Marriage and County-level Crime Rates: A Research Note

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Abstract

Objectives: To determine whether the relationship between marriage and crime extends beyond the individual level of analysis by examining the relationship between marriage rates and crime rates at the county level. Methods: Linear regression analyses of marriage rates on various types of crime, including violent, property, drug, and juvenile crime arrest rates. Results: The analyses suggest that marriage rates are inversely related to rates of violent crime, property crime, drug use, and juvenile violence. Conclusions: This research note suggests that the relationship between marriage and crime is more far reaching than previous studies have indicated. Final remarks address the implications of the findings for theoretical work on crime causation and for public policy.

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Introduction

With the ascent of the life-course criminology paradigm, the importance of marriage as a correlate of criminal behavior has become a central topic of study. Some research in this tradition shows that marriage can act as a "turning point" in a criminal career, leading males to desist from crime after a spirited juvenile or early adult period (see, e.g., Laub and Sampson 2003; Sampson, Laub, and Wimer 2006; van Schellen, Apel, and Nieuwbeerta 2012). With a few notable exceptions (Giordano, Cernkovich, and Rudolph 2002; Warr 2002) and despite some criticism for neglecting certain historical and gender nuances (Bersani, Laub, and Nieuwbeerta 2009; Giordano et al. 2002), this micro-level work is widely regarded as having demonstrated a strong and negative impact of marriage on crime, with more ambiguity with respect to the exact causal mechanisms producing this effect (see Craig, Diamond, and Piquero 2014).

This demonstration is welcome, but it may also be too narrow (see also Beaver et al. 2008). While micro effects are important, there are reasons to suspect that marriage may also be related to crime rates at the macro level. In this way of thinking, higher marriage rates at the ecological level may be related to certain processes that help to lower crime rates. If a relationship does exist between marriage and crime at the macro level, the protective benefits of marriage might be more far reaching than previously thought.

In this research note, we revisit the relationship between marriage and crime by exploring aggregate marriage rates in relation to various macro indicators of crime. We focus on differences among U.S. counties in violent crime, property crime, drug use, and juvenile delinquency rates. Our approach is to examine whether the inverse relationship between marriage and crime observed at the individual level also extends to other levels of analysis. If so, this has implications for the underlying mechanisms by which marriage is related to crime.

Marriage and Crime

A substantial body of prior research addresses the relationship between marriage and criminal offending at the individual level. Sampson and Laub (1993:161) found marriage to be negatively associated with criminality during young adulthood and that early marriages that gradually built up social control were the most influential for crime cessation (Laub, Nagin, and Sampson 1998). Other scholars report similar findings (see, e.g., Bersani et al. 2009; Farrington and West 1995; Horney, Osgood, and Marshall 1995; King, Massoglia, and MacMillan 2007; van Schellen et al. 2012). Despite some null findings (Giordano et al. 2002; Kruttschnitt, Uggen, and Shelton 2000; Uggen and Kruttschnitt 1998), a fair conclusion from the literature is that marriage is an important protective factor against crime.

Theoretical Linkages between Marriage and Crime Rates

Most perspectives in criminology have focused largely on how marriage changes one's behavior (Sampson et al. 2006; van Schellen et al. 2012). The most common such explanation involves social control or routine activity mechanisms. This perspective suggests that marriage "settles people down" and offers new routines that cut individuals off from their former criminal lives (Sampson and Laub 1993; Warr 1998). In a related argument, some scholars argue that marriage can change the way individuals view themselves by making their self-perceptions more prosocial (Burke and Cast 1997; Paternoster and Bushway 2009).

Although this body of work strongly suggests that marriage reduces spousal criminality, marriage may also have a wider protective benefit than criminologists have generally considered. For example, marriage may change the behavior of both spouses and not just one spouse, as some work has found marriage associated with increased levels of self-control for both husbands and wives (Forrest and Hay 2011). Being married may induce one to be more future oriented in terms of the long-term costs of one's actions, along the lines suggested by Gottfredson and Hirschi (1990). This would suggest that measured in the aggregate, marriage would have a larger effect on crime rates than individual-level theoretical specifications have thus far suggested. Another possible mechanism through which marriage influences crime concerns children, for whom stable marriages are thought to engender prosocial behavior (Amato and Keith 1991; Cavanagh and Huston 2006). This theoretical connection is through social control theory—marriage and children strengthen the family social bond, leading to lower risks of criminality.

More important for this article's argument, marriage may further be related to macro-level crime rates by influencing spousal social networks and communities. If marriage reduces criminality because it reduces a spouse's opportunities to spend time with peers (Warr 1998), it is also true

that the absence of home-bound spouses may reduce peers' criminality. In addition to alterations in differential associations, a high marriage rate can increase informal social control and reduce the number of possible crime partners through processes described by routine activities theory. Sampson's work (1987a) supports such a "diffusion of marriage benefits" notion by finding that the risk of burglary victimization is lower in areas with a greater proportion of two-parent households.

Ecological Research on Marriage and Crime

Despite a possible macro-level relationship between marriage and crime, ecological research on crime rates has neglected marriage as a mechanism that reduces crime rates. Generally, when the relationship between marriage and crime has been explored, it has been under the rubric of "family structure." This work has found a positive relationship between divorce rates and crime rates (Cáceres-Delpiano and Giolito 2008; MacDonald and Parker 2001; Messner, Baumer, and Rosenfeld 2004; Messner and Sampson 1991; Sampson 1986; Veysey and Messner 1999; Wong 2011). Many studies also use a measure of family disruption, usually the percentage of female-headed households or of two-parent households, as a control variable when investigating other independent variables of interest (see, e.g., Barkan 2000; Sampson 1986, 1987b; Sampson and Groves 1989; Sampson, Raudenbush, and Earls 1997; Shihadeh and Steffensmeier 1994; Sun, Triplett, and Gainey 2004; Wilson 1987).

Because the actual marriage rate is rarely a direct focus in these studies, the effect of marriage on crime rates remains underexplored. Divorce is only one indicator of marriage and only takes into consideration those who have been married in the past. In addition, marriage and divorce rates in a particular area are not necessarily highly correlated with each other across communities (Sampson 1986). Divorce and marriage rates are also not necessarily overlapping, as people can (and often do) get married multiple times. At one particular time, an area with a high rate of marriage may also have a high divorce rate relative to other areas. Because these two measures are thus not simply the converse of each other, divorce and marriage rates may not represent the consequences of a common underlying process. Moreover, family disruption, typically measured by single-parent households (Sampson 1986; Wong 2011), is also a limited indicator of marriage, as delayed childbirth and childfree marriages are increasing phenomena (Blackstone 2014; Nock 2005). In other words, "families" are increasingly seen as more than parents and children. The omission of a direct measure of marriage in the literature suggests that thus far research has been unable to determine its ecological relationship with crime rates. This research note attempts to fill this need.

Method

Our analysis of the ecological relationship between marriage rates and crime rates involves data from 2000 on the 3,141 counties of the United States and the District of Columbia. We focus on counties as an exploratory step to determine whether the marriage/crime relationship extends beyond the individual level. We used several measures of crime rates from the 2000 Uniform Crime Reports as our dependent variables: (1) the *violent* crime arrest rate per 100,000 population (which includes homicide, robbery, aggravated assault, and rape); (2) the *property* crime arrest rate per 100,000 population; (3) the number of arrests for narcotics use (*drug use*) per 100,000 population. In addition, to examine whether the marriage relationship varies by age of the offenders, we include arrests per 100,000 persons aged 10 to 17 for *juvenile violent crimes*.

Our main independent variable is marriage, measured by the percentage of households with a *married* couple from 2000 Census data. This measure is ideal for a number of reasons. First, it is not limited to households with children. Thus, married couples without children are included in the measure, allowing us to capture the influence of marriage on spouses that more common measures of family structure in ecological studies have not been able to capture. Second, it does not use an inappropriate denominator. Some measures of marriage rates (e.g., percentage of individuals married) suffer because they include in the denominator groups who are not likely to marry (e.g., children or the elderly, who may have been married in the past).

Covariates from the 2000 Census were chosen for their relevance to crime rates in many prior ecological studies. *Population density* has long been found to be associated with crime rates of areas and is one of the original "markers" of social disorganization in Shaw and McKay's (1942) work. To measure population density, we use the number of individuals per square mile. Another key correlate of crime rates is urbanity (Sampson and Wilson 1995; Wells and Weisheit 2004). *Metro* is a dummy variable for whether the county is in a metropolitan area. We also control for social class. *Poverty* is measured by the percentage of the population living below the poverty line. Following prior research (see Messner and Sampson 1991), we also include a measure of public assistance, which is the average amount of *public assistance* per household that received assistance in 1999.

We also include *unemployment*, which is a measure of the percentage unemployed in the civilian labor force. To control for education, we include a measure of *no high school*, which is the percentage of those aged 16 to 19 not in school and who have not graduated.

Research has also long indicated that age is a correlate of crime (Hirschi and Gottfredson 1983), and any relationship between marriage rates and crime may be confounded by age. To control for age, we include the median age of the county population in 2000 (U.S. Census). We include the percentage of the county population that is *Black* to control for the association of race and crime. Both of these measures are taken from the 2000 U.S. Census. Because of the long-standing finding of heightened crime—particularly violent crime—in the south (Nisbett and Cohen 1996), we include a dummy variable (south) that indicates whether the county was located in the south. To control for the effect of sex on crime rates, we include the percentage male in the county population, also from the 2000 U.S. Census. Finally, to ensure that the relationship between marriage and crime we estimate is independent of other marriage-related measures used in the literature, we include the *divorce* rate in the analyses. This is measured as the percentage over 15 who are divorced. The purpose of this covariate is to determine whether marriage is a unique concept that contributes to crime over and above divorce (which is typically used in ecological work).

Analytic Strategy

Analysis of crime rates has been a point of contention in the literature (see, e.g., Osgood 2000). Many have analyzed rates with linear regression models, which may not be appropriate if the data are skewed or distributed in a manner that does not conform to the requirements of linear regression. However, as Osgood (2000) point out, with relatively large population sizes, ordinary least squares should suffice to analyze arrest rates. Thus, our main analyses utilize linear regression, which also follows other well-known work examining macro predictors of crime (see Land, McCall, and Cohen 1990; McCall, Land, and Parker 2010).²

In our final models, collinearity led us to follow standard practice by constructing a disadvantage scale that summed the standardized scores for Black, poverty, unemployment and no high school graduation (α reliability = .71; Land et al. 1990). This measure is included in the second model for each dependent variable. The first model for each dependent variable uses demographic variables as controls and so *Black* is included in these models, but then represented in the *disadvantage* scale in the second group of models.

Variable	N	M (SD)
Marriage	3,139	55.92 (6.30)
Poverty	3,139	14.18 (6.56)
Male	3,139	49.56 (1.96)
Median age	3,139	37.35 (4.01)
Density	3,138	243.74 (1666.86)
Metro/city	3,141	0.24 (.43)
Black	3,139	8.77 (l4.51)
South	3,141	0.45 (.50)
Divorce percentage	3,139	9.50 (1.95)
Average public assistance	3,139	2304.36 (819.02)
No high school	3,138	9.56 (5.23)
Unemployment	3,139	5.82 (2.87)
Violent	3,139	135.30 (127.40)
Property	2,693	402.45 (301.23)
Drug	3,139	383.84 (382.15)
Juvenile violent crime	3,139	150.67 (185.62)

Table 1. Descriptive Statistics.

We also log the violent crime, property crime, drug, and juvenile violence arrest rates to restrict the range of the variables and reduce skew.³

Results

We begin with descriptive statistics for our main study variables. Table 1 presents a summary of the dependent and independent variables. On average, counties had roughly half of households with a married couple living in them. Similarly, on average, the counties were split evenly by sex, with only slightly more females than males. The average median age across the counties is just over 37. 14 percent of the families across the counties were living in poverty; the mean of the countries was less than 10% Black. In addition, on average, about 10 percent of individuals over age 15 were divorced.

As can be expected, there is a large amount of variation in the dependent variables, particularly violent crime. Not surprisingly, there was a much higher property crime rate, with an average of 402.45 property crime arrests per 100,000 population than violent crime (135.30 per 100,000). With respect to illicit drugs, there were 383 arrests per 100,000 and for the juvenile crime measure, there was an average of just over 150 arrests for violent crimes per 100,000 population aged 10 to 17.

Our regression results, shown in Table 2, include two models for each dependent variable. We focus on our three main dependent variables (violent crime, property crime, and drug use). Model 1 includes the main predictor—percentage of households with a married couple—along with individual-level control variables (male, age, and Black). Model 1 in Table 2 shows the results of the regression of violent crime arrest rates on household marriage. The coefficient for marriage is significant and negative (b = -.033, p < .001), which means that for every one-unit increase in marriage (here, a percent), the violent crime arrest rate decreases by .033. The southern indicator and percentage of Black are significant and positive, while age is significant and negative. Surprisingly, the percentage of male is not significant in the model, though likely due to the fact that there was minimal county-level variation for this variable (see Table 1).

Model 2 includes area predictors (percentage of the population in a metropolitan area, density, the disadvantage scale, divorce rate, and receipt of welfare). Marriage remains negative and significant (b = -.021, p < .001), though its coefficient is dampened in this model. The disadvantage and city measures are significant and positive as expected. The south indicator remains positive. Divorce and welfare are also significantly related to violent crime rates, though the relationship of marriage with violent crime appears to be independent of these factors. Model 3 shows the baseline for property crime. Marriage is significant along with percentage of male and age. Model 4 shows the regression of property crime on marriage with the additional covariates, indicating that a 1 percent increase in marriage, on average, is associated with a property crime arrest rate decrease of .021. Marriage remains significant (although attenuated), and the population density and city variables are significantly related to the measure of property crime rates. Divorce is significant and positive, indicating that counties with higher divorce rates tend to have higher property crime rates. This is independent of marriage in the model.

Model 5 displays the baseline for drug use. Model 5 indicates that marriage rates and age and south are significantly related to drug use. Model 6 confirms the significant protective relationship with marriage even in the presence of the additional covariates. Marriage remains significant, with all other variables significant except male and disadvantage, showing a one-unit increase in marriage corresponds to a .010 decrease in drug arrests.

Finally, we examine a measure of juvenile delinquency, to determine whether the marriage relationship casts a wider net than just on one's spouse. In models 7 and 8, marriage rates are strongly and negatively related to juvenile violent crime. These results show that for every

Table 2. The Effect of Marriage on Crime Rates: County Level.

	Model I	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
	Viol	Violent	Property	erty	Drug Use	Use	Juvenile Violent Crime	lent Crime
Measure	b (SE)	b (SE)	b (SE)	b (SE)	b (SE)	b (SE)	b (SE)	b (SE)
Marriage Male Age	033 (.007 (015 (021 (.003) **** .001 (.008) 005 (.004)	025 (.003)**** 031 (.008)**** 044 (.004)****	021 (.003)**** 030 (.008)**** 045 (.004)****	017 (.003)***********************************	010 (.003)** 015 (.009) 038 (.004)***	035 (.004)**** .018 (.009)* 003 (.005)	033 (.004)**** .026 (.009)* .012 (.005)*
Black South City		.259 (.033)**** .196 (.033)****	.002 (.001) .048 (.032)	.073 (.035)* .160 (.031)****	—.001 (.002) .233 (.036)***	.288 (.036)*** .145 (.032)***	.002 (.002) 159 (.040)***	072 (.040) .192 (.040)***
Density Disadvantage Divorce Welfare		.000 (.000)* .064 (.008)*** .063 (.008)*** .000 (.000)***		000 (.000) ***** 002 (.008) .080 (.008) **** .000 (.000)		.000 (.000)**** 005 (.008) .084 (.008)**** .000 (.000)***		.000 (.000)*** .017 (.009) 029 (.010)*** .000 (.000)***
Intercept R ² N	6.586 (.455) .195 2,771	4.945 (.446) .248 2,771	10.403 (.501) .140 2,830	9.352 (.472) .194 2,828	8.826 (.514) .107 2,885	7.336 (.505) .164 2,884	6.213 (.511) .088 2,262	5.123 (.528) .124 2,262

Note: The full coefficients for those variables that are significant but shown as zero in the table are as follows: model 2, Density: 0.0000128, Welfare: 0.0001265, model 4, Density: -0.0000149; model 6, Density: 0.0000342, Welfare: 0.0000677; model 8, Density: 0.000025, Welfare: 0.0001277.** > .05. *** > .01. **** > .001.

one-unit increase in marriage, juvenile violent crime arrests decrease by .033 (model 8). These results indicate that marriage is not only related to adult crime rate measures but also appears to be independently associated with certain juvenile crime indicators. Marriage is related to some crimes independent of the effect of divorce, suggesting that it is an important correlate of crime rates that other analyses have overlooked.

Discussion and Conclusion

The possible connection between marriage and criminal behavior was recognized as early as the 1970s (Knight, Osborn, and West 1977). Spurred by the work of Sampson and Laub (1993), research exploring the effect of marriage on behavior has since burgeoned and has generally found that marriage is inversely related to criminal offending at the individual level of analysis. Left relatively unexplored in this work, however, is whether the inverse relationship between marriage and crime applies to more than just the individual level.

This research note investigated whether marriage has a similar aggregate relationship with various indicators of county-level crime rates. We used a measure of marriage, the percentage of all households with a married couple, which avoids previous measurement limitations. Our models included a host of important covariates that allowed us to isolate as well as possible the association of marriage rates and crime rates. Finally, to illustrate that marriage has a more wide-ranging relationship with crime than that resulting from reducing spousal crime, we calculated models using a measure of juvenile crime.

Overall, our results confirmed that marriage has an inverse relationship with crime rates at the county level, net of relevant covariates. Importantly, the observed negative relationship between marriage and crime rates remained even after controlling for divorce rates. We also found that marriage rates are inversely correlated with juvenile crime, indicating a wider net relationship between marriage and crime than previously noted in the literature.

Our results point to certain crime control policies. A tremendous amount of research has been conducted on the correlates of marriage across place. One of the most consistent findings is that male wage inequality reduces marriage rates (Gould and Paserman 2003). This points to a lack of "marriageable men," which research has suggested is more pronounced in minority neighborhoods (Sampson 1987b; Sampson and Wilson 1995). Policies that improve the economy and increase full employment will likely

increase the marriage rate and thus have a potentially indirect relationship with crime—an implication that is consistent with individual-level research on marriage and crime (Shihadeh and Steffensmeier 1994). The high rates of incarceration that have characterized the United States (Pratt 2008) damage marriage rates by reducing the numbers of "marriageable" men available—an effect that is felt most starkly in disadvantaged communities (Western and Muller 2013). These communities are left without the social supports and controls that emerge from marriage and that are vital for the maintenance of healthy communities.

Our study did have certain limitations. First, as we mentioned previously, the appropriate unit of analysis has long been a subject of much debate in macro-/meso-level research. Much research has taken place on the city level and some argue that more fine grained the level of analysis is preferable to larger aggregations (see Weisburd, Bruinsma, and Bernasco 2009). We use county levels to illustrate that the relationship between marriage rates and crime rates is not necessarily contingent on the level of aggregation. We used cross-sectional data, which limits our ability to determine temporal ordering of the relationship between marriage and crime, thus thwarting our ability to make any causal inferences. Future research should explore whether changes in marriage rates over time influence crime rates. While our findings with respect to the fact that counties with high marriage rates tend to have on average lower rates of crime is consistent with both our expectations and findings at the individual level, recall that our sample sizes were quite large. As a result, it is not surprising that the relationships we observed between marriage and each of our county-level crime rate indicators were statistically significant. Though the inverse association we found between marriage rates and crime rates was consistent across crime measures, it was in each case quite modest in magnitude. In addition, it should be noted that the relationship between other explanatory variables (such as disadvantage and age) and crime rates was substantively larger than what we found for marriage. While marriage may be related to lower crime rates, we readily acknowledge that other factors are just as, or more, important. Finally, and perhaps most importantly, we must readily acknowledge the hazards in using Uniform Crime Reports (UCR) countylevel crime data, problems that are vividly and comprehensively discussed by Maltz and Targonski (2002) and Pridemore (2005).

In sum, this study has contributed to the marriage and crime literature by demonstrating that the association between marriage and crime is likely more far reaching than much criminological work has thus far recognized, as marriage appears to be inversely related to various indicators of crime at

the macro level and not just at the individual level highlighted in prior work. The analyses reported here comport with life-course criminological research and may have implications for crime trends over time. For all these reasons, the marriage effect should receive prominent attention in future work on variation in criminality among individuals and areas.

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Notes

- We used 2000 data because of their availability in a data package to us at the time
 we began this study. Because the percentage of married couple households
 declined only by 6 percent from 2000 to 2010, we believe our results should hold
 true with more recent data.
- We conducted all analyses with a Poisson regression model as well as a sensitivity test, and the results were similar.
- 3. These logged dependent variables show more than acceptable evidence of normality. The following are the means and medians for each: Violent crime (mean = 4. 73 and median = 4.73), property crime (mean = 5.87 and median = 5.99), drug crime (mean = 5.75 and median = 5.84), and juvenile violence (mean = 5.03 and median = 5.04). With the exception of the property crime rate, all measures of skewness are near zero: violent crime (-.469), property crime (-1.09), drug crime (-.756), and juvenile violence (-.088).
- 4. We suggest caution in making too much of statistical significance in these models as the sample size is large.
- 5. To examine the strength of the relationship of the independent variables, the models were rerun with standardized βs (not shown).

References

Amato, Paul R. and Bruce Keith. 1991. "Parental Divorce and Adult Well-being: A Meta-analysis." *Journal of Marriage and the Family* 53:43-58.

Barkan, Steven E. 2000. "Household Crowding and Aggregate Crime Rates." *Journal of Crime and Justice* 23:47-64.

- Beaver, Kevin M., John Paul Wright, Matt DeLisi, and Michael G. Vaughn. 2008. "Desistance from Delinquency: The Marriage Effect Revisited and Extended." Social Science Research 37:736-52.
- Bersani, Bianca E., John H. Laub, and Paul Nieuwbeerta. 2009. "Marriage and Desistance from Crime in the Netherlands: Do Gender and Socio-historical Context Matter?" *Journal of Quantitative Criminology* 25:3-24.
- Blackstone, Amy. 2014. "Doing Family without Having Kids." *Sociology Compass* 8:52-62.
- Burke, Peter J. and Alicia D. Cast. 1997. "Stability and Change in the Gender Identities of Newly Married Couples." *Social Psychology Quarterly* 60:277-90.
- Cáceres-Delpiano, Julio and Eugenio Giolito. 2008. "The Impact of Unilateral Divorce on Crime." ISA Discussion Paper No. 3380. Available at SSRN: http://ssrn.com/abstract=1100983. Accessed December 25, 2012.
- Cavanagh, Shannon E. and Aletha C. Huston. 2006. "Family Instability and Children's Early Problem Behavior." *Social Forces* 85:551-81.
- Craig, Jessica M., Brie Diamond, and Alex R. Piquero. 2014. "Marriage as an Intervention in the Lives of Criminal Offenders." Pp. 19-37 in *Effective Interventions in the Lives of Criminal Offenders*, edited by J. A. Humphrey and P. Cordella. New York: Springer.
- Farrington, David P. and Donald J. West. 1995. "Effects of Marriage, Separation, and Children on Offending by Adult Males." Pp. 249-81 in *Current Perspectives on Aging and the Life Cycle*, edited by Z. S. Blau and J. Hagan. Greenwich, CT: JAI.
- Forrest, Walter and Carter Hay. 2011. "Life-course Transitions, Self-control and Desistance from Crime." *Criminology and Criminal Justice* 11:487-513.
- Giordano, Peggy C., Stephen A. Cernkovich, and Jennifer L. Rudolph. 2002. "Gender, Crime, and Desistance: Toward a Theory of Cognitive Transformation." *American Journal of Sociology* 107:990-1064.
- Gottfredson, M. R. and Hirschi, T. 1990. *A general theory of crime*. Stanford, CA: Stanford University Press.
- Gould, Eric E. and M. Daniele Paserman. 2003. "Waiting for Mr. Right: Rising Inequality and Declining Marriage Rates." *Journal of Urban Economics* 53: 257-81
- Hirschi, Travis and Michael Gottfredson. 1983. "Age and the Explanation of Crime." *American Journal of Sociology* 89:552-84.
- Horney, Julie, D. Wayne Osgood, and Ineke Haen Marshall. 1995. "Criminal Careers in the Short-term: Intra-individual Variability in Crime and its Relation to Local Life Circumstances." *American Sociological Review* 60:655-73.
- King, Ryan D., Michael Massoglia, and Ross MacMillan. 2007. "The Context of Marriage and Crime: Gender, the Propensity to Marry, and Offending in Early Adulthood." *Criminology* 45:33-65.

Knight, Brian J., S. G. Osborn, and Donald J. West. 1977. "Early Marriage and Criminal Technology in Males." *British Journal of Criminology* 17:348-60.

- Kruttschnitt, Candace, Christopher Uggen, and Kelly Shelton. 2000. "Predictors of Desistance among Sex Offenders: The Interaction of Formal and Informal Social Controls." *Justice Quarterly* 17:61-87.
- Land, Kenneth C., Patricia L. McCall, and Lawrence E. Cohen. 1990. "Structural Covariates of Homicide Rates: Are There any Invariances across Time and Social Space?" *American Journal of Sociology* 95:922-63.
- Laub, John H., Daniel S. Nagin, and Robert J. Sampson. 1998. "Trajectories of Change in Criminal Offending: Good Marriages and the Desistance Process." *American Sociological Review* 63:225-38.
- Laub, John H. and Robert J. Sampson. 2003. *Shared Beginnings, Divergent Lives: Delinquent Boys to Age 70*. Cambridge, MA: Harvard University Press.
- Macdonald, John M. and Karen F. Parker. 2001. "The Structural Determinants of Justifiable Homicide Assessing the Theoretical and Political Considerations." *Homicide Studies* 5:187-205.
- Maltz, Michael D. and Joseph Targonski. 2002. "A Note on the Use of County-level UCR Data." *Journal of Quantitative Criminology* 18:297-318.
- McCall, Patricia L., Kenneth C. Land, and Karen F. Parker. 2010. "An Empirical Assessment of What We Know about Structural Covariates of Homicide Rates: A Return to a Classic 20 Years Later." *Homicide Studies* 14:219-43.
- Messner, Steven F., Eric P. Baumer, and Richard Rosenfeld. 2004. "Dimensions of Social Capital and Rates of Criminal Homicide." *American Sociological Review* 69:882-903.
- Messner, Steven F. and Robert J. Sampson. 1991. "The Sex Ratio, Family Disruption, and Rates of Violent Crime: The Paradox of Demographic Structure." Social Forces 69:693-713.
- Nisbett, Richard E. and Dov Cohen. 1996. *Culture of Honor: The Psychology of Violence in the South*. Boulder, CO: Westview Press.
- Nock, Steven L. 2005. "Marriage as a Public Issue." *The Future of Children* 15: 13-32.
- Osgood, D. W. 2000. "Poisson-based regression analysis of aggregate crime rates." *Journal of Quantitative Criminology* 16:21-43.
- Paternoster, Ray and Shawn Bushway. 2009. "Desistance and the Feared Self: Toward an Identity Theory of Criminal Desistance." *Journal of Criminal Law & Criminology* 99:1103-56.
- Pratt, Travis C. 2008. Addicted to Incarceration: Corrections Policy and the Politics of Misinformation in the United States. Los Angeles, CA: Sage.
- Pridemore, William A. 2005. "A Cautionary Note on Using County-level Crime and Homicide Data." *Homicide Studies* 9:256-68.

- Sampson, Robert J. 1986. "Crime in Cities: The Effects of Formal and Informal Social Control." *Crime and Justice* 8:271-311.
- Sampson, Robert J. 1987a. "Does an Intact Family Reduce Burglary Risk for its Neighbors?" *Sociology and Social Research* 71:204-7.
- Sampson, Robert J. 1987b. "Urban Black Violence: The Effect of Male Joblessness and Family Disruption." *American Journal of Sociology* 93:348-82.
- Sampson, Robert J. and W. Byron Groves. 1989. "Community Structure and Crime: Testing Social-disorganization Theory." American Journal of Sociology 94: 774-802.
- Sampson, Robert J. and John H. Laub. 1993. *Crime in the Making: Pathways and Turning Points Through Life*. Boston, MA: Harvard University Press.
- Sampson, Robert J., John H. Laub, and Christopher Wimer. 2006. "Does Marriage Reduce Crime? A Counterfactual Approach to Within-individual Causal Effects." *Criminology* 44:465-508.
- Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy." *Science* 277:918-24.
- Sampson, Robert J. and William Julius Wilson. 1995. "Toward a Theory of Race, Crime, and Urban Inequality." Pp. 37-54 in *Race, Crime, and Justice: A Reader*, edited by John Hagan and Ruth D. Peterson. Stanford, CA: Stanford University Press.
- Shaw, Clifford and Henry D. McKay. 1942. *Juvenile Delinquency and Urban Areas*. Chicago: University of Chicago Press.
- Shihadeh, Edward S. and Darrell J. Steffensmeier. 1994. "Economic Inequality, Family Disruption, and Urban Black Violence: Cities as Units of Stratification and Social Control." *Social Forces* 73:729-51.
- Sun, Ivan Y., Ruth Triplett, and Randy R. Gainey. 2004. "Neighborhood Characteristics and Crime: A Test of Sampson and Groves' Model of Social Disorganization." *Western Criminology Review* 5:1-16.
- Uggen, Christopher and Candace Kruttschnitt. 1998. "Crime in the Breaking: Gender Differences in Desistance." *Law and Society Review* 32:339-66.
- van Schellen, Marieke, Robert Apel, and Paul Nieuwbeerta. 2011. "Because You're Mine, I Walk The Line? Marriage, Spousal Criminality, and Criminal Offending Over the Life Course." *Journal of Quantitative Criminology* 28:701-23.
- Veysey, B. M. and S. F. Messner. 1999. "Further Testing of Social Disorganization Theory: An Elaboration of Sampson and Groves's "Community Structure and Crime." *Journal of Research in Crime and Delinquency* 36:156-74.
- Warr, Mark. 1998. "Life-course transitions and desistance from crime." Criminology 36:183-216.
- Warr, Mark. 2002. Companions in Crime. New York: Cambridge University Press.

Weisburd, David, Gerben J. N. Bruinsma, and Wim Bernasco. 2009. "Units of Analysis in Geographic Criminology: Historical Development, Critical Issues, and Open Questions." Pp. 3-31 in *Putting Crime in Its Place: Units of Analysis in Geographic Criminology*, edited by David Weisburd, Wim Bernasco, and Gerben Bruinsma. New York: Springer.

- Wells, L. Edward and Ralph A. Weisheit. 2004. "Patterns of Rural and Urban Crime: A County-level Comparison." *Criminal Justice Review* 29:1-22.
- Wester, Bruce and Christopher Muller. 2013. "Mass Incarceration, Macrosociology, and the Poor." *The Annals of the American Academy of Political and Social Science* 674:166-89.
- Wilson, William Julius. 1987. *The Truly Disadvantaged: The Inner City, the Under*class, and Public Policy. Chicago: University of Chicago Press.
- Wong, Kwong Siu. 2011. "Reciprocal Effects of Family Disruption and Crime: A Panel Study of Canadian Municipalities." Western Criminology Review 12:43-63.

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