AN EXAMINATION OF ADULT ONSET OFFENDING

By

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A THESIS PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

UNIVERSITY OF FLORIDA

2004
This document is dedicated to my husband, Larry D. Smith, and to my parents, Alvaro Gomez and Routa Kroumovitch-Gomez
ACKNOWLEDGMENTS

I would like to thank Dr. Alex Piquero, my committee chair and mentor, for his guidance, availability, and support. I would also like to thank Dr. Lonn Lanza-Kaduce and Dr. Terry L. Mills, my committee members, for their highly constructive comments and suggestions that greatly enhanced the quality of my thesis.

I am very appreciative to the Department of Criminology and Law, the faculty, staff, and graduate students. The collaborative and supportive environment has significantly contributed to my graduate experience.

I have to show my gratitude to the “girls,” for sharing the unique experiences in graduate school, but, most of all, for all of the fun we have shared.

Finally, I would like to show my greatest appreciation to my husband, Larry D. Smith, to my parents, Routa Kroumovitch-Gomez and Alvaro Gomez, and to my sister, Gaida Gomez. It is through their love, support, and encouragement that I have been able to become the person that I am.
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Abstract of Thesis Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Master of Arts

AN EXAMINATION OF ADULT ONSET OFFENDING

By

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May 2004

Chair: Alex Piquero
Major Department: Criminology and Law

Criminal onset has been a highly researched area in life-course criminology; however, the majority of research has focused on juvenile offenders. As a consequence, adult onset offending has not received adequate attention in the field, and the factors related to this type of criminal initiator are understudied and neglected. In this study, we first focus on whether or not adult onset exists, and, if so, what factors account for adult onset. Secondly, by applying a variety of independent variables, this study examines whether correlates of adult onset can be established, and, if so, if these correlates are the same or similar for other categories of criminal initiators such as nonoffenders, desisters, and persisters. Three key findings emerged from our analysis. First, females are less likely than males to be adult onset offenders. Second, participants who had mothers that smoked cigarettes during pregnancy were more likely to be adult onset offenders than nonoffenders. Third, participants who had higher scores on the total battery score of the California Achievement Test (CAT) were less likely to be adult onset offenders. Future directions are outlined.
CHAPTER 1
INTRODUCTION

Research on adult criminal onset is frequently regarded as unnecessary due to the long established belief that adult criminals are most often grown juvenile delinquents. In general, both to researchers and to policymakers, it seems as though crime is associated with younger persons (Aday 2003). This belief is most likely rooted in two pieces of time-honored criminological knowledge. The first is that adolescents are disproportionately accountable for crime (Farrington 1986). The second is the largely accepted finding concerning aggregate patterns of the age-crime curve, which describe crime rates as reaching their highest points in the late adolescent years and subsequently declining with age (Sampson & Laub 1992). Consequently, the majority of research available on both the onset of criminal careers and broader crime is focused on younger populations. Research on adult offending, and, more specifically, adult criminal onset, is therefore less common and under-explored in the field of criminology (Sampson & Laub 1992). However, this is not to say that adults offend less often than juveniles, or that adult criminal onset has not been recognized in empirical research. Adult offenders are consistently responsible for the majority of arrests in the United States (Federal Bureau of Investigation 2000, 2001, 2002), and adult criminal onset has indeed been identified in several criminological longitudinal studies (Eggleston & Laub 2002).

Nonetheless, the results of these studies do not come without debate. The occurrence of adult criminal onset is often blamed on the use of official records or is disregarded as an infrequent phenomenon, and described as “negligible” or “rare”
(Wolfgang, Thornberry, & Figlio 1987; Moffitt et al. 2001). For example, Terrie Moffitt and colleagues (2001) state that “onset of antisocial behaviour after adolescence is extremely rare,” and believe that the studies that have found significant amounts of adult onset are faulted by their use of official records instead of self-reports. The argument is that criminal or deviant behaviors taking place in the adolescent or childhood years that go undetected and are not officially documented will not be accounted for in the studies that use official records instead of self-report interviews or questionnaires. Hence, while adult onset has only been examined in few studies, the research findings are conflicting, leaving an area of life course criminology understudied and not well understood (Eggleston & Laub 2002).

The purpose of this thesis is to examine the adult onset phenomenon and the correlates associated with adult onset. Before data on this issue are presented, a brief overview of the life-course perspective is presented, followed by an overview of the findings regarding adult onset.
CHAPTER 2
LIFE-COURSE PERSPECTIVE AND THE CRIMINAL CAREER

A person’s life experience is shaped and defined by the multitude of events and changes that continuously occur in the lifetime (Elder 1985). The life-course perspective takes into account that a person’s present condition is preceded by a lifetime of complexity and richness. In order to fully understand a single phenomenon, the past must be explored and unraveled (Elder 1985). For this reason, the two central concepts in the life-course perspective are trajectories and transitions. Trajectories are the long-term patterns and sequences in an individual’s life. These are the life pathways such as marriage, parenthood, careers, self-esteem, and criminal or non-criminal behaviors. Transitions, on the other hand, occur within trajectories and are single events that are often age-graded, such as changes in societal roles or status (Elder 1985; Sampson & Laub 1992). They can include graduation, divorce, retiring, an arrest, etc. These specific life events can be so abrupt and influential that they can transform or modify life trajectories. Therefore, there is a sequence of life trajectories, transitions, and adaptations. It is the adaptation to the transitions that occur in a lifetime that can lead to changes in life trajectories. This interlocked nature of trajectories and transitions leads to the broadly accepted viewpoint of the life-course perspective that an individual’s childhood is connected to adulthood experiences. From a general standpoint, life-course perspectives are concerned with the duration, timing, and ordering of transition events and their effects on long-term social development and trajectories (Sampson & Laub 1992). Therefore, this perspective attempts to explain discontinuity as well as the
permanence of behaviors throughout the life-course (Simons, Johnson, Conger, & Elder 1998).

A criminal career can be examined by using the life-course perspective. This approach is often referred to as the criminal career paradigm. According to Blumstein and colleagues (1986:12), “A criminal career is the characterization of the longitudinal sequence of crimes committed by an individual offender.” Criminal acts, even when organized groups commit them, are ultimately the responsibility of individuals. The criminal career paradigm, instead of focusing on aggregate rates, focuses on individuals and attempts to investigate the origins of criminal behavior. One of the goals of this perspective is to aid in developing crime control policies that would focus on interrupting or altering criminal careers (Blumstein, Cohen, Roth, & Visher 1986).

There are four main components to the criminal career paradigm: participation, frequency, seriousness, and career length (Blumstein, Cohen, Roth, & Visher 1986). Participation separates those who have a criminal career to those who do not, frequency indicates the rate of criminal activity for an active offender, seriousness describes the severity of offenses, and career length describes how long the offender is actively committing crimes (Blumstein, Cohen, Roth, & Visher 1986; Piquero, Farrington, & Blumstein 2003). As previously mentioned, the life-course perspective is concerned with duration, timing, and ordering of transition events. As such, when examining the criminal career, there is focus on the timing and reason behind the onset of criminal activity, the duration or persistence of the offending, if and why the criminal activity may escalate, and why and when offenders desist from a life trajectory of crime (Piquero, Farrington, & Blumstein 2003; Farrington & Maughan 1999). Each aspect of the criminal career is
important to empirically study, and can provide insight into the criminal career. However, criminal initiation, or onset, is particularly critical in that it can offer an understanding of what behaviors may generate criminality (Chu 2002). Empirical research has suggested that some of the predictors of early onset are low family income, poor child rearing skills, psychomotor impulsivity, and low verbal intelligence (Farrington et al. 1990). Research has also suggested that marital disharmony, large family size, parental criminality, and poor academic achievement or school failure are predictors or future offending (Farrington et al. 1990). Given the importance of criminal onset, this particular aspect of the criminal career paradigm has received a vast amount of interest by researchers (Piquero et al. 2003). However, most studies have focused on juvenile criminal initiation, and little research exists that pays attention to the onset of adult offenders (Eggleston & Laub 2002).
CHAPTER 3
ONSET OF ADULT OFFENDING

Although there is not a great deal of empirical research available that has exclusively focused on adult criminal onset, the phenomenon has been identified in a number of studies (Eggleston & Laub 2002). Blumstein, Cohen, Roth, and Visher’s (1986) Criminal Careers and “Career Criminals,” an in-depth summary of longitudinal studies with available data, indicated the presence of adult criminal onset. They noticed that most of the nondelinquent juveniles did not become adult offenders, however, a considerable amount of adult offenders had not been juvenile delinquents. This result seems to be contradictory of Robin’s well-known statement, “adult antisocial behavior virtually requires childhood antisocial behavior” (1978:611). In fact, about half of adult offenders included in the Blumstein and colleagues (1986) summary did not have juvenile records:

Even though juvenile delinquents are far more likely than nondelinquents to become adult offenders, 40 to 50 percent of adult offenders do not have records of juvenile police contacts: because nondelinquent juveniles greatly outnumber delinquent juveniles, even though a smaller fraction of the nondelinquents become adult offenders, their great numbers lead to a substantial contribution of adult offenders.” (Blumstein, Cohen, Roth, & Visher 1986:88)

In a follow up study to Delinquency in a Birth Cohort (1972), From Boy to Man, From Delinquency to Crime (1987), Wolfgang, Thornberry, and Figlio found that 24.2 percent of the sample that had committed a criminal offense were adult offenders only, with no records as juveniles. In describing the offenses of the sample, the researchers state:
In terms of the characteristics of offenses committed, we have seen that the juvenile-only and adult-only offenders committed approximately the same number of offenses, but that the persistent offenders committed far more. In terms of seriousness, though, the most harmful offenses were those committed by the adult group, followed in descending order by those committed by the persistent offenders and then the juvenile offenders.” (Wolfgang, Thornberry, & Figlio 1987: 32)

When the researchers examined the distributions of ages of initiation to delinquency and to criminal behavior, they found that 16 years was the modal age for criminal onset. However, they did discover onset in the age range from 18-22, although less than in the younger age categories, and “a negligible number of subjects entering the criminal population after age 22” (Wolfgang, Thornberry, & Figlio 1987: 37).

Nonetheless, while the researchers report a small and “negligible” quantity of individuals whose onset to criminal activity and delinquency occurred between ages 18-22 and after the age of 22, these subjects with adult onset still comprise 24 percent of those who were arrested in the sample.

A study in Sweden (Stattin, Magnusson, & Reichel 1989), using official record data that followed a subject population from age 10 to age 30, set out to provide basic descriptive information about the criminal activity of the sample at different ages. They found that the peak age for criminal onset for the male subjects in the sample was 15 years of age. However, one in four of the men who had a criminal record in the sample were first registered for an offense after the age of 20 years. This same study found that the female subjects in the sample tended to first engage in criminal activity later in life than the male subjects in the study. They found that the peak age for criminal onset for the female subjects in the sample was 21-23 years of age.

In an effort to compare criminal career characteristics of two male cohorts born in different time periods in the same area of South London, Farrington and Maughan (1999)
used the Cambridge Study in Delinquent Development and the Inner London Study. The Cambridge Study provided a male cohort sample born between September 1952 and August 1954, and the Inner London Study offered a male cohort sample born between September 1959 and August 1960. When examining the distribution of age at first conviction within the samples, this study detected significant adult onset. For the Cambridge cohort, Farrington and Maughan report that 20 per 100 subjects obtained their first conviction in the age bracket 10-16, 10 per 100 in ages 17-20, and seven per 100 in ages 21-33. For the Inner London cohort, they report that 15 per 100 of the male subjects obtained their first conviction in the age brackets of 10-16 and 17-20, and like the Cambridge cohort, seven per 100 acquired their first conviction during the ages of 21-33.

An exploratory study of Chinese male prisoners conducted by Chu (2002) concentrates on investigating the life experiences and criminal initiations, or onset, of the prisoners. This study is unique for two reasons. The first is that uses self-report questionnaires, and the second is that it applies the criminal career paradigm to a setting outside of western nations. The results suggest that criminal onset for the sample of Chinese male prisoners is later in life than that for prisoners in western nations. The peak age of criminal initiation was shown to be between the ages of 18 and 19 years. Chinese prisoners in the sample who were incarcerated for violent crimes and were then currently in prison for a minimum of a second prison term had an average age of onset of 22.23 years, and also had a peak age of onset between 18 and 19 years of age.

Another study that specifically focuses on adult onset offenders is that of Eggleston and Laub (2002). Motivated by the understudied topical area of adult criminal onset, they first set out to explore if an adult onset offender actually exists. They first closely
examine the existing literature, and from that made the observation “that the adult onset offender should be systematically studied as a population among adult offenders in general” (Eggleston & Laub 2002: 605). Using the 1942 and 1949 birth cohort data from Racine, WI, the researchers investigated whether the correlates of crime are different for adult offenders with juvenile records than for those adult offenders who do not have juvenile records. The sample consisted of both male and female subjects, and the data was collected using both records of official police contacts as well as the original interviews. The sample was comprised of 61.2 percent non-offenders, 14.3 percent juvenile only offenders, 11.3 percent adult only offenders, and 13.1 percent persistent offenders. The researchers found that, “adult onset was not a rare event” (Eggleston & Laub 2002: 612) in the Racine, WI sample. In general, this study suggests that the predictor variables for adult offenders with a juvenile onset and those with an adult onset are quite similar. Race, gender, socioeconomic status, and family size all had significant effects on adult offending for those with and without a delinquent past. On the other hand, single parent households and parental crime did not have significant effects on adult offending for either group. Employment was the only variable in this study that affected the probability of offending differently for juvenile onset offenders and adult onset offenders. The variable had no effect on adult offending for those with juvenile onset; however, continuous employment increased the probability of offending for those with late onset. Although Eggleston and Laub’s research results seem to “imply that late onset offenders may not need to be analyzed separately from persistent offenders” (2002: 613), the researchers encourage further investigation in this neglected research area:
these findings should not preclude further investigation of adult onset offenders. The adult onset population is a neglected dimension of criminological research and to remedy this fact, future research should compare early versus late onset offenders using the definition of late onset offending after the peak offending years of adolescence.” (Eggleston & Laub 2002:613)

Some of the suggestions for future research presented in this study include using higher level of variation in the independent variables, a sample from a larger city “such as Philadelphia” (Eggleston & Laub 2002: 613), and a more current population sample.

While there are a few exceptions, it is important to note that the majority of research that examines the criminal career uses official indicators when establishing age of criminal initiation, or onset. This methodological approach has both advantages as well as disadvantages. While official records can provide the advantage of higher accuracy in regards to timing and the type of offense, they also have the disadvantage of not detecting those individuals who have offended but were not caught and documented by official sources (Eggleston & Laub 2002). This particular disadvantage of using official indicators for establishing criminal initiation is at the root of the controversy regarding the existence of adult onset as well as the value of empirically examining the phenomenon (Eggleston & Laub 2002).

Research on criminal initiation, or onset, has received extensive empirical consideration (Piquero, Farrington, & Blumstein 2003). However, the majority of research currently available is directed towards juvenile onset offenders and, for the most part, disregards adult onset. This offender category continues to be discounted or labeled insignificant, although adult onset offenders have been empirically recognized in numerous studies. Some research even suggests that adult onset offenders account for approximately 50 percent of all adult offenders (Eggleston & Laub 2002; Blumstein, Cohen, Roth, & Visher 1986). While conflicting views regarding the existence of adult
onset offenders as well the value of studying this population exist, the number of adult onset offenders appears to be non-negligible. As such, the empirical study of adult onset, though a neglected area of criminology, needs to be further investigated and developed, as encouraged and suggested by Eggleston and Laub (2002).

In this study, we first focus on whether or not adult onset exists, and if so, what factors account for adult onset. In addition, we also explore whether there are gender differences in the prevalence and predictors of late onset. For example, prior research has suggested that females are more likely than males to have late criminal onset (Kratzer & Hodgins 1999). Secondly, by applying a variety of independent variables, this study examines whether correlates of crime with adult onset can be established, and if so, if these correlates are the same or similar for other categories of criminal initiators such as nonoffenders, desisters, and persisters. As such, we explore whether we can predict adult criminal onset, and whether the factors that relate to adult onset among males are similar to or different from the factors relating to adult onset among females.

The current study has several points of distinction, and fulfills many of the research suggestions for investigating adult onset offenders presented by Eggleston and Laub (2002). The researchers point out that, “among the methods to increase the power in a study is to have a high level of variation in the independent variables” (Eggleston & Laub 2002: 613). The current study will use an array of independent variables, and these measures contain adequate variability. In describing a limitation in their own study, Eggleston and Laub (2002:613) state the following:
… the Racine data set is skewed toward less serious offenses compared to larger cities, such as Philadelphia…. Therefore, an analysis of different cities with higher percentages of more serious offenses may produce different results from those found in the present study.

The data used in the current study is from the Philadelphia portion of the National Collaborative Perinatal Project (Niswander & Gordon 1972), which is not only based in a larger city than Racine, WI, it is also the precise city recommended by Eggleston and Laub. The data in the current research consists of an all Black sample, and has both female and male subjects. Eggleston and Laub’s (2002) research on adult onset offenders did not find any distinction in the effect of gender on adult offending for those with juvenile onset or adult onset. However, they note, “that this population deserves to be systematically investigated” (2002:614). The current research effort will examine if there is a gender effect in the existence of adult onset as well as for the predictive variables of adult onset. Finally, Eggleston and Laub remark that, “More contemporary samples may also provide insight into the adult onset phenomenon” (2002: 614). The present study may be able to fulfill this recommendation, because it uses a sample born a few years later than the sample in the Racine, WI, data set and followed (in adult official records) up through 1998.
CHAPTER 4
DATA

This research effort utilizes data from the Philadelphia portion of the National Collaborative Perinatal Project (NCPP) (Niswander & Gordon 1972). The NCPP was a large-scale medical project carried out at a number of university-related hospitals with an aim to collect information on birth defects, neurological conditions, birth complications, and familial and socioeconomic conditions. The participants were infants of mothers who took part in the NCPP and, therefore, reflect the characteristics of families who would be interested in receiving low-cost maternity care provided by a public clinic at Pennsylvania Hospital (Denno 1990). In Philadelphia, the sample included nearly 10,000 pregnant patients who delivered their children at Pennsylvania Hospital between the years 1959 and 1965. The sample on which the present research is based includes 987 participants who were chosen from the first four cohorts (1959-1962) of 2,958 African American mothers who took part in the NCPP. It is these 987 participants who were followed by the original research team at the University of Pennsylvania. Comparisons between the sample of 987 participants and the excluded sample indicated no significant differences in key variables (Denno 1990).

A plethora of information related to mother and the infant participant were collected by teams of doctors, psychologists, and public health officials across all NCPP sites. The information included several measures associated with the mother’s pregnancy, information relating to the birth of the child, as well as important psychological and sociological indicators collected through ages 7/8. In the early 1980’s, a research team
from the University of Pennsylvania collected information related to school functioning and criminal history information, including all police contacts through age 17. Numerous studies have been performed with the age 17 criminal history data (Denno 1990; Gibson, Piquero, & Tibbetts 2000, 2001; Piquero 2000a, 2000b, 2001; Piquero & Chung 2001; Piquero & Tibbetts 1999; Tibbetts & Piquero 1999).

In the summer of 1998, a criminal history follow-up was completed for all 987 participants of the Philadelphia sample (Piquero & White 2003). The Philadelphia Police Department served as the data source for offenses committed by the cohort after reaching the legal adult status of age 18. Adult criminal history data, in the form of conviction, are available through July 1998 or through age 36 for those sample members born into the 1962 cohort and age 39 for those born into the 1959 cohort. Detailed data were collected on the date and type of each conviction. The Philadelphia Police Department also has an extensive alias-tracking system that enables the cross listing of names and social security numbers.

**Variables**

Both maternal age at childbirth (0 = 18 and older, 1 = less than 18) and maternal marital status at childbirth (0 = married, 1 = single or unmarried) were retrieved from medical records. Socioeconomic status (SES) was measured across all NCPP sites by a single-item general SES score that is a multipart measure of three indicators collected at 7 years of age for each participating child: education of head of household, income of head of household, and occupation of head of household (Myrianthropoulos & French 1968). Maternal cigarette smoking was assessed during pregnancy. Mothers were asked to self-report the average number of cigarettes they smoked each day. Although, originally, this variable was coded continuously, for this research effort, we code this variable
dichotomously (0=mother did not smoke, 1=mother smoked). The variable for mother’s changes in marital status is coded continuously.

The participant’s sex was coded as 1 = male, 2 = female. The NCPP includes several different measures of cognitive abilities, and two are included for this analysis. The first is the digit span component of the WISC verbal scale, measured at age seven/eight. The WISC, because it measures both intellective and non-intellective traits, was described as one of the most psychometrically trustworthy measures of intellectual performance in children (Caspi, Harkness, Moffitt, & Silva 1996) and was one of the most popular tests of executive deficits (Lynam, Moffitt, & Stouthamer-Loeber 1993). For the NCPP, the shorter form of the WISC was utilized and Lezak (1983) had shown that the longer and shorter forms of the WISC were functionally comparable. The digit span test of the WISC was designed to assess attention span and short-term memory, two of the major features of neuropsychological functioning/cognitive abilities (Moffitt 1997). Several scholars argued, and some demonstrated, that the WISC was actually more a measure of neuropsychological variation than it was of intelligence or IQ (Moffitt 1997; Moffitt et al. 1994; Piquero 2001; Seguin, Phil, Harden, Tremblay, & Boulerice 1995).

The second measure of cognitive abilities is the total battery score of the California Achievement Test (CAT). The CAT was designed for the measurement, evaluation, and analysis of school achievement, and its emphasis was upon content and objectives in the basic curricular areas of reading, mathematics, and language (Tiegs & Clark 1970). Originally, this test was used in California schools to assess academic achievement and produced total scores in the academic areas of reading, mathematics, language, and
overall academic achievement. The total battery score, which was used as the second measure of cognitive abilities, reflected a student’s standing in terms of total achievement level. In the Philadelphia NCPP, the level four CAT for grades seven and eight (ages twelve to fourteen) was used. The CAT, in general, was highly praised in terms of its validity, comprehensive test and interpretive materials, reliability, and standardization procedures (Denno 1990).

For offending through age 17, a research team from the University of Pennsylvania collected information related to criminal history, including all police contacts (Denno 1990). For data beginning at age 18 through the follow-up period, data in the form of convictions were obtained from the Philadelphia Police Department (Piquero, Gibson, Tibbetts, Turner, & Katz 2002; Piquero & White 2003). Individuals who did not exhibit a police contact prior to age 18, but did have at least one conviction after age 18 were considered adult onset offenders.

**Analytic Plan**

The current research is motivated by two specific questions: Does adult onset exist, and if so, can it be explained by several individual and familial indicators that have been found in prior research to be related to criminal offending. The first portion of the analysis examines the data to determine if adult onset emerges in the Philadelphia sample, and if so, whether there are gender differences in this population. Then, using the constellation of familial and individual variables described earlier, we apply those indicators to predict adult offending. In addition to predicting adult offender status, we also examine the total number of adult offenses in order to distinguish between one-time adult offenders and recidivistic adult offenders. Four models will be estimated; one will compare adult onset offenders to everyone else in the sample, the second will compare
adult onset offenders to nonoffenders, the third model with will compare adult onset
offenders to those who offended as juveniles and then desisted, and the fourth model will
compare adult onset offenders to those who offended both as juveniles and adults.
CHAPTER 5
RESULTS

We begin by examining whether adult criminal onset exists. The sample population was organized into four different groups of offenders, based on whether their age of first police contact occurred during the juvenile years or as an adult. Specifically, those individuals who never offended were categorized as nonoffenders (n = 689). Individuals who do not have police contact in the adolescent years, but do have a conviction in the adult years are categorized as adult onset offenders (n = 78). Those individuals who had a police contact as juvenile, but did not have a conviction in the adult years are categorized as desisters (n = 144). Finally, those individuals who had a police contact as a juvenile and an adult conviction were categorized as persisters (n = 76). In sum, there appears to be a non negligible amount of adult onset in the Philadelphia NCPP data. In the next section, we examine the correlates associated with this adult onset, and compare adult onsetters to different types of offenders.

Models

The first model compares adult onset offenders to everyone else in the sample. Because we are interested in discriminating between two groups, logistic regression is employed in this model, as well as for the other four models. This first full model is shown in Table 1. Three variables in the full model were statistically significant; the participant’s sex, maternal cigarette smoking, and the total battery score of the California Achievement Test (CAT). The effect for sex was negative and significant, indicating that female participants were less likely to be adult onset offenders than male participants. In
terms of maternal cigarette smoking, those participants who had mothers that smoked during their pregnancy were more likely to have an adult criminal onset than those participants whose mothers did not smoke. The final significant variable in the full model, the CAT score, indicates that those individual’s who had higher total battery scores on the California Achievement Test were less likely to be adult onset offenders than those who had lower scores. None of the other variables in the full model were statistically significant.

Male and female estimates predicting adult onset offenders compared to everyone else in the sample are also shown in Table 1. As can be seen, two coefficients are significant among males, but there are no significant coefficients among females. Specifically, males whose mothers smoked during pregnancy are more likely to incur an adult criminal onset than those male participants whose mother did not smoke during pregnancy. Also, males who had higher total battery scores on the California Achievement Test were less likely to be adult onset offenders than those male participants who had lower scores. Among females, there were no statistically significant variables.

For the second model, adult onset offenders were compared to nonoffenders. This second full model is shown in Table 2. The statistically significant variables in the full model are the same significant variables observed in the first full model. For sex, male participants were more likely to be adult onset offenders than female participants. As in the first full model, those participants who had mothers that smoked during their pregnancy were
Table 1. Adult Onset Compared to All Other Sample Members

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<td>Chi-square/df</td>
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</table>

(p < .05)
more likely to be adult onset offenders than those participants whose mothers did not smoke during the pregnancy. This model also indicated that those individuals who had a higher total battery score on the California Achievement Test were less likely to be adult onset offenders. Similar to the first full model, none of the other variables in the second full model were statistically significant.

Male and female estimates predicting adult onset offenders compared to nonoffenders are also shown in Table 2. As can be seen, two coefficients are significant among males, but there are no significant coefficients among females. Specifically, males whose mothers smoked during pregnancy are more likely to incur an adult criminal onset than those male participants whose mother did not smoke during pregnancy. Also, males who had higher total battery scores on the California Achievement Test were less likely to be adult onset offenders than those male participants who had lower scores. Among females, there were no statistically significant variables.

The third model compared adult onset offenders to those who offended as juveniles, but not as adults. The full model is shown in Table 3. In this estimate, only the variable sex was significant. Female participants were less likely to be adult onset offenders, and more likely to have only offended as juveniles.

Male and female estimates predicting adult onset offenders compared to desisters are also shown in Table 3. As can be seen, one coefficient is significant among males, and no coefficients were shown to be significant among females. Males whose mother smoked during pregnancy were more likely to acquire adult criminal onset than those male participants whose mothers did not smoke during pregnancy.
Table 2. Adult Onset Compared to Non-offenders

<table>
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<th>Wald</th>
<th>Exp (B)</th>
<th>Variables Male</th>
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<th>SE (B)</th>
<th>Wald</th>
<th>Exp (B)</th>
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*(p < .05)*
Table 3. Adult Onset Compared to Desisters

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<th>Exp (B)</th>
<th>Variables</th>
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* (p < .05)
Model four compared adult onset offenders to those who offended both as juveniles and adults. No variables were found statistically discriminate among these two groups of offenders in either the full model estimates or in the male and female estimates.

Model five compared adult onset offenders with one conviction to those adult onset offenders with more than one conviction. No variables were found statistically significant among these two groups in either the full model estimates or in the male and female estimates.

Discussion

In this study, we explored the adult criminal onset phenomenon. We first examined whether adult onset exists in the Philadelphia NCPP data, as well as which correlates of criminal activity were associated with adult onset. Further, we sought to investigate whether these correlates are the same or similar for other categories of individuals, nonoffenders and offenders, including desisters and persisters.

Three key findings emerged from our analysis. First, females are less likely than males to be adult onset offenders. This result is interesting in that it is inconsistent with prior research that suggests females are more likely than males to be adult onset offenders (Kratzer & Hodgins 1999). Second, participants who had mothers that smoked cigarettes during pregnancy were more likely to be adult onset offenders than nonoffenders. Prior research has suggested a relationship between maternal cigarette smoking and persistent offending (Piquero et al. 2002), but this is the first study that we are aware of that links maternal cigarette smoking to offspring criminality after the age of eighteen (without evidence of juvenile criminality). It is possible that the variable, maternal cigarette smoking is actually a proxy for other factors that may contribute to criminality. For example, one possibility is that the variable could be a stand-in for the mother’s lifestyle,
socioeconomic status, or a poor care indicator. Another possibility is that maternal cigarette smoking is a proxy for neurological problems. Thirdly, participants who had higher scores on the total battery score of the California Achievement Test (CAT) were less likely to be adult onset offenders. This particular finding shows the preventative effects of cognitive abilities in deterring criminal activity. While sex and the total battery score of the California Achievement Test (CAT) were statistically significant in most models, it is important to emphasize that sex is more substantively significant than the variable CAT.

In total, our results show that it is important for criminal career researchers to continue to delve into the area of adult onset offenders, and to persist in the exploration of the correlates of crime that may predict this type of criminal initiator. Specifically, results from our effort suggest that there are factors that may predict adult criminal onset, and that these correlates may be similar to those predictors of other categories of criminal offenders. In the end, our results corroborate recent research by Eggleston and Laub (2002) regarding the importance of studying adult onset and contradict contentions from other researchers that adult onset is a rare phenomenon, one that is ill deserving of research attention (see Gottfredson and Hirschi, 1990; Moffitt et al., 2001).

To be sure, our research effort has limitations that need to be acknowledged, and that lead us to outline several important directions for future research. First, our study used an entirely African American sample. While there is some existing research on adult criminal onset that explores racial differences, future research should more critically examine whether adult onset patterns differ across race/ethnicity, and whether the correlates associated with adult onset differ according to race as well. Second, our study,
as well as other research on adult onset, used data collected from official records. Focus should be placed on expanding the understanding of adult criminal onset by analyzing the phenomenon using both official records as well as self-report data (Eggleston & Laub 2002). Third, the age range available in the data limited our current effort, as we only had information up to ages 33 through 39. Future research should continue to investigate late onset using data sources with information on older participants. More specifically, future research may want to explore adult criminal onset with data containing information on offenders over the age of 55 years, as prior studies have suggested that a significant portion of senior offenders have no prior criminal records (Aday 2003). Finally, our study was limited in that we did not have available variables on negative adult transitions. Adult drug use and/or dependencies, troubled marriages or divorce, and other adult transitions may be factors to consider when examining adult criminal onset.

The area of adult criminal onset in criminology might also be further illuminated by the insights of Ferraro’s gerontological imagination, in which he emphasizes the importance of chronological age (Ferraro 1997). He also calls attention to the many components of the ageing process that is filled with transitions, advantages, and disadvantages. According to Ferraro, the age of an individual is a key variable to consider because it identifies a cohort location. This is important, in that a cohort can be used as an indication of the shared experiences of people born within the same time period (Mills & Edwards 2002).

Research on adult criminal onset might also be informed by Arnett’s (2000) concept of ‘emerging adulthood’. This new theory of development argues that in modern industrialized societies, individuals between the ages of 18 to 25 are not adolescents or
young adults. Instead, Arnett believes that this time period of life is a distinct
developmental period, with distinctive life transitions and experiences for those that fall
within this category (Arnett 2000). It may be that life transitions and experiences incurred
during emerging adulthood relate in unique ways to adult onset.

This research effort, as well as preceding research, has indicated that adult onset
offenders do exist. This, in itself, has policy implications. Our society is currently aging,
and the adult and senior populations will continue to grow (Aday 2003). Understanding
adult onset offending may inevitably become an important aspect of both crime control
policies as well as the correctional system. Life-course transitions can be age-graded and
accompany the aging process and adulthood. Certain transitions in the life-course are
linked to behaviors that could incorporate criminality. These transitions are often
changes in societal roles and status. For example, as a senior, an individual may have a
sudden need for healthcare and prescription medicines. Transitions can often be abrupt
and influential, changing the behaviors of the individual. For this reason, providing
societal cushions for adult life transitions, such as national healthcare and prescription
benefits, could be a strategy used to control and alleviate the onset of negative adult
behaviors, such as adult onset offending.

In sum, while criminal onset is a highly researched area in life-course criminology,
the traditional focus on “onset” has been on juvenile offenders. As a consequence, adult
onset offending has not received adequate attention in the field, and the factors related to
this type of criminal initiator are understudied and neglected. Since the current study, as
well as previous empirical research, has identified factors that may be associated with
adult criminal onset, continuing research in the area of adult onset offending can only
enhance our knowledge of the behaviors that may produce criminality over the life-course.
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Zenta Gomez-Smith was born in Santiago, Chile, in 1982. Her family moved to the United States in 1988, and eventually settled in central Florida. Zenta graduated from high school in Deland, Florida, in 1999. In 2002, Zenta received her Bachelor of Arts degree in sociology from Stetson University. Zenta was married to Larry David Smith on June 22, 2002. Soon after, they relocated to Gainesville, Florida, in order for Zenta to pursue a Ph.D. at the University of Florida. She completed her Master of Arts in criminology and law in May 2004. Currently, Zenta continues to pursue a Ph.D. at the University of Florida, and is living in Gainesville, Florida, with her husband, Larry, and their three dogs, Major, Ito, and Junior.