

**Seeing the Signs: An Analysis of Early Onset of Violence and Desistance amongst Serious  
Juvenile Offenders**

Tailar M. Brown

The University of Texas at Arlington

Department of Criminology and Criminal Justice

May 2023

**Author Note**

Committee Chair- Sarah A. El-Sayed, Ph.D.

Committee Member- Robert L. Bing, Ph.D.

Committee Member- James D. Kelsay, Ph.D.

## **Abstract**

There has been increasing literature on juvenile delinquency and the factors that influence deviant behavior among adolescents. However, there has been little exploration of the effects of early displays of violent behavior on desistance for those identified as serious juvenile offenders (SJOs). In order to create effective intervention programs and lower recidivism rates among this population, it is essential to comprehend the effects of early instances of violent behavior on SJOs' desistance. Using longitudinal data from the Pathways to Desistance Study, this project explored the connection between early displays of violent behavior (i.e., fights at school, violence against siblings, planning violent acts, etc.) and desistance into adulthood (defined by recidivism). Results from the logistic regression disclose that persistent offending (rearrest) is significantly influenced by early displays of violence, a lack of impulse control, a lack of consideration for others, and gender. This outcome suggests that adolescents who behave violently and/or have a low regard for others are more likely to become persistent offenders over the course of their lives. The findings of this study can be used to inform early intervention and prevention efforts aimed at reducing persistent offending among adolescents.

**Keywords:** Serious Juvenile Offenders, Adolescent(s), Early Violence, Desistance, Recidivism, Rearrest, Pathways to Desistance Study, Persistence

## Table of Contents

Abstract.....	1
Introduction.....	1
Literature Review.....	2
<i>Juvenile Delinquency &amp; Early Onset of Violence</i> .....	2
<i>Desistance</i> .....	5
<i>Violent Offenses and Desistance</i> .....	6
Current Study.....	8
Methods.....	9
<i>Data</i> .....	9
<i>Measures</i> .....	10
<i>Analytic Plan</i> .....	14
Results.....	15
Discussion.....	17
References.....	21

## Introduction

Juvenile delinquency is a pertinent life-stage to examine that has been the focal point of research for criminologists and various social scientists alike. Defined as the illegal or deviant behavior of those who are classified as adolescents (ages 10 to 19), juvenile delinquency encompasses a wide range of offenses and behaviors (Puzzanchera, 2022; Laub & Boonstoppel, 2012). These offenses can be as minor as vandalism, shoplifting, or underage drinking, but may also include more serious violent crimes like homicide, assault, or robbery, for instance.

According to a recent report, the United States Department of Justice estimates that approximately 34,000 arrests for youth offenders were made in 2020, all of which are related to violent crime. However, this figure is considered the lowest rate of youth violent crime since the peak in 1994 at about 145,000 arrests (Puzzanchera, 2022). Despite the statistical decline of youth crime over the past 15 years, engaging in criminal behavior as an adolescent is related to a host of negative life consequences including persistence of criminal behavior throughout the life course (Moffitt, 1993). For this reason, it is imperative to better understand the factors which contribute to juvenile delinquency.

There is not one definite contributor for juvenile delinquency. However, factors including socioeconomic status, familial bonds (dysfunction), mental health disorders, societal and peer pressure, and substance abuse have all been linked to an increase in the likelihood that youth would engage in delinquency (Villeneuve et al., 2019). Similarly, desistance, which is refraining from further criminal behavior, is not attributed to one single factor (Loeber et al., 1991; Sampson & Laub, 1993; Villeneuve et al., 2019). Rather, desistance has been attributed to a variety of factors, such as positive life events, social support, access to educational and employment opportunities, cognitive maturation, and mental health resources (Loeber et al.,

1991; Villeneuve et al., 2019). Together, these factors demonstrate that there is not one single explanation for why youth engage in delinquency or desist from it.

It is important to study juvenile offenders as they are at a heightened risk of becoming chronic offenders later in life (Genovés et al., 2006). However, there are a limited number of studies that specifically examine how early displays of violence impact desistance for a group of serious juvenile offenders. Therefore, this research gap provides an opportunity to analyze how early displays of violent behavior committed by a juvenile can impact his or her ability to desist from future criminal behavior. Understanding how early onsets of violence may or may not impact the desistance of these serious juvenile offenders is essential to the development of effective interventions and services that can reduce rates of recidivism. In order to begin to fill this research gap, this study will investigate the differences in desistance for serious juvenile offenders who have an early onset for violent behavior.

## **Literature Review**

### ***Juvenile Delinquency & Early Onset of Violence***

Over the past century, there has been a plethora of literature and studies produced on the topic of juvenile delinquency (Glueck & Glueck, 1950; Genovés et al., 2006; Mulvey, 2004; Mulvey et al., 2014; Steinburg et al., 2015). Such research has focused on understanding the causes of juvenile delinquency as well as exploring potential interventions and strategies to reduce or prevent it. The foundational study published in 1950 by researchers Glueck and Glueck is responsible for much of what we know about juvenile delinquency. This data was compiled from a 10-year study on 1000 white male subjects, half of whom were not delinquent and the other half who were. The researchers in this study were focused on targeting the person with criminal tendencies, not just a specific crime. They investigated the causes and contributors to

delinquent behavior and classified causation into four categories: emotional/temperamental, socioeconomic, intellectual, and physical (body type). In the Glueck study, they found that social and environmental factors, such as poverty, family dysfunction, and living environment, were strongly associated with juvenile delinquency (Glueck & Glueck, 1950). This study provided a comprehensive understanding of juvenile delinquency and its influences, which has since been used as the foundation for further research. This project would further contribute to what is known about criminal behavior throughout the life course when researchers Robert Sampson and John Laub continued the data collection started by the Gluecks (Sampson & Laub, 1993; Laub & Sampson, 2003).

Other studies, however, have taken a narrower approach to specifically study serious juvenile offenders, the factors that affect recidivism (Genovés et al., 2006), and risk factors for delinquency (Shader, 2001). In contrast to the Gluecks study, these studies focused on understanding the processes that lead to delinquent behavior as well as repeat offenses and how they can be addressed in order to prevent further delinquency. Specifically, these studies have focused on examining individual characteristics such as prior criminal record, substance abuse history, family background, and other risk factors associated with serious delinquency (Genovés et al., 2006). Shader's 2001 article also outlined risk factors that can contribute to delinquency in adolescents. These risk factors included family conflict, aggression, substance abuse, low IQ, and association with delinquent peers. The article emphasized the importance of early intervention and prevention programs to address these risk factors before they develop into criminal behavior. Shader examined the risk factors during early onset (age 6–11) and late onset (age 12–14), but also provided protective factors or factors that likely reduce the chance for delinquent behavior.

In another multi-city, longitudinal study often referred to as the *Causes and Correlates Study* by Thornberry, Huizinga, and Loeber (1995), the researchers examined the characteristics of the early onset of violence as well as its prevalence in adolescents (Thornberry et al., 2004). Early onset is used to describe a person who exhibits violent behavior or tendencies prior to hitting puberty (Office of the Surgeon General (US) et al., 2001). These individuals show signs of violence early on towards family members and peers, typically ranging anywhere from general aggression to physical attacks. The study was conducted in Denver, CO (Huizinga, 1988), Pittsburgh, PA (Loeber, 1986), and Rochester, NY (Thornberry, 1988) between the years 1988 and 1994. These youth studies were initiated by the Office of Juvenile Justice and Delinquency Prevention with the goal of enhancing knowledge on serious delinquency, especially for violent and drug related offenses. The three programs combined included data on 4,500 participants ages 7 to 15 at the baseline of the study. A limitation of this project identified by researchers prior to the study was that there were very few participants that could be identified as serious offenders and an overrepresentation of those that were simply at high risk for delinquency. Key findings for the study found that the early onset of violence was more prevalent in male than female participants and that it was associated with a higher risk of serious delinquent and criminal behavior in adulthood. Like Shader's article (2001), the researchers also identified risk factors for the early onset of violence, including poverty, exposure to violence in the family, and low parental monitoring. Protective factors, such as positive family relationships and high academic achievement, were found to have the most impact on reducing the risk of an early onset of violence.

### *Desistance*

Desistance occurs when a person who has been involved in delinquent or criminal activities in the past decides to stop partaking in those behaviors. This typically is the result of when a person is more bonded to society and has positive stimuli (Sampson & Laub, 1990). There are several factors that contribute to delinquency in adolescence, including poverty, familial history, personal background, education, and living environment. Desistance is possible when these risk factors are identified and addressed appropriately. Some research suggests that desistance is a natural process that occurs as the person matures (Moffitt, 1993; Sampson & Laub, 1993). Also, transitions in one's life resulting from access to opportunities or new relationships can be instrumental in the desistance process. For serious juvenile offenders, positive changes in the individual's lifestyle, like seeking resources for substance abuse issues or improvements in their social life, or making the mental effort to change, helped in the desistance process (Villeneuve, Dufour, & Turcotte, 2019). However, desistance is not a simple or immediate process for many serious juvenile offenders.

Several articles that were references had a central theme of how stable support systems are significant in the desistance process (Villeneuve et al., 2019). These stable support systems, such as a supportive family, help from peers, economic support, or access to educational and health resources, can be influential in leading serious juvenile offenders away from crime and toward more positive outcomes (Panuccio et al., 2012; Villeneuve et al., 2019). Motivation to abstain from crime is the primary influence for desistance for any offender. While social support does increase the likelihood of leaving crime, it can only work if the individual is motivated to change their life and perspective. Sources of motivation can come from their bond with loved



ones, the desire to change, program participation, or fear of imprisonment (Panuccio et al., 2012).

Educational attainment also played a role in the desistance process, which resulted in a substantial amount of literature. An education can provide a person with not only the knowledge and skills needed to pursue a career but also with a sense of purpose and identity (Sampson & Laub, 1993). Obtaining an education can increase individuals' access to resources such as health and mental health services, which can help reduce the risk of future criminal behavior. Studies suggest that learning difficulties and low academic achievement put an individual at a higher risk for delinquent behavior, especially in adolescence. This has been attributed to the fact that these individuals are more likely to drop out of school or be expelled for their behavior with teachers and peers (Grigorenko et al., 2019).

### ***Violent Offenses and Desistance***

Violent Behavior in adolescents starts early in the development process (i.e., ages 5-11). Defined as minor aggression in the early stages this includes acts such as physical fighting, arguing, threatening others, and bullying (Thornberry et al., 2004). Thornberry's 2004 study highlights the developmental pathways to serious and violent offending, which is comprised of the Authority Conflict Pathway, Covert Pathway, and Overt Pathway. The Authority Conflict Pathway begins prior to age 12 and is defined by oppositional behavior, which later develops into defiance and then finally to authority avoidance (i.e., running away or truancy). The Covert Pathway is that which begins with minor covert acts before the age of 15 and progresses to behaviors like property damage, moderate delinquency, and then serious delinquency. The last classification is the Overt Pathway, which has no age marker. This starts off with minor aggression, progresses to physical fighting, and then leads to more severe acts of violence

(Thornberry, 2004). These pathways support the idea that early displays of violence play a role of desistance/persistence.

There are also some empirical studies that suggest that specific offense types, such as those that involve violence, have an influence on desistance (O'Connell et al., 2019; Schroeder et al., 2007; Loeber et al., 2008; Laub & Boonstoppel, 2012; Sampson & Laub, 2003). For instance, individuals who engage in more violent offenses tend to desist from that behavior later in life compared to those who are involved in less serious criminal acts (Grigorenko et al., 2019). This is likely because offenders of more serious crimes can have a more difficult time reintegrating into society, thus increasing the possibility that they will continue with their criminal behavior. Alternatively, people who have committed less serious crimes may have a better chance of reintegrating into society because they face less stigma and fewer legal repercussions associated with their crime (type). O'Connell and his research associates (2019) reviewed previous criminological articles on violent offending and contend that most violent offenders do not reoffend, and the majority of offenders commit non-violent crimes, despite what seems to be a time where violent crime is increasing. This suggests that, generally speaking, those who engage in violent criminal behavior are likely to change their ways and abstain from it in the future. However, while this study examined violent offenses across the entire population, Massoglia's 2006 study focused exclusively on adolescent offenders. This project found that juvenile offenders typically strayed from violent criminal acts as they transitioned into late adolescence. This result appears to be consistent with that of O'Connell and colleagues (2019), as both studies came to the conclusion that the majority of violent offenders do not continue their criminal behavior (violent crime is likely transitory).

### **Current Study**

As indicated by prior literature, importance should be placed on understanding the causes of juvenile delinquency and investigating potential intervention or prevention strategies to reduce it, as is the purpose of each study cited. It was found that social and environmental risk factors such as family dysfunction or poor living conditions were strongly associated with delinquency (Glueck & Glueck, 1950; Genovés et al., 2006; Steinburg et al., 2015). Additionally, an early onset of violence is associated with an increased risk of serious delinquent behavior and persistence into adulthood, with a higher prevalence in males (Office of the Surgeon General (US) et al., 2001). Alternatively, the literature on desistance and violent crime suggest that those who commit violent offenses generally move away from crime thereafter (Grigorenko et al., 2019; O'Connell et al., 2019; Massoglia, 2006). Protective factors such as positive family relationships, stable support systems, and educational attainment are found to have the most impact on reducing the risk in adolescents and encourage desistance (Panuccio et al., 2012; Villeneuve et al., 2019; O'Connell et al., 2019; Shader, 2001).

The goal of this project is to build upon the previous work on desistance by exploring the connections between early violence and desistance in early adulthood among youth offenders known to commit serious crimes. This project utilizes the Pathways data to longitudinally assess the effect of early onsets of violence on the desistance in early adulthood for a sample of serious juvenile offenders. This will allow for the examination of the impact of early displays of violence on desistance in order to better understand which behavioral characteristics have an impact on reducing criminal behavior. It is hypothesized that there will be an appreciable effect on desistance for serious juvenile offenders that exhibited violent behavior earlier in life.

Results will aid in identifying potential interventions that can be used to stop the onset of violence in young offenders and encourage desistance. This research could have important implications for the development of effective rehabilitation programs for juvenile offenders. To achieve this, logistic regression will be used to analyze the data and allow for multiple variables to be compared to the key dependent variable, persistence of crime.

## **Methods**

### ***Data***

The Pathways to Desistance data is a landmark study on serious juvenile offenders and the desistance or continuation of criminal behavior. This data was collected by various researchers across a multitude of academic disciplines, including criminology and psychology, to name a few. The study's goal was to identify exit routes from the juvenile justice system and explain the role of social and developmental changes in the desistance or persistence of crime. Spanning from November 2000 to March 2010 (the start of the 3-year enrollment period to the end of the study), this data set is regarded as the largest longitudinal study on serious juvenile offenders, with a total of 1,354 program participants ranging in age from 14 to 18. Participants were selected based on their age, offense type, and residence in either Maricopa, Arizona, or Philadelphia, Pennsylvania. Maricopa and Philadelphia were chosen as sites because of their large number of female offenders, high rates of juvenile crime, diverse racial groups, and the nature of their juvenile justice systems and policies. Once entered into the study, participants were interviewed periodically over the course of 7 years following their initial (baseline) interview. The format of the study was integral to helping the research group attain the broader goal of influencing better court practices and policies for serious juvenile offenders (Mulvey, 2004; Mulvey et al., 2014; Steinburg et al., 2015).

## ***Measures***

For this study, one dependent variable was analyzed against ten independent variables, covariates, and controls. Table 1 provides descriptive statistics for all of the variables utilized in this project. The variables are defined as follows:

### **Dependent Variable**

#### ***Persistence***

For this study, persistence is defined in this project as the continuance of new arrests measured at the final wave of data collection when participants were in early adulthood (i.e., ages 21 to 25).

The dependent variable is persistence (continued offenses over a period of time), which is measured by the variable rearrest. This variable is the count of arrests for a participant following the initial (baseline) interview. Information regarding the arrest(s) was provided by court records from both Phoenix and Philadelphia. For this project, rearrest was recoded into a dichotomous variable where  $0 = no\ new\ arrests$  and  $1 = any\ new\ arrest$ .

### **Independent Variable**

#### ***Onset of Violence***

An onset of early violence is a pattern of violent behavior displayed in youth prior to adolescence. Participants were measured at baseline for engaging in any acts of violence (i.e., fights) prior to the age of 11. Onset of violence was measured so that  $0 = no\ onset\ of\ violence$  and  $1 = onset\ of\ violence$ .

### **Covariates**

#### ***Test for Cognitive Dysfunction***

The trail-making test was utilized to measure brain function and/or the presence of brain damage in the program participants. The test involves two parts, which are done separately and are

scored by the time taken for completion. The first part (part A) looks at the respondent's ability to sequence as well as their processing speed for a given task. Part B analyzes the sequencing ability, processing speed, and ability to shift cognitively. Sequencing ability refers to the respondent's capability to arrange information in a logical order, while processing speed relates to how fast they can complete a task. Alternatively, cognitive shifting involves the ability to switch between different tasks or mental sets.

### ***Psychosocial Maturity***

This variable is a 30 item Likert scaled questionnaire that looks at the respondent's level of personal and self-responsibility, identity, reliance on others, and work orientation. The purpose of this variable is to assess the respondent's level and ability of adaptive functioning as well as their sociological and psychological competence.

### ***Resistance to Peer Pressure***

This measure examines how the participant behaves independently when surrounded by their friends or others in the same age group. Participants are presented with ten sets of conflicting scenarios and are required to choose the answer that most closely aligns with their behavior and how accurate this statement is. The purpose of the sets of questions is to explore various elements of potential behavioral influence.

### ***Impulsivity***

Impulsivity is defined as taking an action with little to no prior thought. This measure looks at social and emotional adjustments to external pressures and constraints. It is a part of the Weinberger Adjustment Inventory (WAI), which is a series of skilled questions on the topics of impulse control, suppression of aggression, consideration of others, and temperance. Participants with higher scores are consistent with the attributes of someone with more impulse control (or

low impulsivity). The measure required participants to rank how their behavior matched for a series of statements using a 5-point scale where 1= *False*, 2= *Somewhat False*, 3= *Not Sure*, 4= *Somewhat True*, and 5= *True*.

### ***Consideration of Others***

Similar to the variable of impulsivity, consideration of others is a component of the Weinberger Adjustment Inventory (WAI). This element looks at how thoughtful the participant is of other people, their needs, and their feelings. Higher scores for this variable are reflective of greater consideration for others and their well-being. The measure required participants to rank how their behavior matched for a series of statements using a 5-point scale where 1= *False*, 2= *Somewhat False*, 3= *Not Sure*, 4= *Somewhat True*, and 5= *True*.

### ***Neighborhood Conditions***

This measure is a general assessment of the physical environment in which the participant lives. A Likert (rating) scale was used to answer questions related to physical and social disorders.

### ***IQ***

The IQ of each program participant was recorded and then assessed using the Wechsler Abbreviated Scale of Intelligence (WASI). The purpose of WASI is to create an assessment of a person's general intellectual ability and functioning. This 15-minute test is divided into two subtests, one focusing on vocabulary and the other on matrix reasoning. Higher scores reflected greater intellectual capability, with the scores ranging from the minimum of 55 to the maximum of 128.

**Controls*****Gender***

The sex of each participant was recorded during the first phase of the study. Respondents either identified as male or female. It is important to note that this variable does not encompass individuals who identify as non-binary. The variable is denoted in this study as female. Gender was coded into a dichotomous variable where  $0 = male$  and  $1 = female$ .

***Race***

Race was self-reported by the participants into one of four groups: White, Black, Hispanic, or Other. "Other" was used to classify the respondents who did not identify with one of the other three racial groups. This variable allows for the examination of potential disparities or differences in outcomes among different racial groups.



**Table 1: Descriptive Statistics (n=1,321)**

	Mean	SE	Min	Max
<i>Dependent Variables</i>				
Persistence	0.74	0.01	0	1
<i>Independent Variables</i>				
Onset of Violence	0.56	0.01	0	1
<i>Covariates</i>				
Test for Cognitive Dysfunction	2.15	0.03	1	4
Psychosocial Maturity	3.02	0.01	1.1	4
Resistance to Peer Pressure	2.99	0.02	1.3	4
Impulsivity	2.97	0.03	1	5
Consideration of Others	3.49	0.02	1	5
Neighborhood Conditions	2.35	0.02	1	4
IQ	84.59	0.36	55	128
<i>Controls</i>				
Female	0.14	0.01	0	1
White	0.20	0.01	0	1
Black	0.41	0.01	0	1
Hispanic	0.34	0.01	0	1

Note: n= Sample Size, SE= Standard Error

### ***Analytic Plan***

For this project, logistic regression was utilized to examine the research question. This model was appropriate as it allows for the dichotomous dependent variable, persistence, to be predicted with all the independent variables in the model. The analysis was produced using the statistical program STATA. The results produced in this study are composed of a final sample of 1,321 participants. The first step was to examine the descriptive statistics for all variables (reported in Table 1). Then, applying logistic regression the full model was examined for predicting persistence. Table 2, discussed below, outlines all variables used in the model. The coefficients was translated to odds ratios to clarify the interpretability of the findings. Odds ratios

(*ORs*) will be used to assess the magnitude of the effect for the independent variable on the dependent variable—while adjusting for the influence of other variables within the model. Odds ratios are interpreted as a percentage change in the *odds* of the dependent variable as a function of a one-unit change in the independent variable (i.e.,  $OR-1*100$ ). To illustrate further, an *OR* greater than 1.00 indicates a positive association, an *OR* less than 1.00 indicates a negative association, and an *OR* of 1.00 indicates no association.

### **Results**

The current project examined the effect that an early onset of violent behavior has on persistence for a group of serious juvenile offenders. In the life-course literature, early experiences can have a lasting impact throughout one's life (Moffitt, 1993; Sampson & Laub, 1993). For this reason, the current study examines an extreme form of behavior prior to the age of 11, getting into fights and displaying violent tendencies, and how it may impact persistence in offending for a sample of known serious juvenile offenders. Table 2 displays the results of the impact that each independent variable has on persistence. Keep in mind, all variables except for the dependent variable was selected from the baseline. Whereas the dependent variable, persistence, is from the final wave of data. In this way, time order is established so that the independent variables from adolescence are predicting the impact on committing crimes (i.e., persistence) in early adulthood.

The results show that the odds of persistence were significant and positive for serious juvenile offenders who had early displays of violence compared to those who did not. Specifically, there is a 36% increase in persistence of criminal behavior in early adulthood (i.e., getting arrested) for participants who got into fights prior to the age of 11 ( $OR=1.36$ ;  $p < 0.05$ ).

Aside from the primary independent variable, early onset of violent behavior, there were a few covariates and controls that had a significant impact on persistence.

The two covariates that influenced rearrest in serious juvenile offenders were impulsivity and consideration of others. Both variables were designed to measure how the participants respond socially and emotionally to negative external stimuli. Impulsivity was significant and negative. Implying that for every one-unit individuals were less impulsive, persistence in offending decreased by 20% (OR=0.80;  $p < 0.05$ ). Consideration of others was also significant and negative. Specifically, every one-unit participants were more considerate of others and their well-being, persistence in offending decreased rearrest by 22% (OR=0.78;  $p < 0.05$ ). Of the two controls, gender (assigned at birth) and race, gender was the only one to have an appreciable effect on rearrest. Female offenders were less likely to persist in offending than their male counterparts, with a decrease in rearrest by 68% (OR=0.32;  $p < 0.05$ ). Race, however, did not influence rearrest in this sample.

**Table 2: Logistic Regression (n=1,321)**

Persistence	OR	SE	P> z
<i>Independent Variables</i>			
Onset of Violence	1.36*	0.19	0.03
<i>Covariates</i>			
Test for Cognitive Dysfunction	1.06	0.07	0.42
Psychosocial Maturity	1.31	0.21	0.09
Resistance to Peer Pressure	0.84	0.10	0.16
Impulsivity	0.80*	0.06	0.00
Consideration of Others	0.78*	0.06	0.00
Neighborhood Conditions	0.92	0.09	0.35
IQ	0.99	0.01	0.30
<i>Controls</i>			
Female	0.32*	0.06	0.00
Black	1.00	0.18	0.99
Hispanic	1.20	0.22	0.31

\* $p < 0.05$ ; Note: n= Sample Size, OR= Odds Ratio, SE= Standard Error

### Discussion

Previous work on juvenile delinquency placed much importance on defining delinquent behavior in adolescents, understanding the factors that contribute to it, and developing impactful strategies to mitigate the issue (Glueck & Glueck, 1950; Genovés et al., 2006; Steinburg et al., 2015; Shader, 2001; Thornberry et al., 1995; Tolan & Gorman-Smith, 1998). Overall, the topic of juvenile delinquency has been extensively researched, and various approaches have been taken to address it. Despite this, there are few studies that investigate delinquency in serious juvenile offenders and even less research that examines this group and the effect of an early onset of violence on persistence. This gap in research can be attributed to several factors, one of which is the small sample of serious juvenile offenders to study (Office of the Surgeon General (US) et al., 2001). Limitations such as this help to emphasize the importance and depth of the Mulvey study, as this project provided extensive data on more than 1,350 serious juvenile

offenders as they aged into early adulthood. Furthermore, the Mulvey study not only examined the delinquent behavior of the program participants but also their mental health, substance abuse, and educational/employment outcomes, providing a comprehensive understanding of the factors that contribute to persistence or desistance. This information is resourceful for developing effective interventions and policies for at-risk adolescents and juvenile offenders.

The aim of this current project is to provide a comprehensive analysis of the effect early displays of violent behavior have on desistance in serious youth offenders. These results hope to offer insight into what factors and intervention methods better serve youth offenders. Additionally, changes to the way researchers, youth courts, and guidance counselors approach the issues facing serious juvenile offenders are a desired goal. It is important to address the root causes of this trend and provide early intervention and prevention programs for at-risk youth. This can help break the cycle of criminal behavior and reduce the number of chronic offenders in the future. Violence among youth offenders is currently on the rise, and with that, more adolescents are at an increased risk of becoming chronic offenders into adulthood (Puzzanchera, 2022). Understanding the factors that contribute to the persistence in crime for serious juvenile offenders is crucial to developing effective intervention and prevention methods.

The data analysis supported the hypothesis that early onsets of violence have a significant impact on persistence, which is consistent with the literature (Thornberry et al, 1995). Adolescents that exhibit both aggressive and/or violent behavior early on (ages 5-11) are more likely to develop into chronic offenders compared to those that initiate delinquent behavior during adolescence. Early onset juveniles are also more likely to offend for longer periods of time (Thornberry et al., 2004). This increased involvement in delinquency for early onset

offenders is likely influenced by a combination of individual and environmental risk factors that interact and reinforce each other over time, resulting in a persistent pattern of antisocial behaviors. Poor social support, exposure to violence, academic failure, and poor self-control are a few factors that contribute to this (Thornberry et al., 2004; Tolan et al., 2000). This emphasizes the importance of early intervention and prevention efforts aimed at reducing aggressive and violent behavior in young children. Interventions that target individual and environmental risk factors, such as social skills training and community-based programs that promote community, have shown potential for reducing delinquency (Lösel & Farrington, 2012).

Additionally, the findings of this study also suggest that gender, impulsivity, and consideration of others are important predictors of rearrest in this population. The significant gender difference in rearrest rates highlights the need for gender-specific approaches to intervention and prevention. Prior to age 13 males accounted for 85% of physical acts of aggression (fighting, kicking, etc.) compared to 77% for females in the Denver youth study (Thornberry et al., 2004). These variables may be targeted in interventions aimed at reducing persistence among juvenile offenders. Further research is needed to understand these associations and identify additional factors that may impact rearrest in juvenile offenders. Currently, much of the literature on serious youth offenders focuses on the quality of social bonds and their effect on desistance. However, these results support the idea that other factors, such as violence in childhood and socio-emotional competence, play just as large a role in persistence in criminal activity.

There were a few limitations in this study that likely influenced the results gathered. The first limitation is that some of the data could not be accessed due to masking. This limits the

ability to fully analyze the impact of some objective variables on rearrest rates. The second limitation was that this study was not generalizable to all juvenile offenders, only those who had committed serious crimes. Another potential limitation is that the study was conducted only in two geographic areas: Maricopa, AZ and Philadelphia, PA. The restrictions on offender group and location could limit the generalizability of the findings to other populations, despite the diversity in the participating group. By gathering a sample that is more diverse or larger, it can increase the external validity of the results. Despite these limitations, this project helps to contribute to the literature on factors affecting desistance in serious juvenile offenders; additionally, it further emphasizes the importance of early preventive measures that can be utilized to reduce the persistence of crime.

## References

- Elliott, D.S., Huizinga, D., & Morse, B. J. (1986). Self-reported violent offending: A descriptive analysis of juvenile violent offenders and their offending careers. *Journal of Interpersonal Violence*, 1:472–514.
- Office of the Surgeon General (US), National Center for Injury Prevention and Control (US), Center for Mental Health Services (US), & National Institute of Mental Health (US). (2001). Chapter 3: The Developmental Dynamics of Youth Violence. In *Youth violence: A report of the surgeon general*. essay, Dept. of Health and Human Services, U.S. Public Health Service.
- Genovés, V. G., Morales, L. A., & Sánchez-Meca, J. (2006). What works for serious juvenile offenders? A systematic review. *Psicothema*, 18(3), 611-619.
- Glueck, S., & Glueck, E. (1950). Unraveling juvenile delinquency. *Juv. Ct. Judges J*, 2, 32.
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press
- Grigorenko, E. L., Hart, L., Hein, S., Kovalenko, J., & Naumova, O. Y. (2019). Improved educational achievement as a path to desistance. *New Directions for Child and Adolescent Development*, 2019(165), 111–135.
- Laub, J. H., & Boonstoppel, S. L. (2012). Understanding desistance from juvenile offending: Challenges and opportunities. *The Oxford handbook of juvenile crime and juvenile justice*, 373-394.
- Loeber, R. E., Farrington, D. P., Stouthamer-Loeber, M. E., & White, H. R. E. (2008). *Violence and serious theft: Development and prediction from childhood to adulthood*. Routledge/Taylor & Francis Group.
- Loeber, R., Stouthamer-Loeber, M., Van Kammen, W., & Farrington, D. P. (1991). Initiation, escalation and desistance in juvenile offending and their correlates. *J. Crim. L. & Criminology*, 82, 36.
- Lösel, F., & Farrington, D. P. (2012). Direct protective and buffering protective factors in the development of youth violence. *American journal of preventive medicine*, 43(2 Suppl 1), S8–S23.
- Massoglia, M. (2006). Desistance or Displacement? The Changing Patterns of Offending from Adolescence to Young Adulthood. *Journal of Quantitative Criminology*, 22(3), 215–239.
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Bulletin*, 100, 674–701.



- Mulvey, E. P., Schubert, C. A., & Piquero, A. (2014a). Pathways to desistance. US Department of Justice, Office of Justice Programs, National Institute of Justice, Washington, DC.
- Mulvey, E. P., Schubert, C. A., & Piquero, A. (2014b). Pathways to desistance: Final technical report. Washington, DC.
- O'Connell, D., Visher, C., & Liu, L. (2019). Violent offending, desistance, and recidivism. *Marq. L. Rev.*, 103, 983.
- Panuccio, E. A., Christian, J., Martinez, D. J., & Sullivan, M. L. (2012). Social support, motivation, and the process of juvenile reentry: An exploratory analysis of desistance. *Journal of Offender Rehabilitation*, 51(3), 135–160.
- Puzzanchera, C. (2022). Trends in Youth Arrests for Violent Crimes [National Report Series Fact Sheet]. Sampson, R. J., & Laub, J. H. (2003). Shared beginnings, divergent lives: Delinquent boys to age 70. Harvard University Press.
- Sampson, R. J., & Laub, J. H. (1993). *Crime in the making: Pathways and turning points through life*. Harvard University Press.
- Sampson, R. J., & Laub, J. H. (1997). A life course theory of cumulative disadvantage and the stability of delinquency. In *Developmental theories of crime and delinquency: Advance in criminological theory* (1st ed.).
- Sampson, R. J., & Laub, J. H. (2003). *Shared beginnings, divergent lives: Delinquent boys to age 70*. Harvard University Press.
- Schroeder, R. D., Giordano, P. C., & Cernkovich, S. A. (2007). Drug use and desistance processes. *Criminology*, 45(1), 191–222.
- Shader, M. (2001). *Risk Factors for Delinquency: An Overview*. U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Steinberg, L. D., Cauffman, E., & Monahan, K. (2015). Psychosocial maturity and desistance from crime in a sample of serious juvenile offenders. US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Thornberry, T.P., Huizinga, D., & Loeber, R. (1995). The prevention of serious delinquency and violence: Implications from the program of research on the causes and correlates of delinquency. In J. C. Howell, B. Krisberg, J. D. Hawkins, & J. Wilson (Eds.), *Sourcebook on serious, violent and chronic juvenile offenders* (pp. 213-237). Thousand Oaks, CA: Sage Publications.
- Thornberry, T. P., Huizinga, D., Loeber, R., Wyrick, P. A., & Howell, J. C. (2004). *The Causes and Correlates Studies: Findings and Policy Implications*.

- Tolan, P. H. & Gorman-Smith, D. (1998). Development of serious and violent offending careers. In R. Loeber & D. P. Farrington (Eds.) *Serious and violent juvenile offenders: Risk factors and successful interventions*, 68-85. Thousand Oaks, CA: Sage Publications.
- Tolan, P.H., Gorman-Smith, D., and Loeber, R. (2000). Developmental timing of onsets of disruptive behaviors and later delinquency of inner-city youth. *Journal of Child and Family Studies*, 9(1), 203–230.
- Villeneuve, M.-P., F. -Dufour, I., & Turcotte, D. (2019). The transition towards desistance from crime among serious juvenile offenders: A scoping review. *Australian Social Work*, 72(4), 473–489.