout age 32, a trend that is in stark contrast to our existing knowledge of the age-crime curve (Hirschi and Gottfredson 1983). This trend seems to be driven by assault behavior with assault increasing over time for this cohort and robbery decreasing with age, as predicted (data not shown). A comparison with the self-report data also indicates that the Woodlawn cohort has high rates of violence throughout young adulthood. In adolescence, 72 percent of the 705 respondents self-reported at least one violent crime in the past 3 years and 44 percent of the cohort interviewed in young adulthood (N = 952) reported at least one violent crime between ages 17 and 32.

Yet, despite these marital and offending patterns that are dissimilar from Whites, those African Americans that did marry benefited from that life event as evidenced by a reduction in offending across crime type. Thus, the African American men in our sample, despite their low propensity to marry are susceptible to marriage's beneficial effects. This finding is consistent with Laub and Sampson (2003) and with the finding from King et al. (2007) who found that the effect of marriage on crime reduction was most salient among the men with the lowest propensity to marry.

Overall, the findings from the male sample provide strong evidence in favor of the generality of the core finding of Sampson and Laub's age-graded theory of informal social control in that the marriage effect applies to urban African American males as well as White

<sup>&</sup>lt;sup>11</sup>Although all of the coefficients were in the same direction as when all females were included in the sample, with the exception of violent crime becoming positive, we found that none of the coefficients reached significance when we reanalyzed the HLM models when the sample was restricted to female offenders (N = 120). These findings add to the evidence of inconsistency in results among the females. However, it should be noted that this loss of significant findings may be due to a loss in power.

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males. However, this study did not address the mechanisms by which marriage impacts a reduction in offending. Thus, while a marriage effect seems to exist for these urban African American males, questions remain as to whether the mechanisms that are proposed for Whites similarly apply to this population. This is clearly an area for future research. Another area of future research is in applying methodology that can examine the causality of marriage on desistance from crime (King et al. 2007; Sampson, Laub, and Wimer 2006). Although our methodology did not allow us to speak directly to the causal nature of the relationship between marriage and offending, it should be noted that our findings for the Woodlawn males were similar in size and nature to those found in research using the Glueck data set, a less contemporary all White male data set.

For women, only property crime was reduced when a woman was in a state of marriage, with marriage having no effect on total crime or violent crime and increasing drug crime. This lack of consistent findings for females in our study is consistent with current research (e.g., King et al. 2007; Leverentz 2006) and lends credence to Laub and Sampson's (2003) warning that "good marriage" effects may not be as applicable to women as they are for men. It may be that since the males are more antisocial they are more likely to "marry up" as opposed to their less antisocial female counterparts who "marry down" (Laub and Sampson 2003). This notion may be particularly true for African American women. Several researchers have indicated that there is a smaller proportion of "marriageable men" (i.e., employed, not incarcerated, and alive) among African Americans compared to Whites (Lichter et al. 1992; Wilson 1987) and African American women are less likely to marry outside their race than African American men (Qian 2005). Moreover, the dramatic impact of incarceration as a life experience for so many African American men (Lopoo and Western 2005) may eliminate their ability to provide direct supervision over their wives and compromise their ability to provide informal social control, two key mechanisms of desistance according to Laub and Sampson (2003). An investigation into these potential mechanisms is needed.

Another possible explanation may be that if African American women are more likely to have children prior to marriage than Whites (Chadiha, Veroff, and Leber 1998) and have high regard for motherhood (Edin and Kefalas 2005), it may be that motherhood is an earlier and more salient source of social control for these women than marriage. Indeed, recent research has found parenthood to have strong inhibitory effects on disadvantaged African American women (Kreager, Matsueda, and Erosheva 2010). Although an investigation into parenthood as a time-varying covariate is beyond the scope of this study, preliminary evidence indicates that motherhood was prevalent in the teen years (37 percent of the Woodlawn women became mothers before the age 20) with high rates of having a child before marriage (39 percent) or having a child and never marrying (27 percent).<sup>12</sup> Another explanation that must be noted may be that since the Woodlawn women had much lower rates of offending than the men, the lack of findings may be the result of too little power to see a marriage effect.

 $<sup>^{12}</sup>$ However, preliminary findings indicate that when having a child before marriage is added to the models as a time-stable covariate, the results regarding marriage and offending do not change.

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The fact that drug arrests increase among the Woodlawn women when in a state of marriage suggests that assortative mating may be at play for these women when it comes to substance use (Simons et al. 2002). Although we do not have information on the deviance of the marital partner, the pool of antisocial men may be quite large in disadvantaged areas, which increases the likelihood that antisocial females will have antisocial partners. This assortative mating may be particularly relevant for drug crimes as having drug using partners has been linked with continuity in offending (Leverentz 2006; Schroeder, Giordano, and Cernkovich 2007). However, given that only 4.2 percent of the women were arrested for a drug crime, future research on larger samples of women with drug offenses would increase the confidence in this finding.

There are several limitations to this study that need to be considered when interpreting the results. First, we use official records to establish offending patterns. Although official records often provide more accuracy regarding timing and the type of offense (Weis 1986), official records are limited to those events that come to the attention of the police. More specifically, the use of official data introduces the requirement of an official reaction to crime in addition to the commission of a criminal offense, which only allows a subset of actual criminal offending to be assessed. There may also be gender differences in police reaction, which could further underestimate female crime. Second, the data lack annualized incarceration data, which will inevitably underestimate the crime among this population, especially since it is a population that is likely to experience incarceration. To the extent possible, future analyses should include both official and self-report data and include more precise incarceration information. Third, we could not study cohabitation, study competing time-varying social control elements such as employment, or uncover the mechanisms underlying the change in offending. Therefore, greater attention as to whether cohabitation functions similarly to marriage, whether marriage remains a robust predictor of desistance once other life events are taken into account, and why marriage reduces offending (e.g., through increased social control, a change in self-definition, or a change in routine activities and friendships) is needed. Finally, as in all longitudinal studies, the Woodlawn study has experienced attrition. Although attrition analyses uncovered very few differences between those who were and were not followed, the results should be interpreted with this in mind.

A major strength of the study is that it examines the marriage effect on a cohort of African Americans who grew up in a socially disadvantaged inner-city community in the 1960s. First, there are few longitudinal studies of African Americans who have both low rates of marriage, high rates of crime, and have been followed from childhood into young adulthood. Second, this type of cohort is of importance to criminological research as it represents those who live in communities ravaged with crime and drug use across the nation. Finally, although its findings are not necessarily generalizable to a specified larger population, the results do provide one more piece of the "generalizability of the marriage effect on crime" puzzle. Further research could add to this growing body of literature with respect to Hispanic Americans, Native Americans, and cohorts from varying time periods and geographic locations.

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# Biographies

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Doherty and Ensminger



Figure 1. Mean number of arrests for Woodlawn Cohort by gender.

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**Figure 2.** Percent of the Woodlawn Cohort married by gender.

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Table 1

Offending Descriptives for Woodlawn Cohort By Gender.

	To	tal (N =	- 965)		Ma	iles (N =	= 461)		Fema	ales (N	r = 504)	
	Percentage	Μ	SD	Range	Percentage	Μ	SD	Range	Percentage	М	SD	Range
vny arrest	40.8	2.30	5.42	0-50	59.9	4.08	7.11	0-50	23.4	.68	2.11	0-23
/iolent arrest	21.1	.59	1.70	0-21	35.4	1.10	2.31	0-21	8.1	.13	.50	0-5
roperty arrest	26.5	.84	2.37	0-30	39.5	1.40	2.98	0-30	14.7	.33	1.45	0-22
)rug arrest	15.5	.35	1.20	0-14	28.0	.67	1.64	0-14	4.2	90.	.32	0-4
)ther arrest	19.3	.46	1.35	0-13	30.8	.81	1.82	0-13	8.7	.13	.51	0-5

Hierarchical Overdispersed Poisson Models of Marriage and Offending: Males, Aged 17 to 32 (N = 461).

	Total Crime	Violent Crime	Property Crime	Drug Crime
	Model 1	Model 2	Model 3	Model 4
	Estimate (SE)	Estimate (SE)	Estimate (SE)	Estimate (SE)
Intercept	-2.787**** (.3926)	-4.163*** (.3560)	-4.029**** (.2899)	-3.870**** (.3207)
Within individual				
Age	.043*** (.0064)	.072*** (.0085)	.015* (.0069)	027**** (.0059)
Age <sup>2</sup>		.004**(.0011)	.008*** (.0013)	.030**** (.0011)
Marriage	345**** (.0840)	452**** (.1056)	334*** (.1020)	238* (.1112)
Between individual				
Years married (17 to 32)	094**** (.0166)	076**** (.0138)	134**** (.0163)	083**** (.0147)
Early disadvantage	.589*** (.1460)	.661**** (.1231)	.560**** (.1163)	.308* (.1274)
High school dropout	.554** (.1763)	.650*** (.1180)	.640*** (.1584)	.570**** (.1246)
First grade aggression	.548*** (.1260)	.351** (.1194)	.806**** (.1245)	.188* (.0924)

Note. Bold values indicate the within-individual effect of marriage on offending.

\*\*\* p < .001.

\*\* p < .01.

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*p* < .05.

#### Table 3

Hierarchical Overdispersed Bernoulli Models of Marriage and Offending: Females, Aged 17 to 32 (N = 504).

	Total Crime	Violent Crime	Property Crime	Drug Crime
	Model 1	Model 2	Model 3	Model 4
	Estimate (SE)	Estimate (SE)	Estimate (SE)	Estimate (SE)
Intercept	-2.824**** (.1001)	-3.128**** (.0469)	-2.703**** (.0820)	-3.407**** (.0435)
Within individual				
Age	.019**** (.0035)	.000 (.0018)	.026**** (.0024)	062*** (.0017)
Age <sup>2</sup>	.010**** (.0007)	.016**** (.0004)	.012*** (.0005)	
Marriage	084 (.0550)	022 (.0384)	106* (.0442)	.091*(.0384)
Between individual				
Years married (17 to 32)	029**** (.0054)	044 **** (.0018)	014** (.0038)	045**** (.0030)
Early disadvantage	006 (.0395)	.008 (.0179)	121** (.0358)	.098**** (.0161)
High school dropout	.432*** (.0839)	.165** (.0312)	.305**** (.0746)	.135*** (.0328)
First grade aggression	.329*** (.0768)	.169*** (.0277)	.171** (.0633)	.216**** (.0400)

Note. Bold values indicate the within-individual effect of marriage on offending.

\*\*\* *p* < .001.

\*\* p < .01.

*p* < .05.

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