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Bersani, B.; Laub, J.H.; Nieuwbeerta, P.

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Marriage and Desistance from Crime in the Netherlands: Do Gender and Socio-Historical Context Matter?

Bianca E. Bersani · John H. Laub · Paul Nieuwebeerta

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Abstract Over the last two decades, research examining desistance from crime in adulthood has steadily increased. The evidence from this body of research consistently demonstrates that salient life events—in particular, marriage—are associated with a reduction of offending across the life course. However, previous studies have been largely limited to male samples in the United States. As a result, questions regarding the universal effect of these relationships remain. Specifically, research is needed to assess whether the desistance effect of life events like marriage varies by gender and/or socio-historical context in countries other than the U.S. The present research addresses these gaps by examining the relationship between marriage and criminal offending using data from the Criminal Career and Life Course Study (CCLS). The CCLS includes criminal conviction histories spanning a large portion of the life course for nearly 5,000 men and women convicted in the Netherlands in 1977. Because we assess change over multiple observations within and between individuals, we utilize hierarchical models to estimate gender and contextual effects of marriage on criminal offending (i.e., any, violent, and property convictions). Overall, we find consistent support for the idea that marriage reduces offending across gender and socio-historical context. Notably, we find that the reduction in the odds of offending due to marriage is significantly greater for individuals in the most contemporary context. The implications of these findings are discussed.

Keywords Marriage · Desistance · Gender · Socio-historical context

B. E. Bersani (✉) · J. H. Laub
Department of Criminology and Criminal Justice, University of Maryland, 2220 LeFrak Hall,
College Park, MD 20742, USA
e-mail: bbersani@crim.umd.edu

P. Nieuwebeerta
Netherlands Institute for the Study of Crime and Law Enforcement (NSCR), Wassenaarseweg 72,
P.O. Box 792, 2300 AT Leiden, The Netherlands

P. Nieuwebeerta
Department of Sociology, Utrecht University, Heidelberglaan 2, 3584 CS Utrecht, The Netherlands

Introduction

A growing body of literature has emphasized the importance of studying criminal offending trajectories over the life course (Farrington 1999; Laub and Sampson 2003; Loeber and Le Blanc 1990; Sampson and Laub 1993). This research has identified that salient life events such as marriage, employment, geographic mobility, and military service are related to a reduction in criminal behavior in adulthood (Blokland and Nieuwbeerta 2005; Farrington and West 1995; Laub and Sampson 2003; Sampson and Laub 1993; Uggen 2000). Of these, the effect of marriage on desistance from crime has been found to be particularly robust, maintaining its influence across different samples and in applications of varying statistical techniques. Although not entirely unequivocal, the majority of the literature indicates that when an individual is in the state of marriage they are involved in significantly less crime (Blokland and Nieuwbeerta 2005; Horney et al. 1995; Laub and Sampson 2003; Maume et al. 2005; Sampson et al. 2006; Warr 1998). Moreover, recent research indicates that marriage has a causal impact on desistance from crime over the life course (Sampson et al. 2006). The relatively rapid growth of evidence linking marriage to desistance has resulted in the coining of the shorthand term the “good marriage effect,” essentially likening marriage with desistance from crime.

However, important concerns regarding the universal effect of this relationship remain. We note two principal issues here. First, research is needed to assess whether the desistance effect of marriage varies by gender (Giordano et al. 2002). Like most criminological research, assessments of the relationship between marriage and desistance are limited by their general dependence on male samples (for a full discussion see Giordano et al. 2006). While previous studies have linked marriage to desistance among male offenders, the gendered nature of marriage may result in different effects for females. Specifically, Sampson and colleagues (2006) describe a pattern where due to the greater criminal involvement of men relative to women, men tend to marry up, whereas women marry down. That is, because men are much more criminally involved than women the probability that they would marry a criminal spouse is much lower than the probability of a woman marrying a criminal spouse. As a result, the “good marriage effect” evidenced in previous studies may not be replicated among female offenders. Our current understanding of gendered processes of desistance is quite limited and underscores the necessity of research analyzing the intersection of marriage, crime, and gender.

Second, we know little about whether the marriage effect differs across historical contexts. Researchers have increasingly emphasized the importance of taking into account socio-historical context when assessing the impact of life events on desistance from crime (Giordano et al. 2002; King et al. 2007; Laub and Sampson 1995). Whereas the earlier part of the twentieth century was characterized by a standard, normative developmental process where individuals routinely obtained employment, married, and had children by their mid-twenties, this process is far less common today (see Shanahan 2000). Thus, the achievement of the full “respectability package” is no doubt less often realized in contemporary offender samples than those of a few decades ago (Giordano et al. 2002). Consequently, the beneficial influence of marriage may not hold in samples drawn from more contemporary contexts.

To address these significant gaps in the literature, we examine the effect of marriage on patterns of criminal behavior across gender and socio-historical context using a unique set of data from the Criminal Career and Life Course Study (CCLS). The CCLS includes criminal conviction histories spanning a large portion of the life course for nearly 5,000

men and women convicted in the Netherlands in 1977. As described in detail below, we believe the CCLS data are especially well-suited to examine whether the relationship between marriage and desistance from crime is conditioned by gender or socio-historical context in countries other than the U.S. We now turn our attention to the empirical literature on marriage and desistance.

Empirical Literature

Marriage and Desistance

The empirical literature examining the relationship between marriage and desistance has been accumulating and generally finds that individuals, when in the state of marriage, are less likely to commit crime. Support for the influence of marriage on desistance has been found in samples of high-risk offenders (Farrington and West 1995; Horney et al. 1995; Laub and Sampson 2003), general population studies (Massoglia and Uggen 2007; Maume et al. 2005; Warr 1998), for men and women (Giordano et al. 2002), for minorities (Horney et al. 1995), and in studies using official and self-report data (Blokland and Nieuwbeerta 2005; Massoglia and Uggen 2007). Moreover, this research has extended beyond the U.S. and includes studies conducted in London (Farrington and West 1995; Knight et al. 1977), Canada (Ouimet and Le Blanc 1996), and the Netherlands (Blokland and Nieuwbeerta 2005). Most recently, research finds evidence that the relationship between marriage and desistance from crime is in fact causal in nature (Sampson et al. 2006). Using a counterfactual approach which simulates an experimental design, Sampson and colleagues test the causal effect of marriage on offending and find that being married leads to a 35% reduction in crime.

Although support for the effect of marriage on desistance is growing, the evidence is not definitive. In particular, many studies of the marriage effect have been conducted using older data and most have been limited to studying patterns of offending for only males (see, e.g., Farrington and West 1995; Horney et al. 1995; Laub and Sampson 2003). While research on desistance is beginning to address issues regarding the gendered nature of desistance and the effect of marriage using contemporary samples (see, e.g., King et al. 2007), this research is still in its infancy and as a result, important questions remain regarding whether the marriage effect holds across gender, socio-historical context, and in samples from countries other than the U.S.

Gender

As was previously mentioned, most longitudinal studies examining desistance from crime have been limited to looking at samples comprised solely of male offenders. Studies that do include females often “do not include sufficiently large numbers of seriously delinquent girls to provide for a comprehensive analysis.” (Giordano et al. 2002:994). In general, however, the few studies that have examined the relationship between gender and desistance find more similarities in the desistance process across gender than differences (Baskin and Sommers 1998; Giordano et al. 2002; Leverenz 2006; Uggen and Kruttschnitt 1998). For example, Giordano and colleagues (2002) employ a mixed method approach to investigate desistance from crime with a sample of 101 serious male and 109 serious female adolescent delinquents. Although the

findings indicate potential areas of gender differences, there is remarkable similarity in the narratives of men and women regarding their change processes. Specifically, desistance appears to be largely a non-gendered process. Additionally, using qualitative interviews with 49 female ex-offenders in Chicago, Leverenz (2006) finds that benefits from intimate relationships (e.g., marriage, cohabitation) develop even when the partner would be described as antisocial (defined as having a history of offending and/or drug use). Therefore, regardless of whether women “marry down” or not, relationships may be as beneficial for women as they are for men.

One recent study, however, finds evidence of important differences in the marriage effect across gender. King et al. (2007) examined gender differences in the influence of marriage on desistance for a sample of 1,725 young adults from the National Youth Survey. The findings evidence complexities in the marriage effect when examined across gender. To illustrate, initial estimates demonstrate that marriage is negatively associated with offending for both males and females. However, once the sample is conditioned upon the propensity to marry, marriage maintains a small, significant effect on desistance for males, but has no effect on desistance for females. The authors investigate this finding further by disaggregating their sample into groups with low, medium, and high propensity to marry. The results of this analysis indicate that the effect of marriage on desistance varies depending on one’s level of propensity to marry. For males, marriage seems to be the most beneficial for those who are least likely to marry—a finding consistent with Laub and Sampson’s (2003) statement that men almost invariably marry up. Conversely, for females, the marriage effect on desistance is significant only for those with a moderate propensity to marry. Overall, the findings from this research question the non-gendered characterization of the desistance process.

Socio-Historical Context

Members of particular cohorts share a social history which includes the occurrence and aftermath of historical events and the opportunities and constraints posed by society at a given time (Alwin and McCammon 2004; see also Mannheim 1952). Understanding the context of development allows one to gain an appreciation for how lives develop in time and space in distinctive or contingent ways (Laub and Sampson 1995). Moreover, because historical events have the ability to significantly alter individual lives and life course patterns, scholars have stressed the importance of taking into account historical context when examining individual life histories (Elder 1975; Laub and Sampson 2003).

Research investigating the influence of salient life events on criminal behavior has been criticized for being bound by its historical context. For instance, in their seminal work on crime and the life course, Laub and Sampson (2003) tracked the life histories of a group of male offenders born from 1925 to 1932. These men matured during a period characterized by great economic opportunity and traditional sex role ideologies (Laub and Sampson 1995). This research found strong support for the effect of marriage, employment, and military service on desistance from crime. Questions arise, however, concerning whether the influence of salient life events such as marriage hold for “offenders coming of age within the context of a more contemporary social and economic landscape” (Giordano et al. 2002:991). The authors themselves take note of the fact that their sample is set within

a particular socio-historical context and comment that the “[p]rospects for current cohorts may not be as promising.” (Laub and Sampson 1995:137).

A cursory glance at the developments that have taken place over the past century reveals dramatic changes in the opportunity structure. We discuss two particularly influential changes that have occurred in the twenty-first century. First, relationship patterns have changed substantially resulting in increasing levels of cohabitation and later ages at first marriage (Mensch et al. 2005; Smock 2000; Waite 1995). Similar to the U.S., in the later half of the century, the age at first marriage has been increasingly delayed in the Netherlands (Liefbroer and Dykstra 2000). Whereas the median age of first marriage in the Netherlands following the second World War (WWII) was on average 24 years of age for men and 23 years of age for women, by the 1960s the median age of first marriage increased to 30 years of age for men and almost 27 years of age for women (Liefbroer and Dykstra 2000). These changing relationship patterns are repeated when examining rates of cohabitation as they have dramatically increased since the 1960s in the Netherlands. That is, whereas close to 100% of the population married rather than cohabited in the first half of the century, by the 1960s approximately 70% of the population reported cohabiting prior to marriage (Liefbroer and Dykstra 2000). Today, cohabitation in the Netherlands is deemed a normative phase in the life cycle (Manting 1996).

Second, in most developed countries the economy changed dramatically during the mid part of the century following WWII. In the Netherlands, although the economy was physically devastated by the war (Hagestad and Call 2007), the period from 1950 to 1973 marked the “Golden Years” characterized by a fast and stable economic performance (van Zanden 1998). However, beginning in 1973, the economy took a dramatic turn for the worse as unemployment rates increased and the number of hours worked decreased (van Zanden 1998). This downturn persisted until 1987, when the economy once again experienced a sharp increase in performance. The literature is replete with studies documenting the interdependencies among family and work (see, e.g., Bianchi et al. 2005). That is, employment affects an individual’s marriagability as it symbolizes one’s ability to be a good provider (Oppenheimer 1994; Wilson 1987). Hence, as economic opportunities diminish, so too do marriage opportunities. The importance of these changes in the opportunity structure over time has even greater salience for certain segments of society—including the offender population (Laub 1999). Currently, we do not know what effect these changes may have had on the relationship between marriage and offending.

Therefore, although the research to date lends to our understanding of the influence of marriage on desistance, generalizations concerning the marriage effect may be misleading as they are prone to “cohort-centrism” (Riley 1973). That is, because “the life course of any particular cohort reflects its own unique historical background, the numbers and kinds of people involved, and the special sociocultural and environmental events to which these people are exposed” (Riley 1973:42), we are limited in making generalizations about observed life course patterns from analyses conducted on a single group of individuals born in a particular socio-historical context. Alternatively, a more informative strategy would be to analyze individuals across multiple historical contexts which would allow for comparisons across contexts and therefore an assessment of generalities and/or anomalies in life patterns (Elder 1975; Farrington and Maughan 1999; Hogan and Astone 1986; Riley 1973).

The Current Study

This study aims to fill two significant gaps in the literature by assessing the effect of marriage on crime by gender and socio-historical context using a non-U.S. sample. Specifically, using an offender-based sample from the Netherlands, we ask two research questions:

RQ1: Does the effect of marriage on offending differ for men and women?

RQ2: Does the effect of marriage on offending differ across socio-historical context?

Data

We use data from the Criminal Career and Life-Course Study (CCLS), a large-scale longitudinal study carried out at the Netherlands Institute for the Study of Crime and Law Enforcement (NSCR). The CCLS is based on a representative sample of 4% of all cases of criminal offenses that were tried in the Netherlands in 1977. The total sample consists of 4,615 individuals.¹ For several reasons, the design of the CCLS study offers a unique opportunity to examine gender and socio-historical context differences. First, this study contains information on a sizeable number of both male ($n = 4,187$) and female ($n = 428$) offenders. Second, because of the design of the study, we have information on offenders whose birth years range from 1907 to 1965. This particular property of the data allows for the comparison of life course dynamics across multiple historical contexts. Finally, the data contain detailed annual records on criminal behavior and salient life events from age 12 to later adulthood allowing for the examination of offending behavior for a substantial portion of the life course. Although the age range covers the period from age 12–79, it is important to recognize that only 326 cases (approximately 7% of the total sample) have information on this full age range. Because of the decreasing sample size at later ages, we report the analyses for ages 12–55 only. Notably, the substantive results do not differ across samples (i.e., the full sample versus the age restricted sample).²

The criminal careers of the offenders in the CCLS sample were reconstructed using abstracts from the General Documentation Files (GDF) of the Criminal Record Office (“rap sheets”). The GDF contain information on every criminal case registered by the

¹ Based on identifying information from 1977, researchers at the NSCR were able to trace 89.4% of the original sample ($n = 5,164$), leaving a total of 4,615 individuals in the sample to be analyzed. The characteristics of these 4,615 individuals are similar to the total sample consisting of 5,164 persons, and therefore can be regarded as representative of all offenders in 1977. For more information on the full CCLS sample we refer readers to the CCLS codebook (Nieuwbeerta and Blokland 2003) and previous publications based on this dataset (Blokland and Nieuwbeerta 2005; Blokland et al. 2005).

² Given the decreasing sample sizes after age 55, we conducted all of our analyses twice: first using data for the full age range (12 thru 79) and second for ages 12–55. Importantly, the substantive results do not differ across the full versus the age restricted sample. However, it should be recognized that using the restricted age means that for 2% of the cases the offense by which they were sampled in 1977 is not included in the analysis. This may potentially bias the estimate of the effect of marriage for that group (but the direction is unclear since it depends on the number of persons married and divorced at that age). Since, the substantive results of the analyses on the full and the age restricted sample are nearly identical and most notably in the analyses on the full age range we find that the good marriage effect is strongest in the most contemporary context/group, we are confident that our results are robust. Thus, to limit the length of this paper we did not present the results of both analyses, but only for the age restricted sample (12 thru 55).

police at the Public Prosecutor's Office.³ These abstracts were supplemented with information that normally would not be included due to statutory limitations. Specifically, in the Netherlands a person is not given a "blank sheet" upon becoming an adult. Therefore, the data used here contain information on both juvenile and adult offenses.

Information on life circumstances was collected from official population registration records available in each city in the Netherlands (The 'Gemeentelijke Basis Administratie' (GBA) Municipal Basic Administration of Personal Data); a registration system that contains information on all Dutch citizens registered in each municipality in the Netherlands. Records in the population registration contain information on marriage and fertility history, gender, ethnicity, and date of death.

Measures

Dependent Variables

Individual offending rates were measured annually beginning when the offenders were 12 years of age up to the year 2002. Because the dataset contains a sample of all convicted persons in 1977, the subjects range in age from 12 to 79 in 1977. Thus, while data for everyone in the sample is available beginning at age 12, depending on one's age at conviction in 1977, the amount of follow-up data available for any one individual varies.⁴ The standard classification system used in the Netherlands groups offenses into the following categories: violent offenses (e.g., sexual assault, robbery); property offenses; vandalism and offenses against the public order; drug offenses; offenses of the Firearms Act; and other criminal law offenses (e.g., drunk driving).⁵ In the current study we examine offending patterns for three offense categories: any conviction; violent conviction; and property conviction.

Time-Stable Covariates

Our measure of gender is coded 0 = male, 1 = female. To examine the extent to which differences in socio-historical context may affect our results, we divided the sample into three mutually exclusive groups based on the individuals' age in 1977. The cut-points for these groupings were based on a combination of socio-historical events (i.e., World War II, women's movement) and methodological considerations (i.e., an even distribution of cases across groups). The first group was comprised of offenders aged 32 and up in 1977 (birth years 1907–1945), the second group was comprised of those aged 22–31 in 1977 (birth years

³ While the GDF contain information on all offenses that have lead to any type of judicial interference, here we use only information on those offenses that were either followed by a conviction or a prosecutorial disposition due to policy reasons, thereby excluding cases that resulted in an acquittal or a prosecutorial disposition due to insufficient evidence.

⁴ Unlike birth-cohort studies, the age range in the sample is broad and skewed, ranging from 12 to 79 with a peak at age 18. This feature has two implications. First, the convictions recorded for the sample cover a long period—from 1924 to 2002 (when the data collection period concluded). Second, individuals were not randomly sampled from the entire population; they were all criminally active in 1977.

⁵ Given its prevalence in 1977, the sample for driving under the influence was confined to 2%. Less common, serious offenses were over-sampled including: 25% of all robbery, public violence, and battery cases; 100% of all cases involving murder (including attempts), offenses against decency, rape, child molesting, and other sexual assaults; and 17% of all drug offenses. Additionally, because the sample was one of cases, not people, offenders who had two or more convictions in 1977 were more likely to be included in the study. In analyzing the data a weighting factor is included so that the weighted sample represents the distribution of offense types and individuals as they were convicted in 1977.

1946–1955), and the third group included those aged between 12 and 21 in 1977 (birth years 1956–1965). Individuals are fairly equally dispersed throughout all three groups with 29% of the sample in group 1, 36% in group 2, and the remaining 35% in group 3.⁶

Time-Varying Covariates

Marriage is assessed annually and coded dichotomously where 0 = not married, and 1 = married for each year in the study. The importance of accounting for the effects of involuntary cessation from crime and the implications regarding “false desistance” has gained increased attention (Eggleston et al. 2004; Laub and Sampson 2003; Piquero et al. 2001). We control for two forms of involuntary cessation from crime: mortality and incarceration. First, we account for mortality as each observation is censored after the date of death. Second, using information on the number of days not incarcerated each year, we create a variable measuring the percentage of time free on the streets (and thus at risk to commit crime).

Analytic Strategy

We estimate a multilevel model using Generalized Hierarchical Linear Modeling (HLM) version 6.04 (Raudenbush et al. 2007). Since our outcome of interest is a binary indicator of the probability of a criminal conviction, we estimate a series of two-level non-linear models using a Bernoulli specification.⁷ The trajectory of the probability of a criminal conviction over the life course is captured using a cubic function of age. When examining the patterns of offending within individuals over time, the independence assumption is violated in two ways (Osgood 2005). First, given that there is at least some stability in behavior over time, individuals are generally more similar to themselves than to most others. Second, because change is often gradual rather than erratic, individuals at time t are more similar to themselves at time $t - 1$ than, for example at $t - 10$. Statistical models used when analyzing repeated measures data must address these issues.

⁶ A reviewer raised a concern that the non-random sampling strategy employed to create the CCLS data may result in substantively different samples across the three groups. Specifically, older individuals in the sample, because they were convicted of a crime in later adulthood (after age 32), are by definition long-term offenders. Therefore, the older group may capture more criminally active individuals while the younger group may be more representative of the general population in regards to their level of criminal activity. We agree that this concern is an important one and may influence the findings from our analysis. However, it is crucial to keep in mind two points. First, the inclusion criterion for this sample was a conviction for *any* offense. Thus, individuals may be in the sample because of a violent or property offense or they may be in the sample due to a drunk driving or a public order offense. Seriousness of the offense in 1977 was not used for inclusion in the sample. In fact, examining a variety of descriptive factors, we find that the *youngest* group has a significantly earlier age of onset and they are more likely to be convicted of a serious offense. Second, previous analyses with these data (see Blokland et al. 2005:940) indicate that the youngest group remains as active—if not more so—than the older group, across the life course.

⁷ Although the traditional estimation strategy for hierarchical non-linear models has been the use of penalized quasi-likelihood (PQL), we utilize Laplace estimation as it has been shown to provide more precise estimates (Raudenbush et al. 2000; Snijders and Bosker 1999). Additionally, the Laplace estimation method produces a model fit statistic (deviance) which is not available with PQL. We also conducted analyses using the frequency of criminal convictions. Because of the relative rarity of a criminal conviction in each age-period, the rarity of multiple convictions in a given year, and because the substantive results did not differ, we chose to report the estimates from the logit model.

Therefore, we examine offending behavior over the life course using hierarchical models distinguishing two levels. Raudenbush and Bryk (2002:183; see also Horney et al. 1995) suggest that an effective method of modeling within-individual and between-individual change over time is to decompose the time-varying covariates into two parts. First, the difference from the individual specific mean in each time period (group-mean centering), models the *within-individual* change. By group-mean centering these variables, we control for the correlation between the time-varying covariates and the mean level of offending, which could reflect selection processes about the sort of person who is more likely to get married rather than the effect of getting married (Raudenbush and Bryk 2002). Second, we control for individual differences in the overall proportion of time married and time free by including an aggregate measure of these time-varying covariates in our equation. This procedure allows us to model the *between-individual* differences in the overall level of these characteristics on offending. By including these aggregates at level 2, we reduce the possibility of obtaining biased estimates arising from the likelihood that individuals vary by their average length of marriage and time free (see Raudenbush and Bryk 2002:183; Osgood 2005). The level 1, within-individual equation is as follows:

$$\text{Logit} = \ln(p_{it}/(1 - p_{it})) = \eta_{it}$$

$$\eta_{it} = \pi_{0i} + \pi_{1i}(\text{age})_{it} + \pi_2(\text{age}^2)_{it} + \pi_3(\text{age}^3)_{it} + \pi_4(\text{marriage})_{it} + \pi_5(\text{timefree})_{it}$$

where $\ln(p_{it}/(1 - p_{it}))$ is the natural logarithm of the odds (i.e. log-odds) of a criminal conviction for individual i at age t . The equation is specified to follow a cubic function of age (age_{it} , age_{it}^2 , age_{it}^3).⁸ Marriage and time free are time-varying covariates. Marriage can take on values of 0 or 1 for each year in the study. Time free indicates the proportion of time in each year a person is not incarcerated and ranges from 0 to 1. The level 2, between-individual equations are as follows:

$$\begin{aligned}\pi_{0i} &= \beta_{00} + \beta_{01}(\overline{\text{marriage}}) + \beta_{02}(\overline{\text{timefree}}) + \beta_{03}(\text{female}) + \beta_{04}(\text{group2}) + \beta_{05}(\text{group3}) + r_{0i} \\ \pi_{1i} &= \beta_{10} + \beta_{11}(\text{female}) + \beta_{12}(\text{group2}) + \beta_{13}(\text{group3}) + r_{1i} \\ \pi_2 &= \beta_{20} + \beta_{21}(\text{female}) + \beta_{22}(\text{group2}) + \beta_{23}(\text{group3}) \\ \pi_3 &= \beta_{30} + \beta_{31}(\text{female}) + \beta_{32}(\text{group2}) + \beta_{33}(\text{group3}) \\ \pi_4 &= \beta_{40} \\ \pi_5 &= \beta_{50}\end{aligned}$$

where variation in the log-odds of a conviction at the age coded as zero (π_{0i}) is explained by aggregate forms of marriage and time free, and by the time-invariant characteristics female, group 2, and group 3. We allow for variation between individuals in the probability of a conviction parameter (π_{0i}) as indicated by the error term r_{0i} . We allow the age crime curves (π_{1i} , π_2 , and π_3) to differ across gender and socio-historical context (as reflected in groups).⁹ We assume fixed effects (i.e., constant across all individuals) for the marriage (π_4) and time free (π_5) estimates.

⁸ Age, age^2 , and age^3 are divided by 10 (for ease in estimation) and are grand mean centered.

⁹ We include a random age linear slope in the model for any conviction. The model indicated that a random age linear slope was not significant for both the violent conviction and property conviction analyses. Therefore, we assume a fixed effect for age in these models. The inclusion of error terms for the age^2 and age^3 parameters did not allow the model to converge.

Finally, in order to test whether the marriage effect differs as a function of gender or historical context, we expand this model with two separate cross-level interactions. Cross-level interactions allow us to examine whether the relationship between marriage and the probability of a conviction is dependent upon a third variable; in our analysis, this third variable is either: female or group. Drawing on our research questions, the cross-level interaction equations are as follows (note that the other level 2 between person equations (π_{0i} , π_{1i} , π_2 , π_3 , and π_5) remain the same as illustrated above; only the marriage slope (π_4) interaction terms are presented in the equation below):

$$RQ1 : \pi_4 = \beta_{40} + \beta_{41}(\text{female})$$

$$RQ2 : \pi_4 = \beta_{40} + \beta_{41}(\text{group2}) + \beta_{42}(\text{group3})$$

Results

Descriptive Statistics

In Table 1, we present descriptive statistics.¹⁰ Our sample is predominantly male. Notably, we do have a sizable number of females in the sample (9.3%; $n = 428$; 17,026 person-year observations). Women are fairly equally dispersed throughout all three historical contexts accounting for 15% of the sample in group 1, 9% of the sample in group 2, and 5% of the sample in group 3 (data not shown).

The majority of individuals in our sample have been married at some point in their life course (87%). Entry into marriage in this sample is consistent with marital patterns in the U.S. where nearly two-thirds have been married by age 30. Moreover, consistent with contemporary marital patterns in the U.S., examining the marital trends across historical contexts reveals a declining tendency among younger individuals to marry early (see Fig. 1). More than half (56%) of individuals in group 1 were married by age 25; whereas only a third (34%) of individuals in group 3 were married by this same age (data not shown).

Information on conviction histories reveals that the majority of the sample (74%) was convicted of a criminal offense by age 25. Nearly a third of the sample (31%) was convicted of a violent offense and more than half of the sample (53%) was convicted of a property offense by 25 years of age. Not surprisingly then, given what we know about the typical age-crime curve, many of the individuals in our sample are criminally active during young adulthood.

Finally, we calculated the percentage of years free by age. Recall that time free is an annual measure of the percent of time in each year the individual is *not* incarcerated. We find that most individuals spend the majority of their time free on the street (i.e., not incarcerated). This pattern is not surprising given the relatively low incarceration rates and the system of routine early release in the Netherlands (see Bijleveld and Smit 2005).

Multi-Level Models

We begin our discussion by briefly describing the general patterns in the data with regard to the probability of a conviction over the life course looking at age, marriage, gender, and

¹⁰ The descriptive patterns presented for the full sample maintain for gender and socio-historical context specific samples. These tables are available upon request from the lead author.

Table 1 Descriptive statistics for demographic characteristics, marriage by age, convictions by age (any, violent, and property), and time free by age, criminal career and life course study

	Proportions	SD
<i>Demographic characteristics</i>		
Female	0.093	0.290
Group 1 (BY 1907–1945)	0.288	0.453
Group 2 (BY 1946–1955)	0.361	0.480
Group 3 (BY 1956–1965)	0.351	0.477
<i>Percentage married by age^a</i>		
Married by age 20	0.111	0.314
Married by age 25	0.432	0.496
Married by age 30	0.609	0.488
Married by age 35	0.682	0.466
Married by age 40	0.728	0.445
Married by age 55	0.873	0.333
<i>Percentage of any convictions by age^a</i>		
Convicted by age 20	0.565	0.496
Convicted by age 25	0.740	0.439
Convicted by age 30	0.823	0.382
Convicted by age 35	0.877	0.329
Convicted by age 40	0.905	0.293
Convicted by age 55	0.953	0.212
<i>Percentage of violent convictions by age^a</i>		
Convicted by age 20	0.193	0.395
Convicted by age 25	0.314	0.464
Convicted by age 30	0.386	0.487
Convicted by age 35	0.428	0.495
Convicted by age 40	0.462	0.499
Convicted by age 55	0.500	0.500
<i>Percentage of property convictions by age^a</i>		
Convicted by age 20	0.414	0.493
Convicted by age 25	0.525	0.500
Convicted by age 30	0.579	0.494
Convicted by age 35	0.610	0.488
Convicted by age 40	0.632	0.482
Convicted by age 55	0.666	0.472
<i>Percentage of years free (not incarcerated) by age^a</i>		
Percent time free at age 20	0.992	0.029
Percent time free at age 25	0.985	0.047
Percent time free at age 30	0.980	0.059
Percent time free at age 35	0.975	0.071
Percent time free at age 40	0.970	0.083
Percent time free at age 55	0.838	0.150

Note: BY = birth year

^a The proportions and standard deviations are calculated based on all available data (i.e., taking in to account mortality and censoring)

Fig. 1 Percentage of individuals ever married by age and socio-historical context, criminal career and life course study

historical context. Table 2 Model 1 characterizes the average growth trajectory of the probability of a conviction across the life course. All three age terms are significant. The positive-negative-positive pattern of the age terms in our data is indicative of the general age-crime curve.

We compute the percent reduction in the odds of a conviction versus not a conviction with the following transformation: $1 - \text{exponentiation}(\text{coefficient})$. Being female is significantly associated with a 71% ($1 - \exp^{(-1.226)}$) lower odds of a conviction in any year. The findings regarding contextual differences indicate an increase in the odds of a conviction with each successive group. That is, compared to groups 1 and 2, group 3 (the most contemporary context) has a significantly greater risk of a conviction (30% greater odds of a conviction ($\exp^{(0.263)} - 1$)).

Additionally, in Model 1, we decompose the effects of the time-varying covariates into their within-individual and between-individual parts. Recall that the level 1 or the within-individual analysis captures the influence of change in our time-varying covariates on the probability of a conviction. That is, the within-individual analysis tells us what influence a transition such as getting married has on offending. Marriage has a statistically significant and strong negative within-individual association with offending. Being in the state of marriage is associated with a 35% ($1 - \exp^{(-0.431)}$) reduction in the odds of a conviction.

Cross-Level Interactions

Marriage $\times$ Gender

Our first research question asked whether the effect of marriage on the probability of a conviction differed for men and women. Critics of the “good marriage effect” assert that marriage may not hold the same beneficial effect for women due to the gendered nature of marriage. We present the gender findings in Model 2 in Table 2. We find that the effect of marriage on offending is significantly different for men and women. Being in the state of marriage is associated with a 36% ($1 - \exp^{(-0.443)}$) decrease in the odds of a conviction for men and a 21% ($1 - \exp^{(-0.443 + 0.212)}$) decrease in the odds of a conviction for women. That is, the effect of marriage for women is significantly lower than that for men; however,

Table 2 Hierarchical non-linear model of the probability of any conviction ($n = 4,615$ individuals; 173,080 person-year observations), criminal career and life course study

	Model 1		Model 2		Model 3	
	Coefficient	SE	Coefficient	SE	Coefficient	SE
Intercept	−2.175***	0.035	−2.175***	0.036	−2.169***	0.036
<i>Within-individual</i>						
Age	4.951***	0.350	4.969***	0.350	4.781***	0.356
Age ²	−0.989***	0.106	−0.992***	0.106	−0.954***	0.107
Age ³	0.053***	0.010	0.053***	0.010	0.051***	0.010
Married	−0.431***	0.022	−0.443***	0.023	−0.325***	0.037
<i>Between-individual</i>						
Married	−1.074***	0.062	−1.077***	0.062	−1.087***	0.062
Female	−1.226***	0.129	−1.221***	0.129	−1.226***	0.129
Group 2	0.047	0.046	0.046	0.045	0.043	0.046
Group 3	0.263***	0.055	0.262***	0.055	0.245***	0.055
<i>Marriage slope</i>						
Marriage* female			0.212*	0.101		
Marriage* group 2					−0.073	0.051
Marriage* group 3					−0.275***	0.057
<i>Model fit</i>						
Deviance	438399.6		438395.9		438385.1	

Note: Data are weighted; Laplace estimates are shown. Time free is controlled in all models. The growth parameters (π_{1i} , π_2 , and π_3) also include the female, group 2, and group 3 variables. Due to space constraints and because we are not substantively interested in these effects we do not show them in the table; however, this information is available upon request

* $P < .05$; ** $P < .01$; *** $P < .001$

for both men and women, being in the state of marriage is associated with a decrease in the odds of a conviction.

Marriage $\times$ Historical Context

Our second research question asked whether the effect of marriage on the odds of a conviction differed by historical context. Because important changes in social institutions have taken place over the past century, individual developmental trajectories are likely to differ depending upon when people come of age. For instance, entry into marriage among more contemporary individuals occurs at much older ages compared to previous generations. We assess whether the effect of marriage differs across socio-historical context by disaggregating our sample into 3 groups. We present these findings in Model 3 in Table 2. Compared to group 1 (the oldest group), the effect of marriage significantly differs for group 3 (the youngest group). Being in the state of marriage is associated with a 28% ($1 - \exp^{(-0.325)}$) decrease in the odds of a conviction for individuals in group 1, it is associated with a 33% ($1 - \exp^{(-0.325 + -0.073)}$) decrease for group 2, whereas being in the state of marriage is associated with a 45% ($1 - \exp^{(-0.325 + -0.275)}$) decrease in the odds of a conviction for group 3. Stated simply, the good marriage effect is strongest in the most contemporary context.

Sensitivity Analyses

A number of sensitivity analyses were conducted to examine whether alterations to this basic model influence our findings.¹¹ Specifically, we examine whether our findings differ across crime specific outcomes. Additionally, we examine whether our findings suffer from a potential aggregation bias by estimating models that account for a gender $\times$ historical context interaction.

Crime Specific Analysis

The findings presented above reveal that marriage is associated with a reduction in the odds of a conviction for men and women and across historical context. It is important to note, however, that our outcome of interest in the previous analysis was any conviction—a variable capturing a combination of violent offenses, property offenses, and an array of other criminal offenses ranging from offenses against the public order to drunk driving. Although men and women display similar general crime patterns such as being more involved in property and drug offenses, men have much higher rates of criminal behavior compared to women (Steffensmeier and Allan 1996). This gap is most evident for violent crimes. Because of important gender specific crime trends, we conduct a series of crime specific analyses to test the robustness of the marriage effect found in our analysis of any convictions. Specifically, we re-estimate the models looking exclusively at violent convictions and property convictions.

Violent Convictions

We present our results for the violent conviction analysis in Table 3. General patterns of violent convictions are shown in Model 1 and as expected, we find that women have a significantly lower odds of a violent conviction compared to men. Similar to the findings regarding any conviction, the odds of a violent conviction is greatest in the most contemporary context. We find that both getting married (within-individual) and being married (between-individual) have a statistically significant and strong negative association with offending.

The findings for the gender and historical context cross-level interactions are presented in models 2 and 3, respectively. Unlike the findings for any conviction, we find no significant gender differences in the marriage effect for violent convictions (see Model 2). Looking at contextual differences in the effect of marriage on violent convictions (see Model 3), we find a similar pattern compared to those for any conviction. Being married is associated with a significantly larger decrease in the odds of a violent conviction for the most contemporary group. We note that the finding of no significant gender differences in this analysis is tempered by the fact that we have few women in the data convicted of a violent crime and therefore these results should be interpreted cautiously.

Property Convictions

The results for property convictions are shown in Table 4. The general conviction patterns remain consistent with those found for both any conviction and violent convictions.

¹¹ Tables for the sensitivity analyses are available from the lead author upon request.

Table 3 Hierarchical non-linear model of the probability of a violent conviction ($n = 4,615$ individuals; 173,080 person-year observations), criminal career and life course study

	Model 1		Model 2		Model 3	
	Coefficient	SE	Coefficient	SE	Coefficient	SE
Intercept	−4.187***	0.052	−4.187***	0.052	−4.179***	0.052
<i>Within-individual</i>						
Age	6.119***	0.833	6.122***	0.833	5.900***	0.845
Age ²	−1.438***	0.252	−1.436***	0.252	−1.388***	0.254
Age ³	0.101***	0.024	0.101***	0.024	0.098***	0.024
Married	−0.391***	0.040	−0.393***	0.041	−0.262***	0.071
<i>Between-individual</i>						
Married	−0.713***	0.088	−0.713***	0.089	−0.741***	0.089
Female	−2.234***	0.414	−2.230***	0.426	−2.234***	0.415
Group 2	0.100	0.063	0.100	0.063	0.093	0.064
Group 3	0.394***	0.084	0.394***	0.084	0.361***	0.084
<i>Marriage slope</i>						
Marriage* female			0.082	0.289		
Marriage* group 2					−0.038	0.095
Marriage* group 3					−0.408***	0.105
<i>Model fit</i>						
Deviance	360585.3		360585.2		360570.5	

Note: Data are weighted; Laplace estimates are shown. Time free is controlled in all models. The growth parameters (π_1 , π_2 , and π_3) also include the female, group 2, and group 3 variables. Due to space constraints and because we are not substantively interested in these effects we do not show them in the table; however, this information is available upon request

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$

Compared to men, women have lower odds of a property conviction and individuals in group 3 have significantly greater odds of a property conviction compared to group 1. Moreover, being married and staying married are both associated with a significant, negative effect on property convictions.

We find that the effect of being in the state of marriage is significantly different across gender and is associated with a larger decrease in the odds of a property conviction for men compared to woman (results shown in Model 2 in Table 4). Moreover, similar to the findings for any conviction, being in the state of marriage is associated with a decrease in the odds of a property conviction for both men and women. In Model 3, we present the results for the contextual analysis. Unlike the previous findings, we find no significant differences in the effect of marriage across historical context for property convictions.

Marriage $\times$ Gender $\times$ Historical Context

Although our previous analyses reveal rather consistent patterns in regards to the marriage effect, it is possible that the findings are subject to aggregation bias as we may be glossing over important differences that are specific to each gender within each historical context. This is perhaps especially true for women as they have experienced remarkable changes in

Table 4 Hierarchical non-linear model of the probability of a property conviction ($n = 4,615$ individuals; 173,080 person-year observations), criminal career and life course study

	Model 1		Model 2		Model 3	
	Coefficient	SE	Coefficient	SE	Coefficient	SE
Intercept	−3.459***	0.046	−3.460***	0.046	−3.457***	0.046
<i>Within-individual</i>						
Age	4.889***	0.470	4.922***	0.470	4.871***	0.475
Age ²	−1.259***	0.147	−1.266***	0.147	−1.256***	0.148
Age ³	0.097***	0.015	0.097***	0.015	0.097***	0.015
Married	−0.463***	0.027	−0.489***	0.028	−0.448***	0.048
<i>Between-individual</i>						
Married	−1.269***	0.084	−1.277***	0.084	−1.278***	0.084
Female	−0.440**	0.149	−0.430**	0.151	−0.440**	0.150
Group 2	0.048	0.059	0.046	0.059	0.050	0.060
Group 3	0.447***	0.072	0.444***	0.072	0.433***	0.073
<i>Marriage slope</i>						
Marriage* female			0.329**	0.112		
Marriage* group 2					0.046	0.064
Marriage* group 3					−0.113	0.071
<i>Model fit</i>						
Deviance	390227.6		390220.5		390223.7	

Note: Data are weighted; Laplace estimates are shown. Time free is controlled in all models. The growth parameters (π_1 , π_2 , and π_3) also include the female, group 2, and group 3 variables. Due to space constraints and because we are not substantively interested in these effects we do not show them in the table; however, this information is available upon request

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$

their familial and social roles over the past century. To capture this added level of complexity, we include an additional term in our equation that represents the interaction between gender and historical context (results not shown).¹² In a nutshell, we fail to find significant differences in the effect of marriage across gender and historical context combinations.

In order to summarize the results from our sensitivity analyses and for ease of presentation, we plot the percent reduction in the odds of a conviction for gender, historical context, and conviction type in Fig. 2. Clearly, being in the state of marriage reduces the odds of offending regardless of gender. This pattern holds across all three crime types. We also show that marriage is associated with decreased odds of a conviction regardless of socio-historical context. Although social contexts have changed dramatically over the past century, the effect of marriage on desistance from crime continues.

¹² The equation for this model is: $\pi_4 = \beta_{40} + \beta_{41}(\text{female}) + \beta_{42}(\text{group2}) + \beta_{43}(\text{group3}) + \beta_{44}(\text{female}) \times (\text{group2}) + \beta_{45}(\text{female}) \times (\text{group3})$

Fig. 2 Percent reduction in the odds of a conviction due to marriage by gender, socio-historical context, and conviction type, criminal career and life course study

Discussion

Although research examining the relationship between marriage and offending over the life course continues to grow, important questions remain regarding the universal applicability of this relationship. Specifically, we note significant gaps in the literature concerning whether the so-called “good marriage effect” evidenced in past studies holds across gender and socio-historical context in countries outside the U.S. Using data from the Netherlands Criminal Career and Life Course Study, we address these important gaps by asking two questions: does the effect of marriage on offending differ for men and women? And, does the effect of marriage on offending differ across socio-historical contexts?

To answer these questions, we employ a multilevel non-linear model and estimate whether gender or socio-historical context modify the relationship between marriage and offending. Consistent with previous findings (e.g., King et al. 2007), we find that marriage is more beneficial for men; however, marriage is also associated with a decrease in the odds of a conviction for women. There are several possible explanations for why these differences in the magnitude of the marriage effect across gender emerge. First, the stronger effect of marriage for men compared with women may be due to the tendency of men to “marry up” and women to “marry down” (Laub and Sampson 2003; Sampson et al. 2006). This expectation is based on the notion that due to differences in criminal involvement across gender, women are more likely to come into contact with criminal men than vice versa. Although this pattern is speculative at this point, support for this relationship arises from the fact that the greater benefits of marriage for men are not limited to desistance alone, but have been evidenced in studies of depression, mortality, and health in general (Waite and Gallagher 2000). Similar to other research examining gender differences in the benefits of marriage, we find that marriage is beneficial for both men and women, but the effect is significantly greater for men.

Additionally, the gender difference may be due to the influence of parenthood. Although limited in volume, the extant research suggests that parenthood as a desistance producing factor is more consequential for women compared with men (Giordano et al. 2002; Graham and Bowling 1996; Uggen and Kruttschnitt 1998). Graham and Bowling (1996:73), find

that women endure both “practical and emotional consequences of motherhood.” That is, not only do opportunities to offend decline, but the consequences of criminal behavior become more salient for mothers. The effects of parenthood were not as evident among the men in their study. Although it is beyond the scope of the current study to examine the complexities underlying the relationship between gender, parenthood, and offending patterns, preliminary analyses indicate that women in the CCLS are significantly more likely to report having a child before marriage. If the differential impact of parenthood evidenced in previous studies is replicated in our sample, then this difference could account for the differences in the marriage effect across gender in our study. Future research is needed to tease out the complexities that exist when domains such as marriage and parenthood intersect and more accurately capture how these domains influence desistance among men and women.

Finally, we cannot rule out the possibility that the relationship between marriage and offending is spurious. More precisely, an alternative explanation is that official sanctioning differences exist in the processing of offenders across gender (see e.g., Daly and Tonry 1997). The leniency afforded women in sanctioning severity is likely linked to the role gender plays in courtroom decision making processes. Specifically, practical concerns such as childcare responsibilities and dependency appear to safeguard women from harsh criminal justice prosecuting and sanctioning (Daly 1987; Kruttschnitt 1982; Steffensmeier et al. 1993). Moreover, women who are perceived as being subject to greater levels of informal social control (e.g., married, childcare responsibilities, etc.) tend to receive the least severe sanctions (Daly 1987; Kruttschnitt 1982). Because our outcome measures conviction history, gender differences in criminal justice decision making may be particularly influential here. Therefore, rather than capturing the effect of marriage, we may be capturing the influence of the effect of gender in the criminal justice sanctioning process.

In regards to our second question, we find few differences in the effect of marriage on offending across socio-historical contexts. Regardless of historical context, being in the state of marriage reduces offending. Moreover, our analysis demonstrates that the influence of marriage on the desistance process is strongest in the most contemporary context. We discuss four potential explanations for these trends.

First, the quality and stability of marriage may differ across these three groups. We conducted a series of exploratory analyses and uncovered a couple of patterns that are relevant here. First, groups coming of age in more contemporary contexts have a later age at first marriage compared to older groups. Second, of those that do get married, there are fewer instances of separation within the most contemporary group. We believe these two factors are linked –because individuals in our most contemporary context are deciding to marry at a later age and they report fewer instances of marital dissolution, the stronger marriage effect for this group may be indicative of greater marital stability or marital quality. As a result, these marriages have a stronger crime inhibiting effect.

Second, the stronger effect of marriage within the contemporary group may be due to the increasing prevalence of cohabitation among individuals in this group. Although we do not have information on cohabitation in the CCLS, in general the Netherlands has been a progressive country regarding cohabitation. In fact, whereas cohabitation was initially viewed as a “deviant” response to the conventional “bourgeois marriage,” since the 1980s it has become a normative phase prior to marriage in the Netherlands (Manting 1996). Although cohabitation has increased within contemporary contexts, the likelihood of these relationships transitioning in to marriage is high in the Netherlands (Mills 2004). Therefore, it is plausible that an investment process linking marriage to desistance is initiated

within these cohabiting relationships. As a result, when individuals in contemporary groups marry, these relationships are characterized by greater quality and stability.

Third, these patterns may be due to the influence of parenthood. In the CCLS data, the tendency to have a child out of wedlock is more prevalent among the youngest, most contemporary cohort. Whereas 9% of the oldest group reported having a child before marriage, more than 20% of the youngest group reporting having a child before marriage. An interesting trend in European countries is the tendency to view cohabiting couples with children as a familial institution whereas cohabiting couples without children are not viewed as a family (Kiernan 2004). This change in norms is not universally held, but instead is more common among younger, cohabiting individuals. Therefore, cohabiting couples having a child are not viewed as “deviant,” but rather they are seen as being part of a conventional societal institution—the family institution. It will be interesting to see what effect recent legal changes in the Netherlands have on the impact of premarital childbearing. Specifically, beginning in 1998, the Netherlands instituted a formal registration of partnerships which made legally registered cohabitation functionally equivalent to marriage (Kiernan 2004). Again, we can only speculate that the increasing age of first marriage among our contemporary group is reflective of the general patterns regarding delayed marriage and cohabitation. Yet, if the pattern in our data is representative of the increasing tendency to view premarital childbearing within cohabiting relationships as normative, then we would expect to find even stronger effects of marriage on reducing offending patterns among individuals coming of age today.

On a final note, it is important to consider the influence of the changing opportunity structure across these different socio-historical contexts. In the Netherlands, the context in which these groups would have matured differed dramatically. Although these contexts and changing opportunity structures are not mutually exclusive, there are some general trends that we can draw upon. In particular, looking at the economic structure, we find that the two oldest cohorts would have experienced greater economic instability throughout much of their young adulthood. Conversely, the youngest cohort would have matured during a period marked by an economic upturn. These economic shifts undoubtedly had an impact on marital opportunities over these contexts (see Bianchi et al. 2005; Oppenheimer 1994; van Zanden 1998). The pattern of increasing strength of the marriage effect within the contemporary group may be reflective of the influence of changes in the opportunity structure that have taken place over the past century.

Conclusion

We note a few important limitations to the current study. First, and perhaps most importantly, we only examine the influence of marriage on offending. Many other salient life events have been implicated in the desistance process, such as employment, military service, education, children, and religion (see, e.g., Edin et al. 2004; Giordano et al. 2002; Graham and Bowling 1996; Uggen 2000). Although we are unable to examine the relationship of these other important salient life events, our research provides a useful starting point for future studies assessing the effect of salient life events on desistance across gender and socio-historical context.

Second, our results are limited due to methodological reasons. For instance, our analysis relies on official data, the limits of which have been explicated extensively in criminology (Black 1970; Gove et al. 1985; Hindelang et al. 1979). Additionally, the data are generated from a sample of convicted individuals in 1977. Therefore, we are unable to generalize the

findings of this study to the general population. Importantly for both of these limitations, we examine offending patterns across a variety of criminal convictions that encompass a continuum of offending severity. That is, we have a measure of violent convictions, property convictions, and any conviction which includes convictions for drunk driving, drug offenses, and offenses against the public order. As a result, our data capture a wide array of criminal acts. The consistency of results across crime type provide increased assurance that our findings are not critically biased due to the use of official records.

Third, our measure of marriage includes only legal marriage. Recently, scholars have increasingly emphasized the importance of studying alternative relationship types—in particular, cohabitation. Our current level of knowledge about the influence of cohabitation on offending is mixed (cf., Horney et al. 1995; Leverentz 2006; Sampson et al. 2006). With increasing rates of cohabitation in the Netherlands, the United States, and other countries, research examining the influence of a variety of relationship types on offending trajectories is much needed.

Finally, we are limited in making generalizations regarding our findings. Although the patterns pertaining to relationships, parenthood, and economic opportunities are not unlike those of the United States and other developed countries, cross-national comparative analyses are needed in order to assess whether these patterns hold in other contexts as well.

Our findings largely support theories explicating a general process of desistance (see, e.g., Laub and Sampson 2003). Overall, we find evidence suggesting that the influence of marriage is universal in nature; that is, the negative relationship between marriage and offending maintains across gender, socio-historical context, and gender $\times$ socio-historical context groups within this sample from the Netherlands. Even though important social changes have taken place over the past century in the Netherlands, marriage continues to be a significant factor in understanding patterns of offending across the life course. In fact, for both men and women, the effect of marriage on offending is greatest in the most contemporary context.

It is important to note, however, that the mechanisms through which marriage affects the desistance process (e.g., increased supervision/monitoring; change in routine activities; increase in social ties), remain largely unknown. Although we are unable to speculate about the possible mechanisms taking place, our research does demonstrate that the influence marriage has on offending patterns here generalize to both males and females. Moreover, the effect of marriage maintains across a dramatically changing socio-historical context. In fact, even though researchers have cautioned that due to changes taking place in opportunity structures (e.g., employment opportunities, marriage markets), individuals growing-up in more contemporary contexts may be unable to profit from the benefits of salient life events such as marriage (Giordano et al. 2002; Laub and Sampson 1995), we find that the benefits of marriage are strongest for the youngest, most contemporary group in our sample. At least with respect to crime, marriage seems to be anything but old fashioned, “retro,” or no longer relevant.

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References

- Alwin DF, McCammon RJ (2004) Generations, cohorts, and social change. In: Mortimer JT, Shanahan MJ (eds) *Handbook of the life course*. Springer, New York, NY, pp 23–49

- Baskin DR, Sommers IB (1998) *Casualties of community disorder: women's careers in violent crime*. Westview Press, Boulder, CO
- Bianchi SM, Casper LM, King RB (2005) *Work, family, health and well-being*. Lawrence Erlbaum Associates, Mahwah, NJ
- Bijleveld CCJ, Smit PR (2005) Crime and punishment in the Netherlands, 1980–1999. In: Tonry M, Farrington DP (eds) *Crime and punishment in western countries, 1980–1999*. University of Chicago Press, Chicago, IL, pp 161–212
- Black DJ (1970) The production of crime rates. *Am Sociol Rev* 35:733–748
- Blokland AAJ, Nieuwbeerta P (2005) The effects of life circumstances on longitudinal trajectories of offending. *Criminology* 43:1203–1240
- Blokland AAJ, Nagin DS, Nieuwbeerta P (2005) Life span offending trajectories of a Dutch conviction cohort. *Criminology* 43:919–954
- Daly K (1987) Discrimination in the criminal courts: family, gender, and the problem of equal treatment. *Soc Forces* 66:152–175
- Daly K, Tonry M (1997) Gender, race, and sentencing. *Crime Justice* 22:201–252
- Edin K, Nelson TJ, Paranal R (2004) Fatherhood and incarceration as potential turning points in the criminal careers of unskilled men. In: Patillo M, Weiman D, Western B (eds) *Imprisoning America: the social effects of mass incarceration*. Russell Sage Foundation, New York, NY, pp 46–75
- Eggleson EP, Laub JH, Sampson RJ (2004) Methodological sensitivities to latent class analysis of long-term criminal trajectories. *J Quant Criminol* 20:1–26
- Elder GH Jr (1975) Age differentiation and the life course. *Annu Rev Sociol* 1:165–190
- Farrington DP (1999) A criminological research agenda for the next millennium. *Int J Offender Ther Comp Criminol* 43:154–167
- Farrington DP, Maughan B (1999) Criminal careers in two London cohorts. *Crim Behav Men Health* 9:91–106
- Farrington DP, West DJ (1995) Effects of marriage, separation, and children on offending by adult males. In: Blau ZS, Hagan J (eds) *Current perspectives on aging and the life cycle: delinquency and disrepute in the life course*, vol 4. JAI Press Inc., Greenwich, CT, pp 249–281
- Giordano PC, Cernkovich SA, Rudolph JL (2002) Gender, crime, and desistance: toward a theory of cognitive transformation. *Am J Sociol* 107:990–1064
- Giordano PC, Deines JA, Cernkovich SA (2006) In and out of crime: a life course perspective on girls' delinquency. In: Heimer K, Kruttschnitt C (eds) *Gender and crime: patterns in victimization and offending*. New York University Press, New York, NY, pp 17–40
- Gove WR, Hughes M, Geerken M (1985) Are Uniform Crime Reports a valid indicator of the index crimes? An affirmative answer with minor qualifications. *Criminology* 23:451–501
- Graham J, Bowling B (1996) *Young people and crime*. Home Office Research Study 145, London
- Hagestad GO, Call VRA (2007) Pathways to childlessness: a life course perspective. *J Fam Issues* 28:1338–1361
- Hindelang MJ, Hirschi T, Weis JG (1979) Correlates of delinquency: the illusion of discrepancy between self-report and official measures. *Am Sociol Rev* 44:995–1014
- Hogan DP, Astone NM (1986) The transition to adulthood. *Annu Rev Sociol* 12:109–130
- Horney JD, Osgood W, Marshall IH (1995) Criminal careers in the short term: intra-individual variability in crime and its relation to local life circumstances. *Am Sociol Rev* 60:655–673
- Kiernan K (2004) Unmarried cohabitation and parenthood in Britain and Europe. *Law Policy* 26:33–55
- King RD, Massoglia M, MacMillan R (2007) The context of marriage and crime: gender, the propensity to marry, and offending in early adulthood. *Criminology* 45:33–65
- Knight BJ, Osborn SG, West DJ (1977) Early marriage and criminal tendency in males. *Brit J Criminol* 17:348–360
- Kruttschnitt C (1982) Women, crime, and dependency: an application of the theory of law. *Criminology* 19:495–513
- Laub JH, Sampson RJ (2003) *Shared beginnings, divergent lives: delinquent boys to age 70*. Harvard University Press, Cambridge, MA
- Laub JH (1999) Alterations in the opportunity structure: a criminological perspective. In: Booth A, Crouter A, Shanahan M (eds) *Transitions to adulthood in a changing economy: no work, No Family, No Future*. Praeger Publishers, Westport, CT, pp 48–55
- Laub JH, Sampson RJ (1995) Crime and context in the lives of 1,000 Boston men, circa 1925–1955. In: Blau ZS, Hagan J (eds) *Current perspectives on aging and the life cycle: delinquency and disrepute in the life course*, vol 4. JAI Press Inc., Greenwich, CT, pp 119–139
- Leverenz AM (2006) The love of a good man? Romantic relationships as a source of support or hindrance for female ex-offenders. *J Res Crime Delinq* 43:459–488
- Liefbroer AC, Dykstra PA (2000) Samenleven met een partner [Living together with a partner]. In Liefbroer AC, Dykstra PA (eds) *Levenslopen in Verandering. Een studie naar ontwikkelingen in de levenslopen*

- van Nederlanders geboren tussen 1900 and 1970. [Changes over the life course. A study of the developments in life courses of the Dutch between 1900 and 1970.], SDU Publishers, The Hague
- Loeber R, Le Blanc M (1990) Toward a developmental criminology. *Crime Justice* 12:375–473
- Mannheim K (1952) *Essays on the sociology of knowledge*. Routledge & Kegan Paul LTD, London
- Manting D (1996) The changing meaning of cohabitation and marriage. *Eur Sociol Rev* 12:53–65
- Massoglia M, Uggen C (2007) Subjective desistance and the transition to adulthood. *J Contemp Crim Justice* 23:90–103
- Maume MO, Ousey GC, Beaver K (2005) Cutting the grass: a reexamination of the link between marital attachment, delinquent peers, and desistance from marijuana use. *J Quant Criminol* 21:27–53
- Mills M (2004) Stability and change: the structuration of partnership histories in Canada, the Netherlands, and the Russian Federation. *Eur J Popul* 20:141–175
- Mensch B, Singh S, Casterline JB (2005) Trends in the timing of first marriage among men and women in the developing world. The Population Research Council, Inc., New York, NY
- Nieuwebeerta P, Blokland AAJ (2003) Criminal careers and adult dutch offenders (codebook and documentation). Netherlands Institute for the Study of Crime and Law Enforcement, Leiden
- Oppenheimer VK (1994) Women's rising employment and the future of the family in industrial societies. *Popul Dev Rev* 20:293–342
- Osgood WD (2005) Life events and criminal behaviour. Paper presented at the Second Annual SCoPiC Conference, June, Cambridge, UK
- Ouimet M, Le Blanc M (1996) The role of life experiences in the continuation of the adult criminal career. *Crim Behav Men Health* 6:73–97
- Piquero AR, Blumstein A, Brame R, Haapanen R, Mulvey EP, Nagin DS (2001) Assessing the impact of exposure time and incapacitation on longitudinal trajectories of criminal offending. *J Adolescent Res* 16:54–74
- Raudenbush SW, Bryk AS (2002) *Hierarchical linear models: applications and data analysis methods*, 2nd edn. Sage Publications, Thousand Oaks, CA
- Raudenbush SW, Yang M, Yosef M (2000) Maximum likelihood for generalized linear models with nested random effects via high-order multivariate laplace approximation. *J Comput Graph Stat* 9:141–157
- Raudenbush SW, Bryk AS, Congdon R (2007) *HLM 6.04: hierarchical linear and nonlinear modeling*. Scientific Software International, Lincolnwood, IL
- Riley MW (1973) Aging and cohort succession: interpretations and misinterpretations. *Public Opin Quart* 37:35–49
- Sampson RJ, Laub JH (1993) *Crime in the making: pathways and turning points through life*. Harvard University Press, Cambridge, MA
- Sampson RJ, Laub JH, Wimer C (2006) Does marriage reduce crime? A counterfactual approach to within-individual causal effects. *Criminology* 44:465–508
- Shanahan MJ (2000) Pathways to adulthood in changing societies: variability and mechanisms in life course perspective. *Annu Rev Sociol* 26:667–692
- Smock PJ (2000) Cohabitation in the United States: an appraisal of research themes, findings, and implications. *Annu Rev Sociol* 26:1–20
- Snijders T, Bosker R (1999) *Multilevel analysis: an introduction to basic and advanced multilevel modeling*. Sage Publications, Thousand Oaks, CA
- Steffensmeier D, Allan E (1996) Gender and crime: toward a gendered theory of female offending. *Annu Rev Sociol* 22:459–487
- Steffensmeier D, Kramer J, Streifel C (1993) Gender and imprisonment decisions. *Criminology* 31:411–446
- Uggen C (2000) Work as a turning point in the life course of criminals: a duration model of age, employment, and recidivism. *Am Sociol Rev* 67:529–546
- Uggen C, Kruttschnitt C (1998) Crime in the breaking: gender differences in desistance. *Law Soc Rev* 32:339–366
- van Zanden JL (1998) *The economic history of the Netherlands 1914–1995: a small open economy in the 'long' twentieth century*. Routledge, London, UK
- Waite LJ (1995) Does marriage matter? *Demography* 32:483–507
- Waite LJ, Gallagher M (2000) *The case for marriage: why married people are happier, healthier and better off financially*. Random House, Inc., New York, NY
- Warr M (1998) Life-course transitions and desistance from crime. *Criminology* 34:183–216
- Wilson WJ (1987) *The truly disadvantaged: the inner city, the underclass and public policy*. The University of Chicago Press, Chicago, IL