

University of Montana

ScholarWorks at University of Montana

Graduate Student Theses, Dissertations, &
Professional Papers

Graduate School

2003

Timing of adult social bonds and desistance from crime

Eric W. Emerson

The University of Montana

Follow this and additional works at: <https://scholarworks.umt.edu/etd>

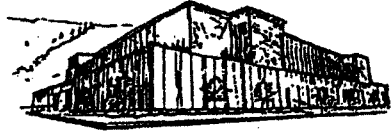
Let us know how access to this document benefits you.

Recommended Citation

Emerson, Eric W., "Timing of adult social bonds and desistance from crime" (2003). *Graduate Student Theses, Dissertations, & Professional Papers*. 5453.

<https://scholarworks.umt.edu/etd/5453>

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.



Maureen and Mike
MANSFIELD LIBRARY

The University of

Montana

Permission is granted by the author to reproduce this material in its entirety,
provided that this material is used for scholarly purposes and is properly cited in
published works and reports.

****Please check "Yes" or "No" and provide signature****

Yes, I grant permission

X

No, I do not grant permission

Author's Signature: _____

[Handwritten signature]

Date: _____

5/9/03

Any copying for commercial purposes or financial gain may be undertaken only
with the author's explicit consent.

THE TIMING OF ADULT SOCIAL BONDS AND DESISTANCE FROM CRIME

by

Eric Emerson

B.S. Montana State University. 1999

Presented in partial fulfillment of the requirements

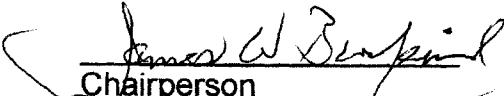
for the degree of

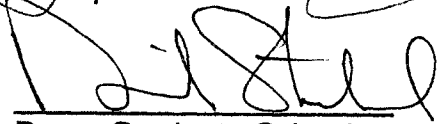
Master of Arts

The University of Montana

May 2003

Approved by:


Chairperson


Dean, Graduate School

5-9-03

Date

UMI Number: EP40917

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP40917

Published by ProQuest LLC (2014). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Adult Social Bonds: The Timing of Marital Transitions in Emerging Adulthood

Director: James W. Burfeind 

A life-course perspective incorporates a developmental model to understand age-graded transitions or turning points in the life course. The purpose of this research is to examine the timing of adult social bonds and desistance from crime in paroles released from the California Youth Authority from 1965-1984. The adult social bonds of marriage and employment are explored from two points in the development period of emerging adulthood. Although the explanatory power of adult social bonds was limited, results supported previous research in the relationship between age and employment and criminal offending. In addition, marriage early in adulthood was a stronger predictor of desistance from crime than marriage later in adulthood.

ACKNOWLEDGEMENTS

This paper is largely indebted to Dr. James Burfeind and Dr. Rodney L. Brod at the University of Montana. I appreciate both of your support and guidance in the course of this project and throughout my graduate school experience. A special thanks to Dr. John Spores who served as the outside member to my committee. Additional thanks to my fiancée Melissa, your encouragement made graduate study possible.

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
INTRODUCTION	1
SOCIAL CONTROL THEORIES	1
SOCIAL BONDS	3
SELF-CONTROL	6
LIFE-COURSE THEORY	8
<i>Employment</i>	11
<i>Marriage</i>	13
METHODOLOGY	15
DATA	16
PROCEDURES	17
VARIABLES	19
<i>Employment</i>	19
<i>Recidivism</i>	19
<i>Marriage</i>	19
<i>Stake in Conformity</i>	20
<i>Drug Use</i>	20
DATA REDUCTION AND INDEX CONSTRUCTION	20
DATA ANALYSIS	23
DISCUSSION	31
APPENDIX	35
REFERENCES	36

Figures and Tables

Figure 1:	Adult Social Bonds and Recidivism.....	16
Table 1:	Factor Loadings for Drug Variables.....	22
Table 2:	Group Means.....	23
Table 3:	Tukey's Post Hoc Test.....	24
Table 4:	Recidivism by Stake in Conformity.....	25
Table 5:	Variation of Recidivism Explained by Age and Adult Social Bonds.....	25
Table 6:	Correlation Between Recidivism and Marriage/ Employment/ Age.....	26
Figure 2:	The Causal Impact of Marriage, Employment, and Age on Recidivism.....	27
Table 7:	Correlation Between Adult Social Bonds and Recidivism Early Emerging Adulthood.....	28
Figure 3:	Causal Impact of Marriage and Employment In Early Emerging Adulthood.....	29
Table 8:	Correlation Between Adult Social Bonds and Recidivism in Late Emerging Adulthood.....	24
Figure 4:	Causal Impact of Marriage and Employment in Late Emerging Adulthood.....	22

THE TIMING OF ADULT SOCIAL BONDS AND DESISTANCE FROM CRIME

A life-course perspective differs from traditional control theory by incorporating a developmental model to explain continuity and change in antisocial behavior over the life-course. Life-course research explores developmental trajectories, transitions, and turning points across the life span in order to understand age-graded events and desistance from crime. The purpose of this research is to examine the timing of the life-course events of marriage and employment using longitudinal data from 524 parolees to illustrate the impact of “culturally defined age-graded roles and social transitions” on criminal trajectories (Elder 1985:17). A secondary analysis of data collected from the California Youth Authority was examined in order to explore the relationship between the timing of an individual’s first marriage, employment, and desistance from crime in ages ranging from the late teens through the mid-twenties, a developmental phase recently labeled “emerging adulthood” (Arnett 2000).

SOCIAL CONTROL THEORIES

Control theory differs from other criminological theories in attempting to explain, “why people obey rules,” rather than explaining criminal behavior (Hirschi 1969:10). Social control theories assume that humans are hedonistic in nature and that deviance is the result of individuals acting in a self-interested manner. Emile Durkheim (1895), the father of control theory, examined various societies to conclude that crime is present in all cultures and serves a functional

role of defining boundaries and the degree of social disapproval for various acts. Crime, according to Durkheim, maintains the social order by providing an example of societal disapproval when individuals are sanctioned or imprisoned. Durkheim argued that socialization and training are necessary in order for societal norms to be internalized and restrict an individual's propensity toward deviance. Several theoretical developments in the twentieth century applied Durkheim's notion of social control to delinquent behavior.

Albert J. Reiss, Jr. (1951:196) offered a social control explanation for juvenile delinquency in a study of 1,110 juveniles. Reiss developed a control theory that argued individuals become free to engage in delinquency following the failure of both personal and social controls. According to Reiss, concepts of personality grounded in psychoanalytical theory represent the internal control necessary for individuals to resist meeting needs in ways that "conflict with the norms and rules of the community" (Reiss 1951:196). The social controls discussed by Reiss represent the influence of important social groups including school, family, and significant others.

David Matza and Gresham Sykes (1957) argued that previous theories failed to explain how juveniles can both be bound to the common value system and participate in delinquency. The authors claimed that juveniles become free to engage in delinquency through techniques of neutralization that allows for the temporary suspension of societal values. Matza and Sykes (1957:664-670) identify denial of responsibility, denial of injury, denial of victim, condemnation of condemners, and appeal to higher loyalties as techniques of neutralization.

Walter Reckless (1961) defined internal and external controls that “contain” the temptation for deviant behavior. Internal controls represent the development of a self-concept or conscience that serves as a buffer against opportunities for deviance. This self-concept formed in childhood was emphasized as a strong determinate of deviance as individuals interact with the social environment. According to Reckless, external controls are found within the social environment in the relationships that individuals form during socialization (Reckless, 1961). These controls are found in social institutions such as the school and family that bind individuals to the dominant value system in society.

SOCIAL BONDS

Drawing from previous theoretical developments, Travis Hirschi argued that an individual becomes free to engage in criminal behavior when societal bonds are weak or broken. Hirschi relied on self-reported data from a sample of 4,077 juveniles to describe the elements of the social bond in his 1969 book, *Causes of Delinquency*. Hirschi discussed belief, commitment, involvement, and attachment as elements of the social bond that restrain individuals from engaging in deviant behavior. Belief represents acceptance of societal rules and authority as just or fair. This element of the social bond assumes that there exists variation in the degree that individuals internalize the common value system. Individuals that fail to recognize the legitimacy of authority are more likely to disregard the rules that restrict deviance.

Commitment describes the degree of investment in societal institutions. The amount of time invested in work or education offers a greater risk in the decision to commit crime. Education represents a common social institution involving youth in the process of socialization. Most juvenile delinquency theories incorporate education factors in the explanation of crime. Hirschi measured the amount of time a juvenile spends on homework in his operationalizing commitment to education (Hirschi 1969:142).

Involvement represents the opportunity for deviance by measuring time spent on conventional or unconventional behavior. This argument assumes that an individual who is busy engaging in conventional activity will have less opportunity to engage in criminal behavior (Hirschi 1969:22). This element of the social bond and subsequent research has resulted in intervention strategies that attempt to involve juveniles in after school activities during the peak hours of delinquency following release from school (Cullen and Agnew 1999).

Attachment refers to the identification or ties to others that illustrate the internalization of societal norms. This element of the social bond argues that individuals are restricted in engaging in criminal behavior to the degree in which they are invested in others. The role of attachment was Hirschi's incorporation of the conscience or superego found in previous theories that mediates behavior and action. Instead of focusing on the internal conscience or superego, Hirschi places attachment in the external relationships individuals form with others. An individual who lacks attachment to others in society is less likely to consider the consequences of their actions and subsequently more prone to engage in

criminal acts. When these attachments are completely absent, the resulting behavior represents “the guiltlessness of the psychopath” (Hirschi 1969:18).

The largest criticism of Hirschi’s social bond theory is found in the causal order of events. Findings from empirical tests of social bond theory are generally dependent on the type of research design. Cross-sectional designs offer the best support for Hirschi’s model when the causal orders of the social bonds are unable to be tested. The use of longitudinal data allows researchers to explore the causal order in the association between elements of the social bond and delinquency. For example, attachment to delinquent peers can cause delinquent behavior that results in the weakening of the attachment of parents (Williams and McShane 1999).

The use of longitudinal data offers the opportunity to test the causal order of social bonds. In a study by Wiatrowski et al. (1981) the four bond elements are applied from the social bond theory to test the validity of Hirschi’s concepts. The sample consisted of longitudinal data collected from the Youth in Transition Study. Data were collected in five waves beginning in 1966 and included 2213 tenth grade boys. The authors attempted to use a system of measures that “parallels Hirschi’s (1969) research” (Wiatrowski et al. 1981:531). In addition, measures of family socioeconomic level, ability, and the influence of others are considered in predicting delinquency.

Although support for Hirschi’s model was found, consideration of other factors found that a more complex model provided a stronger correlation than the model used by Hirschi. These factors include socioeconomic status and the

ability to succeed in school that influenced both parental attachment and school-related components. The authors also conclude that the effects of parental attachment on belief are “transmitted through school attachment” (Wiatrowski et al. 1981:535). These findings contradict Hirschi's assumption that bonds to societal institutions were formed in the family. Instead, the data supports a developmental approach that “treats education as important in the integration of the youth into adult social life” (Wiatrowski et al. 1981:537).

SELF-CONTROL THEORY

Michael Gottfredson and Travis Hirschi (1990) proposed *A General Theory of Crime* in an attempt to explain the convergence of the propensities and conditions that result in all criminal behaviors. Gottfredson and Hirschi target ineffective child rearing as the source for development of low self-control, or the inability to resist the opportunity for immediate gain. Crime is defined by Gottfredson and Hirschi as “acts of force or fraud undertaken in the pursuit of self-interest” (Gottfredson and Hirschi 1990:15). An individual with low self-control is more prone to engage in a delinquent act when the opportunity or condition arises.

According to Gottfredson and Hirschi, the “latent trait” or propensity to offend associated with low self-control are stable throughout adolescence and into adulthood. A self-control perspective explains the failure to successfully function in a school setting is a result of low self-control. Those who have low self-control have difficulty coping with the restraints of school. Restraints that

require “young persons to be quiet, physically inactive, and attentive” conflict with the behavior of individuals that lack self-control (Gottfredson and Hirschi 1990:162).

As individuals with low self-control proceed into adulthood, they are limited in their ability to maintain stable employment, and often experience unsuccessful marriages. The qualities necessary for a stable marriage or employment are not consistent with an individual who lacks self-control. These traits influence an individual throughout their lives as they experience “difficulty meeting the obligations of structured employment, just as they have difficulty meeting the obligations of school and family” (Gottfredson and Hirschi 1990:165).

A self-control perspective differs from social bond theory by returning the source of social control to the individual level. A level of control established early in childhood determines the amount of propensity toward deviance. This propensity, according to Gottfredson and Hirschi, explains the stability in offending as individuals progress through life with the inability to resist the temptation to participate in criminal behavior.

A common critique of self-control theory is the inability to account for changes in criminal offending over the life-course. This critique is grounded in a large body of longitudinal research that finds most juvenile delinquents do not become criminal adults. In addition, a large percentage of juveniles commit delinquency in adolescence regardless of background characteristics relevant to low levels of control (Moffit 1993). Gottfredson and Hirschi (1990) reject the necessity for longitudinal data in order to uncover the impact of life events

relevant to criminal offending. Instead, the authors argue that local life events such as “marriage to a nondelinquent spouse, persistence in a good job, or an educational program” are not random circumstances and the “crime-relevant characteristics of people cause all of these events” (Gottfredson and Hirschi 1990:237).

LIFE COURSE THEORY

The inability of traditional theories to address changing patterns of criminal behavior over the life-course has resulted in the recent incorporation of a developmental perspective within traditional theories of delinquent behavior (Thornberry 1997). This incorporation of a developmental perspective has recently been integrated within traditional strain, social learning, symbolic interaction, and control theories. A developmental perspective addresses the failings of previous theories to explain “prevalence, age of onset of offending, duration of careers, escalation and de-escalation of criminal behavior in terms of both frequency and seriousness, and desistance from criminal involvement” (Thornberry 1997:22)

Terrie Moffitt (1993) proposed a complementary pair of developmental theories to explain two distinct categories of offenders that determine stability and desistance in antisocial behavior. Moffitt (1993:677), using self-reported data, addressed the frequency of offending to conclude that criminal behavior in adolescence “appears to be a normal part of teen life”. Moffitt, grounded within

psychological and neurological concepts, identifies two distinct categories of offenders: life-course persistent and life-course limited offenders.

Life-course persistent offenders, according to Moffitt, exhibit stable involvement in crime and represent a different category of offender than those that typically engage in delinquency. These offenders have similar neuropsychological deficits that are compounded with faulty interactions with ineffective parents (Moffitt 1997). This category of offender has a similar pattern of early onset and stable antisocial behavior as individuals with low self-control. In addition, life course persistent offenders maintain stability as cumulative and contemporary consequences “knife off” opportunities for change as they progress into adulthood (Moffitt 1997:23).

The life-course limited offender has a more sporadic involvement in deviance that generally disappears by young adulthood. Moffitt advances the argument that adolescence are temporarily attracted to the lifestyle of life-course persistent and mimic their behavior during adolescence (Moffitt 1997). Desistance in adolescent-limited offenders is anticipated as opportunities for autonomy are offered in conventional adult roles. These roles are accessible to the limited offender, as they do not suffer the consequences of lost opportunities in adolescence.

Additional theories apply life-course perspectives in criminology by incorporating developmental phases to explain the process of aging out of crime. Sampson and Laub (1993) revived data from the Glueck’s longitudinal study of delinquents in order to explain variations in criminal behavior. Operating from the

principles of control theory, Sampson and Laub integrated the concepts of the life course perspective in order to explain changing ties to institutions of social control that result in different criminal trajectories (Sampson and Laub 1993; Elder 1985). Trajectories represent interconnected pathways or careers that make up long-term behaviors. Although criminal trajectories explain stability in criminal offending, a trajectory is also subject to change relative to life events and circumstances.

Embedded within trajectories, transitions represent a sequence of events that can alter an individual life-course (Elder 1985). Examples of transitions include life events such as marriage, employment, or becoming a parent that result in a “turning point” in the developmental trajectory (Elder 1985:32). For example, an individual invested in a criminal trajectory may determine after fathering children or landing a good job that the risks associated with continued offending become too great. The “freedom” from societal bonds discussed earlier is diminished as an individual is bound to the common value system. These transitions or turning points vary in their significance to a life-course trajectory.

Sampson and Laub (1993) argue that the quality or strength of social ties in each transition determine a developmental trajectory. The authors describe the strength and quality of adult social bonds and their transitional impact on criminal trajectories. The strength of social bonds is determined by investment or social capital that is obtained in relationships of marriage and employment. Unlike previous life-course models, Sampson and Laub (1993:304) “emphasize

the quality or strength of social ties in these transitions more than the occurrence or timing of discrete life events.”

Employment. Sampson and Laub (1993) argue that employment in itself does not result in an increase in social control. The authors define employment “coupled with job stability, job commitment, and mutual ties to work” as responsible for reducing criminal behavior (Sampson and Laub 1993:140). Their measures of employment rely on the elements of attachment, commitment, and involvement discussed earlier in Hirschi’s social bond. Sampson and Laub report findings consistent with job stability and attachment to others in the workplace mediating the impact of employment and desistance from crime (Sampson and Laub 1993).

The relationship between employment and delinquency has often failed to find the empirical support predicted in social control theory. Research in youth employment has found a positive association with delinquency during adolescence. In addition, employed adolescence has been found to be more delinquent and report greater rates of substance abuse than unemployed youth (Greenberger et al. 1980; Steinberg, Fegley, and Dornbusch 1993). An explanation for the relationship between employment and delinquency is offered from a social bond perspective that parental attachment is weakened by employment as juveniles gain financial independence.

Mathew Ploeger (1997) explored the problematic relationship between employment and delinquency in a longitudinal study. Ploeger analyzed youth employment using three waves of the National Youth Survey. This study tested

a social control theory explanation for the positive association between employment and delinquency. Ploeger found that controlling for parental influence and time spent with parents had little effect on the relationship between employment and delinquency. Ploeger concluded that findings supported a differential association explanation for the positive relationship between employment in adolescence and delinquency. Employment appeared to “widen the adolescents peer network” resulting in increased “avenues to delinquency open to the adolescent” (Ploeger 1997:671).

Christopher Ugden (2000) analyzed data from the National Supported Work Demonstration Project targeted at criminal offenders in U.S. cities from 1975-1997. The requirements of the program stated that an individual was incarcerated at least six months before the start of the program. Treatment and control groups were randomly assigned that determined whether an individual was offered a job in the program. Both groups were followed for three years at nine-month intervals. Although the program was deemed a failure, Ugden describes the age-graded impact of employment in predicting recidivism.

The results of the program revealed that employment varied dependent on the subject’s age when entering the program. Among individuals 26 and younger no difference in rates of recidivism existed between the control and treatment groups. In participants older than 27, there was a significant treatment effect for employment. This relationship remained after controlling for personal characteristics (sex, race marital status, education, work history, prior arrest, and site unemployment rate) (Ugden 2000). Previous research on employment has

found support in treating the influence of employment as age-graded in deterring criminal behavior.

Marriage. The transition of marriage and desistance from crime has found consistent empirical support that married individuals are less likely to participate in deviant behavior than their single counterparts (Sampson and Laub 1993; Warr 1998; Farrington and West 1995). Farrington and West (1995), in a longitudinal study of London males, found that offenders were as likely as nonoffenders to get married. In addition, individuals that married were less likely to commit offense than those that remained single (Farrington and West 1995).

Mark Warr (1998) conducted a study using waves 5 and 6 of the National Youth Survey to analyze the transition of marriage on delinquency. The sample represented ages ranging from 15 to 24 and examined the between marriage and desistance from crime. Warr (1998:188) argued that the relationship between marriage and desistance in crime is that “marriage acts to disrupt or dissolve friendships that existed prior to marriage”. These findings suggest that marriage results in a reduced exposure to delinquent peers and time spent with friends. In addition, when measures of peer influence are held constant the influence of marriage on delinquency is substantially decreased (Warr 1998).

The relationship between peer association and marriage was further supported in Simons’ et al. (2002) study of 236 young adults and their romantic partners. The analysis revealed little support for the quality of marriage and instead favored a peer association explanation for marriage and desistance from crime. In addition, the authors argue the concept of “assortative mating,” where

antisocial individuals seek partners with similar characteristics. This mating of individuals with similar propensities to crime further explained differences in marriage and criminal behavior (Simons et al. 2002).

Marriage represents a major transition in the life course as individuals enter into "an adult institution of informal social control" (Sampson and Laub 1993:7). Sampson and Laub emphasized the degree of investment or attachment to spouse predicted desistance from crime. While previous research has examined marriage attachment, existence, and the corresponding relationship to delinquent peers, the purpose of this study is to examine the timing of an individual's first marriage on a criminal trajectory.

Thornberry (1997) describes trajectories in the life course as containing three dimensions: entrance, success, and timing. Entrance refers to the participation in a specific trajectory. For example, some people may enter into marriage and parenthood while others may remain single. Upon entrance to a trajectory, an individual can have varying levels of success, such as achieving or failing and dropping out of school.

The dimension of timing describes how particular life events are age-graded. For example, fatherhood can serve as a deterrent that alters an individual criminal trajectory as an adult, but fatherhood in adolescence may have a reverse relationship on criminal behavior. The timing of transitions are dependent upon the normatively defined correct times for members of society to enter trajectories and experience specific transitions within these trajectories (Elder 1983).

The developmental phase explored in this research is the period from late teens through the mid twenties recently labeled “emerging adulthood” (Arnett 2000:469). Emerging adulthood represents the transition from adolescence to adulthood that experienced a dramatic demographic shift in recent years. Increasingly individuals are not becoming married or delaying marriage further into adulthood, from 1970 to 1996 the proportion of unmarried men ages 25-29 increased from 19 to 52 percent (U.S. Bureau of the Census, 1996). Previously defined as a short transition where adolescents settle into adult roles, emerging adulthood has expanded to include an increased opportunity for exploration and even an increase in risk behaviors among adults (Arnett 2000:475).

METHODOLOGY

The purpose of this research is to develop and test a theoretical model of continuity and change in criminal offending. This study examines the relationship between changes in life circumstances and the continuation or cessation of criminal behavior. In addition, this research will expand on previous studies by examining the timing of adult social bonds and future criminality. The model in Figure 1 depicts the theoretical model that illustrates a life-course explanation for desistance from crime through the influence of adult social bonds. This research will expand upon previous explanations of continuity and change by including an analysis of the timing of adult social bonds in emerging adulthood and their influence on criminal behavior.

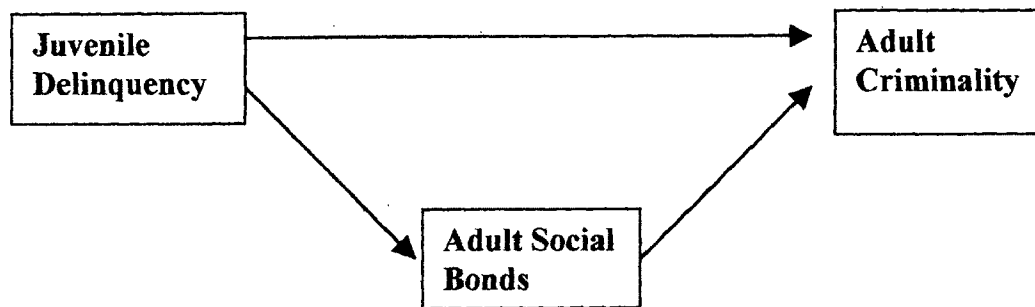


Figure 1. Adult Social Bonds and Recidivism

DATA

A secondary analysis is conducted using longitudinal information gathered from 524 male juvenile offenders released from the California Youth Authority (CYA) from 1965-1984 (Piquero et al. 2000). Individuals were released from the CYA in their late teens and were followed for a seven-year period. Involvement in life circumstances including employment and marriage was recorded. A month score was reported for every month an individual was not serving time in jail, prison, or CYA detention. An advantage of this data collection is the ability to record the major life transitions as individuals emerge as adults following release from the CYA and continue through early adulthood.

Four groups were created from a seven year post release longitudinal data collection dependent on the timing of marriage in emerging adulthood. Individuals married in both early and late emerging adulthood were created along with two groups representing those parolees that remained single in both early and late emerging adulthood. A three year score for involvement in life circumstances was combined for each case.

Cases reported as married between early and late emerging adulthood, 16.4 percent of the population, were excluded from group analysis. Individuals incarcerated during the three-year period of data collection were also excluded from analysis. Fifteen cases, 3.7 percent of the study population, were excluded from analysis due to incarceration. The decision to exclude individuals incarcerated for the period of data collection was based on the inability for individuals to participate in employment. In addition, excluding individuals incarcerated for the 36 months of data collection increased the normality of the distribution of recidivism, the dependent variable. This study is composed of 408 males ranging from seventeen to twenty five years old. The racial makeup of the population was dummy coded as White (52%) and Nonwhite (48%).

PROCEDURES

Analysis includes a four-group analysis using one-way analysis of variance (ANOVA) in order to examine the influence of marital timing on continuing criminal behavior. Crosstab analysis explores the relationship between recidivism and an individual's stake in conformity in emerging adulthood. In addition, analysis will include the use of multiple linear regression to predict recidivism from marriage and employment in both early and late emerging adulthood.

An analysis of variance is used in comparing four groups created based on marital status and points in time. These groups were created from two different places in time in emerging adulthood, the first at approximately age 18,

and the second around age 22. Group membership is dependent upon the year an individual was reported as married following release from the California Youth Authority.

The null hypothesis tested using ANOVA is that no difference exists in the dependent variable among the groups. The total variation of the dependent variable is portioned into the variation of the observations within a group about the mean and the variation between the group means. An *F* ratio is calculated by dividing the mean square between groups and the within group mean square. In addition, Tukey's post hoc test for means was conducted in order to display the statistical significant differences in means between the groups.

Multiple linear regression was used to predict values in recidivism, the dependent variable. The generated slope or weighted constant for each dependent variable results in the unstandardized slope values in the regression. The standardized score, or Beta was also reported for each independent variable. The standardized Beta scores allows for direct comparison of the relative strengths between the variables. Similar to a partial correlation, Beta ranges between ± 1.0 and determines the relationship between variables when the influence of other variables has been partialled out.

A path diagram was created to illustrate the strength of the relationship between the independent and dependent variables in both early and late emerging adulthood. The amount of total variance explained between each independent variable is calculated by multiplying Beta by the zero-order correlation. To complete the path model, the path of the unexplained variance

was expressed as the square root of the variance V , $(1-R^2)$. The percentage of explained variance accounted for by each independent variable was calculated by dividing the explained variance by the R^2 value.

VARIABLES

Employment. Each year of follow up involvement in full-time employment was recorded. In addition, a month score for every month a parolee was employed was collected each year following release. Employment represents an adult social bond that is found in previous research as predictive of future criminality (Sampson and Laub 1993). The relationship between employment stability and recidivism was compared at both times during emerging adulthood to determine the influence of timing of employment and offending.

Recidivism. The measure of recidivism was operationalized using a month free score for every month an individual was not within a correctional facility. The scores were combined for a three-year period and reverse coded to measure the amount of months served within a correctional facility. The distribution of recidivism among the parolees was approximately normal.

Marriage. The concept of marriage was operationalized using a three-year total for each year an individual was reported as married. A potential for a reduction in content validity arises in operationalizing the measure of marital stability. It is impossible to identify parolees that were married to different individuals during the three years of interest. In addition, the measure of

attachment or commitment to spouse found in previous research is limited in this analysis.

Stake in Conformity. Previous research has found that an individual is controlled from participating in deviance relative to their investment in social bonds. Involvement in marriage and employment represent an individual's degree of conformity. Marital stability and involvement in employment were combined to determine each stake in conformity measure. This index of informal social control is consistent with Sampson and Laub's (1993) position that social ties to jobs and families inhibit deviance (Piquero 2000).

Drug Use. Following release from the CYA, the type and use of drugs was recorded each year of an offender's probation. The use of alcohol, heroin, and other mind-altering substances were recorded. Previous research has found that substance abuse or dependency increases the likelihood of additional criminal behavior. In addition, previous research has explored a strong relationship between drug abuse and the inability to maintain full-time employment or a successful marriage (Benson 2000).

DATA REDUCTION AND INDEX CONSTRUCTION

Factor analysis was used to maximize the explanation of concepts used in the analysis. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO), Bartlett's Test of Sphericity, and initial eigenvalues determined the condensing of measures into K number of dimensions. The KMO test was used to determine the appropriate variables to include in factor analysis. The suitability for the

correlation matrix and individual variables was determined by values of .50 or higher (Hair 1984). Bartlett's Test of Sphericity was used at an alpha level of .05 to indicate the significance of the relationships relative to the identity matrix. The number of initial eigenvalues greater than 1.0 determined the amount of total variance that each factor explained.

The reliability of each construct was tested to determine the indicators that share in the measurement of the concept. Chronbach alpha measures the inter-item reliability for a set of measures. The value of Chronbach alpha ranges from 0 to 1, higher values indicate higher inter-item consistency. Hotelling's T-Squared and Tukey's tests of additivity to determine the degree of additivity for each indicator in the constructs. Hotelling's T-Squared determined the impact between a set of means among the indicators. Tukey's test of additivity determined the power to raise observations in the construct.

Drug Use. A variety of different types of drug use were collected from each parolee. Factor analysis was used to determine the variables that best measured the construct of drug use. Information on various drugs included heroin, uppers and downers, mind-altering drugs, and alcohol. The main factors that emerged included the variables heroin, mind-altering drugs, and uppers and downers. Alcohol was removed from the analysis based upon a low inter-item correlation coefficient compared to the other variables. As Table 1 indicates, the three variables of heroin, mind-altering drugs, and uppers and downers form a single factor. An analysis to assess the scalability of the items in Table 1 yielded

an alpha of .64. The items were added to form a new scale measuring drug use among parolees.

Table1. Factor Loadings for Drug Variables

	<u>Factor Loadings</u>
Uppers Downers	.767
Mind-Altering	.779
Heroin	.735

Principal Component Analysis.

The purpose of this research is to examine continuity and change in criminal offending in youth parolees released in adulthood. Several limitations in this study arise in the limited amount of variables included in this research. The use of drugs represents an indicator in this research of the low self-control that predicts stability in criminal offending. The construct validity of this measure is reduced by limiting the measurement of self-control to drug use. Previous research has measured a variety of behavior measures in the school and family in measuring an individual's self-control (Gottfredson and Hirschi 1990).

This research is limited in the explanatory power of recidivism due to the lack of information provided for each parolee. Future research would benefit from an analysis that included other variables in explaining desistance from crime. For example, previous research has suggested that peer influence explained the influence of timing in marriage and employment (Warr 1998;

Ploeger 2000). This research is limited by not including peer influence in the relationship between adult social bonds and recidivism.

DATA ANALYSIS

Initial ANOVA and Chi-Square Tests. Four groups contain individuals reported as married and single for the three-year period of data collection in both early and late emerging adulthood. Tables 2 illustrates the number of cases, racial composition, and mean age for each of the four groups. The mean months spent in a correctional facility are also displayed in Table 2. Results support the age-crime relationship as younger parolees have rates of recidivism higher than their older counterparts. The recidivism rates of married individuals also support previous findings as married parolees have lower rates of recidivism than those that remain single. An *F* ratio of 10.72 allows for a rejection of the null hypothesis that the groups have the same recidivism.

Table 2. Group Means

	N	Percent White	Mean Age in Years	Mean Months in Correctional Facility Per Year
Married Time 1	68 (16.6%)	46.7 %	18.3	2.8
Single Time 1	157 (38.5%)	50.0%	18.4	4.9
Married Time 2	48 (11.8%)	43.3%	22.1	3.9
Single Time 2	135 (33.1%)	60.3%	22.4	5.7
Total N	408 (100%)			

$F = 10.72$ $p < .001$

The mean differences in recidivism are displayed in Table 3 using Tukey's post hoc test. The results indicate that those married in the early emerging adulthood have recidivism means that are significantly reduced compared to their single counterparts in both early and late emerging adulthood. Those married in the later stage in emerging adulthood have means that are significantly lower than those individuals that remain single later in emerging adulthood.

Table 3. Tukey's Post Hoc Test

Dependent Variable: Recidivism
Tukey HSD

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
Married Time 1	Single Time 1	-6.199*	1.544	.000
	Married Time 2	-3.126	2.005	.403
	Single Time 2	-8.524*	1.581	.000
Married Time 2	Married Time 1	3.126	2.005	.403
	Single Time 1	-3.073	1.754	.298
	Single Time 2	-5.398*	1.787	.014

*. The mean difference is significant at the .05 level.

Table 4 exhibits the relationship between stake in conformity and recidivism. Results indicate a strong inverse relationship between stake in conformity and recidivism. The results in Table 4 support a social control perspective that argues ties to job and family increase societal bonds that restrict propensities to commit crime (Sampson and Laub 1993; Hirschi 1969). The chi-

square value of 34.89 in Table 4 indicates a strong relationship between the presence of stability in marriage and employment and desistance from crime.

Table 4. Recidivism by Stake in Conformity

		Stake in Conformity			Total
		Low	Medium	High	
Recidivism	Low	44 27.0%	21 23.1%	69 44.8%	134 32.8%
	Medium	48 29.4%	30 33.0%	60 39.0%	138 33.8%
	High	71 43.6%	40 44.0%	25 16.2%	136 33.3%
Total		163 100.0%	91 100.0%	154 100.0%	408 100.0%

Chi-Square = 34.89 p < .001

An advantage of longitudinal data is the ability to track the impact of adult social bonds over time. The findings in Table 4 support previous findings that attribute marriage and employment to an increased stake in conformity that reduces criminal offending. While this research also supports previous findings of control theory, the use of longitudinal data allows for the exploration of the causal impact of adult social bonds relative to their timing in the life-course.

Stepwise Variable Selection. Stepwise variable selection was used to determine the variables that had the highest partial correlations with the dependent variable. The variables race and drug use were both removed from the model because their partial correlations failed to reach significance at the .05 alpha level (see Appendix). The removal of drug use and race decreases the

overall explanatory power of the model. A limited sample size restricts the use of variables that have been found to be significant predictors in previous research (Ploeger 1997; Ugden 2000).

Marriage was the first variable to enter into the model, followed by employment and age. Table 5 shows the impact of incorporating marriage, employment, and age on recidivism, the dependent variable. The overall explanatory power of the model is limited in explaining 10.3 percent of the variance in recidivism.

Table 5. Variation of Recidivism Explained by Age and Adult Social Bonds

Model	R	R Square	Adjusted R Square
1	.257 ^a	.066	.064
2	.301 ^b	.090	.086
3	.322 ^c	.103	.097

a. Predictors: (Constant), Marriage

b. Predictors: (Constant), Marriage, Employment

c. Predictors: (Constant), Marriage, Employment, Age

Marriage, employment, and age are all negatively correlated with recidivism in Table 6. Marriage represents the strongest predictor of recidivism with a Beta value of -.242, accounting for 56.4 percent of the explained variance. Employment is also negatively correlated with recidivism with a Beta value of -.187, accounting for 30 percent of the explained variance. Age was the weakest predictor of the independent variables, with a Beta of -.122, accounting for 13.5 percent of the explained variance in recidivism.

Table 6. Correlation Between Recidivism and Marriage/ Employment/ Age

		Unstandardized Coefficients					Proportion	Proportion
Model		B	Std. Error	Beta	Zero-order	Partial	of Explained Variance	of Total Variance
3	(Constant)	14.088	.518					
	Marriage	-4.119E-02	.010	-.242	-.257	-.247	.564	.062
	Employment	-5.332E-02	.010	-.187	-.176	-.193	.300	.033
	Age	-2.663E-02	.010	-.122	-.123	-.126	.135	.015

R=.322, Adjusted R Square = .097, R Square = .103

The path diagram in Figure 2 summarizes the causal impact of marriage, employment, and age on recidivism. The Beta values and zero-order correlation are displayed in the path diagram in Figure 2 for each independent variable. In addition, the correlation coefficients between each independent variable are also displayed in the path model. Results of the path model suggest a weak correlation between recidivism and the independent variables.

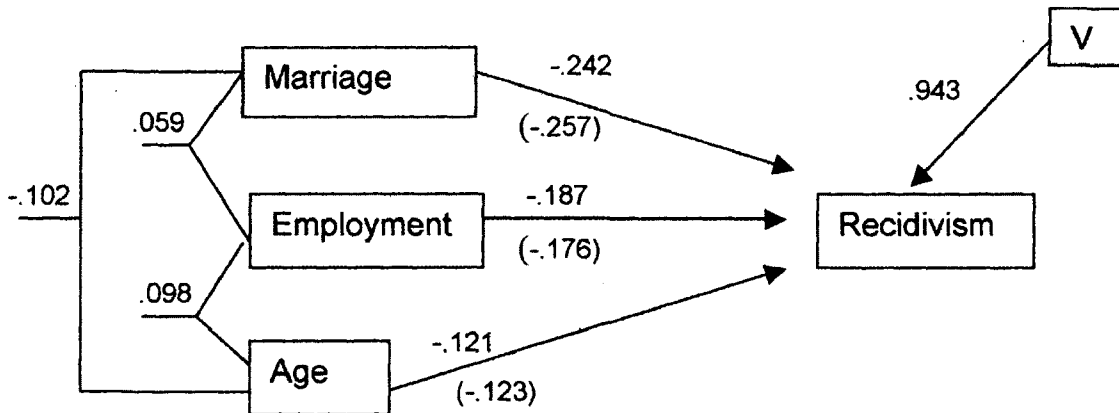


Figure 2. The Causal Impact of Marriage, Employment, and Age on Recidivism

Results of regressing adult social bonds indicate that marriage and employment are both negatively correlated with recidivism in adults. Results support the findings of Sampson and Laub's (1993) research that found ties to job and family significantly reduce criminal activity. In addition, age appears to have a negative correlation with recidivism predicted by the age-crime curve.

While results support previous control perspectives, the purpose of this analysis is to examine the relationship between the timing of adult social bonds at different points in emerging adulthood. The first time period, early emerging adulthood, includes only those parolees around age 18. The second time period, late emerging adulthood, is composed of parolees approximately 22 years of age. Regressing marriage and employment at both early and late emerging adulthood allows for a comparison of the impact of specific types of adult social bonds relative to their timing in the life-course.

Early Emerging Adulthood. Tables 7 display the result of regressing the two adult social bonds of marriage and employment on recidivism during the earliest point in emerging adulthood. The R-Squared value indicates that 9.7 percent of the variance of recidivism is explained by marriage and employment. The Beta values of employment and marriage indicate a negative correlation between both independent variables and recidivism (Table 7). Results indicate that marriage is the strongest predictor in early adulthood, accounting for approximately seven times the explained variance in recidivism as employment.

Table 7. Correlation Between Adult Social Bonds and Recidivism Early Emerging Adulthood

	B	Std. Error	Beta	Zero-order	Partial	Proportion of Explained Variance	Proportion of Total Variance
(Constant)	13.809	.779					
Marriage	-6.E-02	.012	-.292	-.292	-.293	.876	.085
Employment	-.431	.261	-.105	-.108	-.110	.124	.012

R=.311, Adjusted R Square = .088, R Square = .097

The Beta coefficients are shown along with the correlation coefficients between the independent variables in the path diagram (Figure 3). The correlation between the two independent variables suggests a weak relationship between marriage and employment in early emerging adulthood.

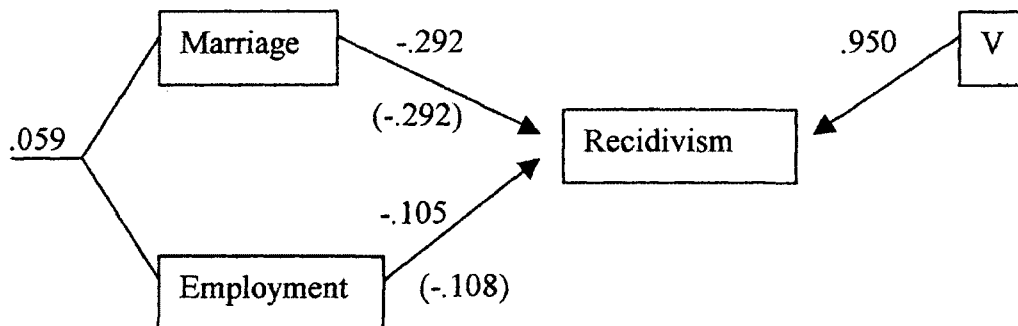


Figure 3. Causal Impact of Marriage and Employment in Early Emerging Adulthood

Late Emerging Adulthood. Marriage and employment appear slightly stronger in predicting months free later in emerging adulthood, explaining 10.7 percent of the variance (Table 8). Both models appear limited in their prediction

value of recidivism, although the relationships between the adult social bonds differentiate relative to the time period in emerging adulthood. The results indicate that employment is the strongest predictor of the social bonds in later emerging adulthood with a Beta value of -.264, accounting for 68.2 percent of the explained variance of recidivism. In comparison, marriage decreased substantially in predicting recidivism in late emerging adulthood, accounting for 31.2 percent of the explained variance (Table 8).

Table 8. Correlation between Adult Social Bonds and Recidivism in Late Emerging Adulthood

	B	Std. Error	Beta	Zero-order	Partial	Proportion of Explained Variance	Proportion of Total Variance
(Constant)	17.720	1.051					
Marriage	-5.E-02	.019	-.178	-.194	-.185	.318	.034
Employment	-1.068	.285	-.264	-.275	-.269	.682	.073

R = .327, Adjusted R Square = .097, R Square = .107

The path model in Figure 4 illustrates the coefficients for each element in the adult social bond in late emerging adulthood. The results found in employment support previous findings that define an age-graded impact of employment. Employment appears a relatively weak predictor in early emerging adulthood when marriage appears the strongest predictor of recidivism. Later in emerging adulthood, employment becomes the strongest predictor of recidivism as marriage decreases in explanatory power.

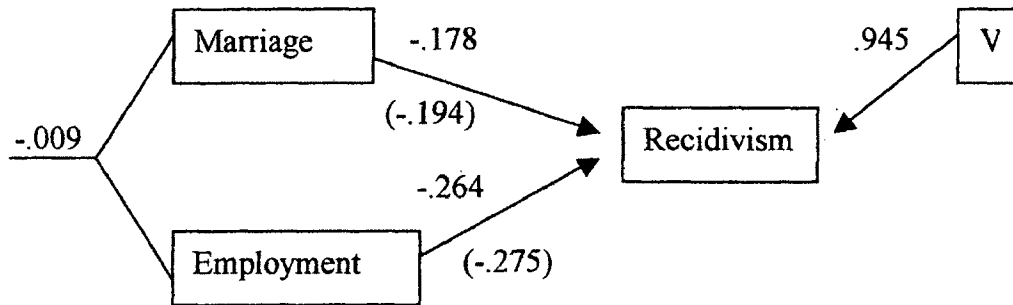


Figure 4. Causal Impact of Marriage and Employment in Late Emerging Adulthood

DISCUSSION

The purpose of this research was to examine the transitional impact of adult social bonds and recidivism. In addition, the influence of timing in marriage and employment was explored at two points in time within the developmental phase of emerging adulthood. Previous control theories predict stability in offending regardless of local life events (Gottfredson and Hirschi 1990). A life-course perspective incorporates a developmental model to explain both stability and desistance from crime in adulthood (Elder 1983; Sampson and Laub 1993).

The overall findings support previous control theory explanations between the presence of adult social bonds and a reduction in criminal behavior. The results indicated that the combination of marriage and employment significantly decreased rates of recidivism. The results of regressing both employment and marriage generated statistically significant but relatively weak predictive models. The limitations of this study are found in the inability to control for specific individual characteristics and other influences on recidivism.

The relationship between marriage and recidivism was found to be consistent with previous research. Parolees reported as married following release were less likely to recidivate than their single counterparts and those married later in emerging adulthood. These findings suggest that other factors may influence marriage and desistance from crime in early adulthood. A possible explanation not explored in this study includes the reduction in time spent with delinquent peers discussed by Warr (1998).

Although the overall explanatory power was limited, the impact of timing in both marriage and employment was explored in this study. The relationship between the timing of marriage and recidivism differed from employment. Results suggest marriage in early emerging adulthood was a stronger predictor of recidivism than employment. Later in adulthood, the explanatory power of marriage decreased as employment became the strongest predictor.

The results of employment indicated that later emerging adulthood employment was the strongest predictor of recidivism. In early emerging adulthood, employment was a relatively weak predictor. The findings of employment support the age-graded impact of employment found in previous research (Ploeger 1997; Ugden 2000). The influence of timing in both marriage and employment support a developmental perspective that incorporates the entrance, success, and timing of transitions in explaining changes in life-course trajectories (Elder 1983).

The simple correlation coefficients between employment and marriage suggested there was relatively no correlation between marriage and

employment. The simple correlation coefficients offered evidence contrary to the argument provided by Gottfredson and Hirschi (1990) that individuals involved in stable marriages will also experience stability in employment. Instead, the weak explanatory power of employment supports the age-graded impact found in previous research (Ploeger 1997; Ugden 2000).

Implications for Future Research. Future research in criminal offenders and desistance from crime would benefit from a larger sample of parolees and the use of additional measures following release. The use of self reported data that included delinquency and peer measures may offer further explanation into the process of aging out of crime. While relatively no difference between race and the impact of marriage and employment was found, additional measures regarding race and ethnicity would offer a better comparison of the racial and cultural differences found in adult social bonds and recidivism.

Further research into the timing of adult social bonds would benefit programs designed at reducing the rate of recidivism among offenders. A further exploration of employment at different phases of adulthood could uncover reasons for the age-graded differences in predicting recidivism. The potential benefits may be applied in future employment programs for criminal offenders. Additionally, research in marital transitions and desistance from crime may influence offender treatment programs that encourage spouse participation in programs designed to reduce rates of recidivism.

Implications for Policy and Practice. The potential policy and practice implications of this research suggest that employment programs offered to

younger offenders or high-risk youth are unlikely to result in a decrease in criminal behavior. Previous research in employment and criminal behavior has also found that employment does little to improve delinquency rates in young adults (Ploeger 1997; Ugden 2000). However, this research also indicates that employment programs that target older offenders are effective. Employment program resources may best be directed toward a slightly older offender group.

The potential policy implications for marriage are obviously limited although findings may support practice applications that actively involve the spouses of parolees following release. The strength of marriage in reducing recidivism in younger offenders suggests taking steps to ensure marital stability or attachment may benefit rates of recidivism. Previous research has suggested that marriage reduces offending in all ages. Incorporating practices designed to support offender's marital relationships may prove beneficial in reducing recidivism.

APPENDIX

Model	R	R Square	Adjusted R Square
1	.257 ^a	.066	.064
2	.301 ^b	.090	.086
3	.322 ^c	.103	.097

a. Predictors: (Constant), Marriage

b. Predictors: (Constant), Marriage, Employment

c. Predictors: (Constant), Marriage, Employment, Age

Excluded Variables

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
	-.079 ^b	-1.664	.097	-.083	.988
	.022 ^b	.459	.147	.023	.983

b. Predictors in the Model: (Constant), Marriage, Employment

REFERENCES

- Arnett, Jeffrey Jason. 2000. "Emerging Adulthood: A Theory of Development From the Late Teen Through the Twenties." *American Psychologist* 55:469-480.
- Benson, Michael L. 2002. *Crime and the Life Course: An Introduction*. Los Angeles, CA:Roxbury Publishing.
- Cullen, Francis T. and Robert Agnew. 1999. *Criminological Theory: Past to Present*. Los Angeles, CA: Roxbury Publishing.
- Durkheim, Emile. 1895. *The Rules of the Sociological Method*. Translated. Sarah A. Solovoy and John H. Mueller. New York Free Press.
- Elder, Glen H., Jr. 1985. "Perspectives on the Life Course." Pp. 23-49 in *Life Course Dynamics*, edited by Glen H. Elder Jr. Ithaca, NY: Cornell University Press.
- Farrington, David P. and Donald J. West. 1995. "Effects of Marriage, Separation and Children on Offending by Adult Males." In Zena Blau Smith and John Hagan (eds.), *Current Perspectives on Aging and the Life Cycle: Delinquency and Disrepute in the Life Course*. Vol. 4. Greenwich, Conn:JAI Press.
- Gottfredson, Michael R. and Travis Hirschi. 1990. *A General Theory of Crime*. Stanford, CA: Stanford University Press.
- Greenberger, Ellen, Laurence D. Steinberg, Alan Vaux, and Sharon McAuliffe. 1980. "Adolescence Who Work: Effects of Part-Time Employment on Family and Peer Relations." *Journal of Youth and Adolescence*. 9:189-202.
- Hair, Joseph F., Ralph E. Anderson, Ronald L. Tatham, and William C. Black. 1989. *Multivariate Data Analysis*. 4th edition. Englewood Cliffs, New Jersey: Prentice Hall.
- Hirschi, Travis. 1969. *Causes of Delinquency*. Berkeley, California: University of California Press.
- Laub, John H. and Robert J. Sampson. 1993. "Turning Points in the Life Course: Why Change Matters to the Study of Crime." *Criminology* 31:301-325.
- Moffit, Terrie E. 1993. "Adolescence-Limited and Life-Course Persistent Antisocial Behavior." *Psychology Review* 100, No. 4:674-701.

- Piquero, Alex R., Robert Brame, Paul Mazerolle, and Rudy Haapanen. 2001. Continuity and Change in Criminal Offending by California Youth Authority Parolees Released 1965-1984. [Computer file]. ICPR version. Gainesville, FL: University of Florida [producer], 2001. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2001.
- Piquero, Alex and Paul Mazerolle. 2001. *Life-Course Criminology: Contemporary and Classic Readings*. Belmont, CA:Wadsworth.
- Ploeger, Mathew. 1997. "Youth Employment and Delinquency: Reconsidering a Problematic Relationship." *Criminology* 35:659-675.
- Reckless, Walter C. 1961. *The Crime Problem*. (3rd ed). New York, NY: Appleton-Century Crofts.
- Reiss, Albert J. Jr. 1951. "Delinquency as the Failure of Personal and Social Controls." *American Sociologist Review* 21:196-207.
- Sampson, Robert J. and John H. Laub. 1993a. *Crime in the Making: Pathways and Turning Points Through Life*. Cambridge, MA: Harvard University Press.
- _____. 1993b. "Crime and Deviance in the Life Course." *Annual Review of Sociology* 18:63-84.
- _____. 1993c. "Turning Points in the Life Course: Why Change Matters to the Study of Crime." *Criminology* 31:301-325.
- Simons, Ronald L., Eric Stewart, Leslie C. Gordon, Rand D. Conger, and Glen H. Elder, Jr. 2002. "A Test of Life-Course Explanations for Stability and Change in Antisocial Behavior from Adolescence to Young Adulthood." *Criminology* 40:401-434.
- Steinberg, Laurence D., Susan Fegley, and Sanford M. Dornbusch. 1993. "Negative Impact of Part-Time Work on Adolescent Adjustment: Evidence from a Longitudinal Study." *Developmental Psychology* 29:171-181.
- Sykes, Gresham M. and David Matza. 1957. "Techniques of Neutralization: A Theory of Delinquency." *American Sociological Review* 22:664-670.
- Thornberry, Terence P. 1997. *Developmental Theories of Crime and Delinquency*. New Brunswick, NJ: Transaction Publishers.
- Williams, Frank P. and Marylin D. McShane. 1999. *Criminological Theory*. (3rd ed). Upper Saddle River, NJ: Prentice Hall.

- Ugden, Christopher. 2000. "Work as a Turning Point in the Life Course of Criminals: A Duration Model of Age, Employment, and Recidivism." *American Sociological Review* 67:529-546.
- U.S. Bureau of the Census. 1996. *Marital Status and Living Arrangements: March 1996*. Current Population Reports, Series P20-496. Washington DC: U.S. Government Printing Office.
- Warr, Mark. 1998. "Life-Course Transitions and Desistance from Crime." *Criminology* 36:183-216.
- Wiatrowski, Michael D., David B. Griswold and Mary K. Roberts. 1981. "Social Control Theory and Delinquency." *American Sociological Review* 49:525-541.