

# Age and Crime

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## Introduction

On August 22, 2013, Marie Smothers, a 78-year-old woman, was watching over an 8-year-old boy in the Slaughter, Louisiana mobile home in which they both lived. The boy was enjoying a popular video game called *Grand Theft Auto IV* which includes quite a bit of graphic violence. At some point in the evening, the boy found a .38 caliber pistol and used it to shoot Smothers in the back of the head while she watched television, killing her. The police eventually determined the shooting was intentional rather than an accident. The act made international headlines, primarily because of the role it played in the video game and violence debate. But there was another facet of the story that made it unique as well: the ages of the perpetrator and victim. It is extremely rare for homicides to be committed by individuals under the age of 14. From 1980 to 2008 only half of a percent of all homicide offenders were younger than 14. Similarly, it is rare for homicide victims to be elderly. Roughly 5% of all homicide victims were 65 and older during the same time period (Cooper & Smith, 2011).

For just about as long as crime and delinquency have been studied, scholars and the public alike have known that age is a very strong and important correlate of poor behavior. That is one reason why “neighbors were surprised, shocked” by the Smothers killing (Russell, 2013). Nearly every article written about the story included references to both the perpetrator’s and victim’s ages. Age, it has been said, is a “brute fact of criminology” (Hirschi & Gottfredson, 1983, p. 552). What has become known as the “age–crime curve” is illustrative of this fact, as nearly all crimes across time and place have peaked in late adolescence and declined thereafter. This entry will discuss the relationship between age and crime, beginning with an historical overview. It will then trace the

history of the interpretation of the age–crime curve by scholars in criminology, followed by more recent work. The entry concludes with policy and practice implications of the age and crime relationship.

## Age and Crime: A Contemporary View

The relationship between age and crime is one of the most robust relationships in all of criminology. This relationship shows that crime increases in early adolescence, around the age of 14, peaks in the early to mid 20s, and then declines thereafter. This standard shape, which has been termed the “age–crime curve,” is not questioned by scholars. However, questions surrounding how much variation occurs in the age–crime curve by crime type, social group, and historical period remain. In addition, the meaning of the shape of the curve is not clear.

Before delving into historical research on age and crime and more recent attempts to explain it, a few recent findings from official crime data are presented to illustrate the age–crime curve. In 2012, the most recent year for which Uniform Crime Report data are available (the Uniform Crime Report, UCR, is the nation’s “official” record of arrests and crimes known to the police, reported by individual agencies across the United States), the UCR shows that while ages 18–24 represented only 11.2% of the population (according to the US Census), they made up over 28.7% of all arrests. The disparity is similar for violent crimes, for which this age group represents nearly 28.4% of all arrests. The disparity is slightly higher for property crimes, for which this age group represents 30.1% of all arrests.

As mentioned above, the figures for the tail ends of the distribution are reversed; while those aged 50–64 represent 19% of the population, they only represented 9.3% of all arrests. For violent crimes, this age group only represented 8.3% of all arrests. Children aged 0–15 represented 19.8% of the population in 2012, but only 3% of all arrests.

In terms of victimization, a similar pattern emerges. According to the 2012 National Crime

Victimization Survey (NCVS), the primary data source for information on victimization in the United States, individuals aged 18–24 represented 41% of all violent victimizations and those aged 50–64 represented 15% of all violent victimizations. The NCVS does not include questions about those under age 12, so information about this age group's victimization is not available. In sum, while age and crime patterns have been studied for decades, the general patterns seem to still be holding. Next, the entry describes some of the early, historical work on the topic.

## Age and Crime: Early Work

### *Quetelet*

Widely regarded as one of the “founders” of criminology, French astronomer and mathematician Adolphe Quetelet was one of the first to recognize the persistent relationship between age and crime. In his 1831 publication *Research on the Propensity for Crime at Different Ages*, he examined the national crime statistics in France for the years 1826–1829, and discovered that crime rose with age, peaking around age 25 and declining precipitously thereafter. Quetelet ([1831] 1984, pp. 54–56) wrote:

Among all the causes which have an influence for developing or halting the propensity for crime, the most vigorous is, without contradiction, age. It is, in fact, with age that man's physical strength and passions develop and that their energy afterwards diminishes ... This propensity must be practically nil at both extremes of life since, on the one hand, strength and passions, those two powerful instruments of crime, have scarcely been born, and when, on the other hand, their energy (pretty nearly extinguished) is found weakened by reason ... It is about the age of 25 years when the propensity for crime attains its *maximum*.

### *Hall*

G. Stanley Hall, in his 1904 book *Adolescence*, which was a follow-up to his text *Psychology*, charted the changes that occur during the teens, including crime. In the opening of Chapter V, he stated: “In all civilized lands, criminal statistics show two sad and significant facts: First that there

is a marked increase in crime at the age of twelve to fourteen, not in crimes of one, but of all kinds, and that this increase continues for a number of years” (Hall, 1904, p. 325). Using data from a variety of sources and nations, Hall showed that crime peaked in late adolescence and early adulthood. Interestingly, like Quetelet before him, he found that age patterns varied by sex. Mirroring future explanations (detailed below), Hall argued that the increase in crime during adolescence may be attributed to “in some cases ... [an] inability to assume any fixed position in life” (p. 330). Mirroring later theories of the age–crime curve, Hall argued that adolescence is a time of flux with biological maturity being juxtaposed with an absence of social characteristics associated with adulthood.

Around this time, the criminal justice system formally recognized that age matters not only in terms of the number and type of offenses committed but in how perpetrators should be handled. In 1899, the first “juvenile court” opened in Cook County, Illinois. Since the early 1800s, juvenile reformatories had existed in various states, places where juveniles who had committed offenses would be sent, but the juvenile court represented the development of a truly separate system for adults and juveniles. Through much of the early twentieth century, a juvenile justice was indeed distinct from the harsher adult system. In the latter part of the twentieth century, however, lines began to blur as juveniles were increasingly handled in the adult system and juvenile delinquency became “recriminalized” (Singer, 1996). Interestingly, while there have been attempts to create subsystems for particular populations (e.g., drug courts, veterans courts), no “elderly” system has been put in place in the criminal justice system, despite the uniqueness of that population.

## The Meaning of the Age–Crime Curve: Interpretations and Controversies

While the correlation between age and crime has been recognized and studied for decades, just what the age–crime curve means is anything but established. Some researchers argue that the age–crime curve is generally the same for all crimes and has remained so across different time periods. If true, this would have important

implications for crime theory and policy. Others dispute this and argue that there are variations in these curves and that research is still needed to sort out how crime unfolds over time for different crimes and different groups. This position has very different implications for policy.

### *The "great debate"*

In what has been labeled the "great debate" in criminology, which ran the gamut of topics from the meaning of age to the importance of longitudinal research methods in criminology, two very clearly articulated sides were established. On one side were Travis Hirschi and Michael Gottfredson (1983), who penned a by now classic article on age and crime in which they somewhat controversially argued that because the shape of the age-crime curve is similar across time and place, there must be something inherent to offending that leads to its increase and then decline over the life course. Using crime data from England and the United States during differing time periods, Gottfredson and Hirschi purposed that the age-crime curve was a "law of nature" that did not change regardless of social conditions. They also found that except for the differences in the amount of crime committed, the age-crime curve was unchanging between not only males and females but also whites and non-whites. Synder (2012) illustrates the prototypical age-crime curves for three distinct time periods using murder as an example. As can be seen in Synder's publication, while the overall proportions for each age category differ (for example, in 1990, the peak of the distribution for those aged 18-20 years old is much higher than that for 2010), the general shape is similar for 1990, 2000, and 2010.

According to Hirschi and Gottfredson, this implies several things. First, it means that "criminal career" research, which was just coming into form in the early 1980s, was not necessary and in fact a waste of precious resources. This was especially true of "longitudinal" studies, which follow the same people or groups of people (e.g., a cohort) over time to establish trends. To Hirschi and Gottfredson, researchers already knew what these trends were and the additional cost and time needed for longitudinal data collection was not worth the benefits. They also believed that

examining sources of criminal behavior over time, particularly social ones, was futile. If the age-crime curve was the same across time and place, social factors could not possibly be the driving force. If the age-crime curve is indeed invariant, the age at which a criminal activity occurs is largely irrelevant to the causal research involving criminal activity as any causal factors attributed to criminal behavior at one stage in life can also account for similar behavior during another stage in life. Also, the common criticism made of mainstream theories – that they cannot account for the age-crime curve – is unfounded due to the fact that theoretical causal explanations of the onset of criminal behavior are synonymous with the causal mechanisms of desistance.

On the other side of the debate, researchers took umbrage at several of Hirschi and Gottfredson's claims, suggesting that they were perhaps being a bit hyperbolic. This opposing viewpoint (represented by such researchers as David Greenberg, Alfred Blumstein, Jacqueline Cohen, and David Farrington) suggests that, in fact, the age distribution for all crimes is *not* the same, and that social factors are likely to be useful in explaining such things as onset, frequency, duration, and desistance from crime.

While much of this debate was largely theoretical, important empirical contributions were published by David Farrington (1986) and Darrell Steffensmeier and colleagues (1989). Farrington offered a useful addition to the debate by showing that in order to fully understand the age-crime curve, one must separate prevalence (e.g., how many different people are offending at a given time) and incidence (of those offending, how much do they offend?) as well as age, period (factors relating to particular historical time points), and cohort (factors associated with a group of individuals who experienced similar events) effects. His data indicated that the age-crime curve was still found even after removing period and cohort effects. There appears to be more controversy with respect to whether prevalence or incidence drives the typical age-crime curve illustrated in cross-sectional data. In other words, does the decrease in arrest rates after age 24 reflect the same people committing fewer crimes or the fact that people drop out of the offending group and those who stay in continue to offend at stable rates? This question motivated a key theoretical

advancement, which is described below. Farrington's conclusion in 1986 was that prevalence rather than incidence varied across age.

In another important empirical study, Darrell Steffensmeier and colleagues (1989) showed that between 1940 and 1980, the age distribution for arrests (using UCR data) varied considerably over time and for specific crimes. Using what they called Percentage Age Involvement, which represented the differing percentage of all arrests for each age group, they showed that some crimes do indeed peak around age 18–20, as Hirschi and Gottfredson argued. However, other crimes show different distributions, such as gambling (median age 39), driving under the influence (median age 33), and family violence (median age 30). Additionally, they showed period effects where the peak age varied by time period. For example, in 1980 the peak age for gambling was 49, but in 1940 it was 37. They conclude by stating, "Thus, there is not a single age pattern, as suggested by Hirschi and Gottfredson, but several" (p. 826).

### Recent Research

More recent research on age and crime has failed to unequivocally adjudicate these two positions, but it seems as if the "criminal career" camp has garnered more support. In other words, more recent research on age and crime has shown that there is a benefit to longitudinal methodologies, that something is to be gained by examining different parts of the criminal career, and that the relationship between age and crime is not entirely invariant (for a review, see Piquero, Farrington, & Blumstein, 2003). Research has continued to find that there is variation in the patterning of crime by age over time, but the definition of "invariance" is not definitive (see for example, Britt, 1992; LeBlanc & Loeber, 1998).

One methodological advancement in the last 20 years that has greatly impacted the study of crime and age is the group-based trajectory approach, introduced to criminology by Daniel Nagin and Kenneth C. Land (Nagin & Land, 1993). The trajectory method seeks to determine if individuals followed over time have similar or distinct pathways of criminal behavior. The availability of software and programming to implement the semi-parametric group-based model has led

to an explosion of research on the topic. As of December 26, 2014, a Google Scholar search of the terms "trajectory" and "crime" produced over 94,000 hits. If one restricts this search to publications prior to 1990, only 3,120 hits are found.

The group-based trajectory method has consistently found that more than one group of offenders can be identified according to their sequence of offending over time. This strongly implies that the age–crime curve is *not* the same for individual offenders and thus not invariant. Piquero (2008) found that, in general, three or four groups are routinely identified (for an update, see Jennings & Reingle, 2012). This strongly implies that rather than the age–crime relationship being invariant, it varies even within the same sample.

Invariance of the age–crime curve has been studied in relation to numerous factors, including gender (Steffensmeier et al., 1989; Steffensmeier & Streifel, 1991; Tittle, Ward, & Grasmick, 2003; Uggen & Kruttschnitt, 1998), race (Shulman, Steinberg, & Piquero, 2013; Ulmer & Steffensmeier, 2014), and most often by crime type (Farrington, 1986; Steffensmeier et al., 1989; Tittle & Grasmick, 1997). For the most part, these studies have found evidence of variance across the factors studied, but similarity is also often noted. For example, Steffensmeier and Streifel (1991) noted that while offending became more concentrated at earlier ages during the twentieth century, this "shifting" occurred very similarly for both males and females. This general conclusion of "similarity and dissimilarity" continues for more recent research and is epitomized by Laub and Sampson's (2003) finding of six distinct groups of offenders in the Glueck and Glueck data (variance) juxtaposed to the empirical reality that nearly every offender eventually desisted (ceased offending) (invariance).

### Theoretical Explanations of the Age–Crime Curve

Given that the age–crime curve is one of the oldest known relationships in all of criminology, not only has a tremendous amount of research been conducted on its basic shape and variance/invariance, but explanations of the relationship have been offered for decades as

well. As mentioned previously, the invariance argument is premised on the theory that social factors are unable to explain the age-crime curve. According to Hirschi and Gottfredson, this is due to the “inexorable aging of the organism” and thus is a biological phenomenon (see also Wilson & Herrnstein, 1985). In other words, crimes require physical strength and energy, both of which recede with age. More direct biological arguments have been offered in recent years, which rely on such things as evolution (Kanazawa & Still, 2000) as well as physiological changes that accompany aging (Gove, 1985; Walsh, 2009). For example, testosterone levels tend to decline over time and new evidence on brain maturation suggests that elements of cognition that are useful for impulse control and better decision-making become more fully developed during the individual’s mid 20s. This research aligns nicely with the age-crime patterns described above.

More sociological approaches to explaining the age-crime curve have noted the contradictions in modern society, in which individuals become biologically mature far before they are able to attain social maturity. Youth in high school, for example, struggle with the need to assert their independence and carve out their own identity while at the same time being constrained by legal requirements that they attend school, limits on how much they can work, and other laws restricting their rights (e.g., to smoke cigarettes, purchase alcohol, and vote). Thus, according to this societal explanation, the period just before adulthood is one of turbulence and stress, and delinquent behavior is one result (Agnew, 2003; Greenberg, 1977).

With the rise of life-course criminology, explicit theories have been developed that address the age-crime curve. Perhaps the best known, Sampson and Laub’s age-graded theory of informal social controls, explains the increase in crime in adolescence by a loosening of social bonds to parents and teachers and the subsequent decline in crime in adulthood by the replenishment of bonds, this time to spouses, children, and the world of work. In other words, in childhood, offending is relatively rare because of close-knit attachments to parents, teachers, and school. In adolescence, these social bonds become weaker, and are replaced by peers who do not have the

same restraining influence. In adulthood, offending will continue until prosocial bonds are formed by employment, marriage, and children. In the quest to discover why offenders reform, marriage and work have been extensively tested, with much research to support the theory. Other life-course theories focus on the role of delinquent peers, strain, increasing rational choice, and identity changes.

One of the more notable theories of the age-crime curve is Moffitt’s group-based typology. In 1993, Moffitt argued that the cross-sectional age-crime curve, which some researchers interpret as implying universal changes in incidence of offending over the life course, actually masks two important groups. First, there is what she referred to as the “adolescence-limited” group, which is composed of typical individuals who suffer from the maturity gap alluded to above. This group is normally adjusted in childhood, experiences the strain of adolescence mixed with antisocial peers to look up to, and as a result engage in crime and delinquency. This accounts for the “peak” in the age-crime curve, but instead of representing an increase in overall incidence, it is one of prevalence. The second group Moffitt called “life-course persistent” offenders. This group represents a very small portion of offenders but is composed of high-rate, chronic delinquents. These two classifications comprise Moffitt’s dual taxonomy of the age-crime curve. Once the adolescence-limited group readjusts and stops offending, this second group continues, which accounts for the tails of the distribution. Research is mixed on the theory, with much work finding evidence for statistical groups (as Moffitt predicted) but the number of groups often being larger than originally hypothesized.

Two final notes in closing the section on theory: First, nearly all of the work put forth to explain the age-crime curve has focused on traditional street crimes. White-collar crime has received relatively less attention and it has represented a point of contention between those who argue the age-crime curve is invariant and those who see variation. For example, white-collar crime is generally engaged in by those considerably older than the typical street criminal (Friedrichs, 2009). Whether this reflects differences in circumstance

or requires additional theoretical explication remains to be seen.

Second, it is unlikely that one class of theories or one scholarly discipline will be able to fully explain the age-crime curve. Much evidence exists to support the notion that social factors can indeed help us understand the development of crime over the life course. At the same time, biological factors are also likely to be at work. Ulmer and Steffensmeier put it well, stating, "If we want to understand age effects on crime, we cannot ignore either the human organism or his or her environment, physical or social. Empirical behavior is nearly always a complex blend of physical/biological and social factors. The relative causal weight of each set of factors will depend on what specific aspects of behavior we seek to understand" (2014, p. 394).

### What Does the Age-Crime Curve Mean for Public Policy?

Policy implications of the age-crime curve depend in large measure on the theoretical meaning of the curve. If one focuses on the work of Hirschi and Gottfredson, there are some clear implications for public policy. Hirschi and Gottfredson believed that because such a large portion of the population begins, and escalates, their criminal behavior in the early teen years, trying to figure out who the highest offenders are to punish them is useless because it takes too long to figure out who those individuals are – and they are aging out anyway. Selective incapacitation was a popular policy in the 1980s and 1990s; it dictated that law enforcement should look for the most frequent and violent offenders and lock them up. However, what the age-crime curve tells us is that even frequent and violent offenders start to reduce, or stop, their criminal activity in their late teens. By the time that officials identify the high-frequency and violent offenders, they will already be entering their late teen years and reducing their poor behavior without intervention from the criminal justice system.

The age-crime relationship also indicates that long prison sentences might be counterproductive. Incarcerating an individual, especially a youth in their teens, won't do much good if that individual is already aging out of criminal

behavior. Currently, the United States has a problem with a "graying" incarcerated population of prisoners over the age of 55 (Reimer, 2008). Research reviewed in this entry suggests that individuals over the age of 55 are among the least likely to commit crime. Paying large sums of money and dedicating criminal justice resources to this age group is unlikely to have a large impact on crime and violence.

Harsh prosecution of juveniles might actually make criminality worse by labeling a youth as a criminal. Juvenile waivers – a practice popular in the 1980s and 1990s that "waived" discretion of the juvenile court to hear a juvenile case and instead placed it within the jurisdiction of the adult court – have not shown much promise in reducing crime and criminality. Further, it goes against the knowledge the age-crime curve provides: that juveniles are already headed toward desistance from crime. Perhaps a better policy is giving "hooks" to juveniles that provide opportunities for positive change (Giordano, Cernkovich, & Holland, 2003). The age-crime relationship certainly does not say that we should ignore teens; in fact, it suggests that teens *should* be focused on – however, they should be exposed to prevention efforts and intervention when appropriate (Farrington & Welsh, 2007).

The criminal career work also has implications for policy. For example, research on criminal careers focuses on several related components, such as onset, frequency, prevalence, and career length. Understanding which offenders are likelier to have a longer criminal career can help the system become more efficient. In addition, while most offenders desist after emerging adulthood, the criminal career research has shown that not all do, and this is especially true for certain crimes. Gambling, drunk driving, and family violence are more common among those over the age of 30 – presumably because they are the ones with access to a vehicle to drive and to be married. Enforcement of these crimes should note their seriousness in later life and focus prevention and suppression efforts on older individuals as well as those in their adolescent years.

As noted above, the age-crime curve is likely a result of a mix of social and biological factors. Policies that will be most effective will recognize this and seek to address both. For example, a recognition that social bonds are important to

anchor individuals to society, while also recognizing that factors such as neurological maturation play a role in wanton behavior through the mid 20s, may be a fruitful policy approach.

## Conclusion

In sum, research on age and crime has been conducted for at least as long as scholars have empirically examined criminal behavior. The shape of the age-crime curve is remarkable for its consistency and persistence over time. A tremendous amount of attention has been paid to better understand the curve and what it means for theories and policies surrounding crime. While it appears there is much continuity in terms of the shape over time and across offenses, there is also evidence of change. Research will likely continue into the future in an attempt to settle these important debates.

SEE ALSO: At-Risk Youth; Crime Measurement; Criminology; Longitudinal Research.

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