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# But What Does It Mean? Defining, Measuring, and Analyzing Desistance From Crime in Criminal Justice

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# **Executive Summary**

Research on crime over the course of an individual's life has increased in the last 30 years both in scope and specificity. One focus area that has emerged from this work is what scholars call "desistance from crime." Generally, desistance is understood to mean the reduction in criminal behavior that occurs after a person reaches adulthood. But exactly what desistance is remains unclear, as varying definitions and measurement strategies have evolved over time. Because inconsistent definitions will lead to varying measurement strategies, it is difficult to come to conclusions about desistance.

The purpose of this white paper is to review what we know about how desistance has been defined and measured and to offer recommendations to researchers and practitioners on the best way to do both, given the constraints under which they operate.

The paper begins with a review of historical research on desistance (before the term came to prominence). Next is a discussion of conceptual definitions of desistance, which includes a suggestion to define desistance as "the process by which criminality, or the individual risk for antisocial conduct, declines over the life-course, generally after adolescence."

The paper then reviews how researchers have measured and modeled desistance and discusses the implications of these strategies. Finally, the paper provides an overview of unresolved issues and offers a set of recommendations for policymakers, practitioners, and scholars. The recommendations are as follows:

- 1. The source of data from surveys or official records is consequential for the conclusions that can be drawn from research. When possible, researchers should use surveys to measure desistance. If only official data are available, they are suitable as indirect measures of desistance and termination.
- 2. Both qualitative and quantitative data are useful for studying desistance and can provide unique information on the process. If both qualitative and quantitative data are available, researchers will be better able to capture a more complete picture of desistance.
- 3. The goal of the study should guide whether researchers use general samples or samples of persons convicted of a crime. If the study aims to generate knowledge on correlates of normative desistance, general (or community) samples will suffice. However, if the goal is to evaluate criminal justice interventions, it is necessary to use persons convicted of a crime for the sample.
- 4. Follow-up periods should be as long as possible. Follow-up periods of less than nine or 10 years may not be able to capture the entire process of desistance, but they may help identify early stages of desistance.
- Measures and modeling of desistance should move beyond a binary, "committed a crime or not" approach. Scholarship has tended to show that desistance is a process that must be modeled over time using multiple indicators.
- 6. Indicators of desistance ideally should be those relating to criminality, such as antisocial attitudes, self-control, or even common risk assessments. However, criminal behavior can be used as an indirect measure or to capture "termination" (the ending of a criminal career).

# But What Does It Mean? Defining, Measuring, and Analyzing Desistance From Crime in Criminal Justice

## Introduction

n a review published in 2001, life-course scholars John Laub and Robert Sampson (2001, p. 8) noted that a journal editor had told them desistance "was not a word" in response to their work on the subject. It is hard to imagine that being the case today, as the term has become fully entrenched in academic literature and is even making its way into policy and practice. Yet inconsistencies in the way desistance is defined and measured remain. This is problematic for a variety of reasons, including the inability to meaningfully merge research findings across studies.

The continuing difficulty in defining and measuring desistance is not surprising. Scholars have long pointed out that desistance is an "unusual" concept (Maruna, 2001, p. 17) because it is meant to capture the lack of activity rather than the presence of it. Unfortunately, early research treated desistance as precisely that: a lack of criminal behavior. This strategy, which still exists in policy research, is sensitive to the period of time selected to monitor behavior and also assumes that desistance is abrupt. More recent work has indicated that desistance is a process that may not be best measured in a binary fashion.

If desistance is more complex than simply a crime-free gap, it becomes much trickier to define and measure. In that same article referenced earlier, Laub and Sampson (2001, p. 4) asked whether desistance was like pornography: We know it when we see it (in reference to a 1964 U.S. Supreme Court case in which Justice Potter Stewart claimed to know pornography when he saw it). Pornography is difficult to define. What makes something pornographic as opposed to artistic? Similarly, desistance is a term that is increasingly used in the literature but in different ways, which can lead to significant variation in research conclusions and implications. It is also difficult to define. If a person released from prison does not commit any criminal acts in five years, has he or she desisted?

It is important, therefore, to understand what desistance is and how researchers can measure it in the most effective manner. It is essential that baseline definitions exist so that, at the very least, researchers are attempting to study the same phenomenon when they examine concepts such as desistance. If not, conclusions and recommendations for policy and practice become muddled and useless. Fortunately, scholarship on desistance from crime has advanced significantly in the past few years, allowing more nuanced and sophisticated assessments of the process to unfold.

## Overview of the Paper

The overall goal of this white paper is to provide grounded recommendations for policy and practice. To do that, the paper reviews definitions of desistance used in the literature and then offers an updated, theoretically grounded definition as a foundation for future work.

First, the paper offers brief comments on the history of desistance research, drawing on age and crime literature. Next, it discusses the ways in which existing studies measure desistance in relation to the offered definition of desistance. Which ways of measuring desistance get closest to the phenomenon of interest? Which are most likely

to advance our understanding of why people exit a criminal life and how we can facilitate that process? Finally, the paper provides detailed recommendations for researchers and practitioners who are seeking to examine and promote desistance from crime.

In the end, the paper offers a close examination of the phenomenon of desistance. What does it mean? What is its essence? The paper argues that desistance is "the process by which criminality, or the individual risk for antisocial conduct, declines over the life-course, generally after adolescence." How can researchers ensure they are actually capturing that essence in their work? And what is the best approach to measure desistance effectively and feasibly, in a way that allows practitioners to gauge the impact of programs and policies? These guiding questions provide a framework for the paper.

## **History of Desistance Scholarship**

Scholarship that examines crime over the life of an individual, called life-course criminology, is based on the work of Glenn Elder (1994). Elder argued that four themes distinguish life-course research:

- 1. Historical time and place: The way in which lives unfold is dependent on where and when people lived.
- 2. Timing: The impact of events for one's life-course depends on when it happened in his or her life.
- 3. Linked lives: People are interconnected.
- 4. Agency: Choice matters.

Theme 1, history, is relevant to any discussion of how to conceptualize desistance. The process through which individuals decelerate or cease offending may have looked much different in years past.

Desistance from crime is a relatively new concept, emerging in earnest in the last 30 years. In a review of desistance research, Rocque (2017) found that prior to the 1970s, the term desistance was virtually never used to describe the cessation of offending; instead, it described the abandonment of a particular act in progress. It was not until Wolfgang and colleagues' (1972) research on a Philadelphia birth cohort that desistance appears to have been used in the way it is today. In the follow-up to the birth cohort study, one chapter (Rand, 1987) was devoted to understanding the predictors of desistance from crime.

Although the term desistance is relatively new, the notion that crime is a young person's game is not. Research from the 19th century, though limited, recognized that when plotted against age, crimes declined. In perhaps the earliest of such observations, Belgian astronomer Adolphe Quetelet (1984), in his *Research on the Propensity for Crime at Different Ages*, originally published in 1831, found a sharp decline in crimes after ages 25-30 for both property and personal offenses. Interestingly, however, Quetelet made a point to argue that age does not directly cause a decrease in crime but rather a decrease in "criminality," or the propensity to engage in antisocial conduct. This point has been overlooked in much of the desistance literature, which uses behavior as an indicator of desistance.

Although other scholars in the 19th and early 20th centuries noted the relationship between age and crime — known as the age-crime curve (see Goring, 1913; Lombroso, 1911; Parmalee, 1918) — it was the work of husband and wife research team Eleanor and Sheldon Glueck at Harvard University that illuminated how criminal behavior changes over time. Early scholars like Quetelet used aggregate, cross-sectional data to make claims about the relationship between age and crime. In other words, the data they examined were collected at one point in time and represented, for example, the number of people arrested at various ages. This sort of analysis is informative, but it does not examine how crime changes for the same person as he or she gets older.

The Gluecks conducted some of the first longitudinal panel studies in criminology. Over a span of several decades, they led four projects that followed different samples of individuals involved in the justice system. As Rocque (2017, p. 35) wrote, "The Gluecks thus showed conclusively, through these innovative longitudinal studies, that behavior, even of serious offenders, improves over time. They did not, however, use the term 'desistance.' Instead, they referred to this phenomenon as 'maturation,' something that was related to, but not determined by, age." Although

not defined precisely, maturation referred to a process that led to reformation of behavior and, ultimately, social integration. Interestingly, the Gluecks believed that a criminal career was pre-fixed and lasted a similar length, so those who started later would end later. This implies that a research design that examines crime at two points in time — provided the length of time was long enough — would be able to identify individuals who are desisting (see, for example, Glueck & Glueck, 1940). For these studies, it would be necessary to gather information on the onset of crime.

Other 20th century criminological work noted the relationship between age and crime, but it was not a focal point until the 1980s, when career criminal and criminal career research became embroiled in a debate among criminal propensity theorists (Posick & Rocque, 2018). However, David Matza's (1964) *Delinquency and Drift* presented a relevant and novel image of juvenile delinquency. Matza argued that existing criminological theories painted a picture of a person driven to deviance by social or internal forces. These forces build up so much that, logically, individuals exposed to them should continue committing crimes well past adulthood — but they do not. To Matza, the problem is that the average youths involved in the juvenile justice system are not defined by their delinquency. They are not committed to it. Rather, sometimes they engage in it, and sometimes they do not. They drift in and out of delinquency, and when they reach maturation, it is rather easy to walk away from the criminal lifestyle. This noteworthy argument implies that, for the most part, intensive intervention or treatment is not needed to foster desistance from crime because it will occur naturally.

## Definitions of Desistance in Early Scholarship

Because desistance was not a focal point of research prior to the late 20th century, it was not well defined in early scholarship, if it was defined at all. For example, Quetelet ([1831] 1984) argued that age decreased the propensity to commit crimes, but this was based on the observation that fewer older individuals were officially involved in crime over the course of a year. As will be discussed later, it is impossible to know why cross-sectional data show that there are fewer individuals in the criminal ranks.

Another early scholar, Maurice Parmelee (1918), used prison statistics from 1910 to argue that criminality declines after age 45. However, he recognized that using prison admissions "probably exaggerates adult criminality in proportion to juvenile criminality" (p. 211). Using conviction data for males and females, Parmelee argued that criminality decreases early in adulthood. Like Quetelet, Parmelee used cross-sectional snapshots and attributed a decline in the proportion of individuals in the justice system at advanced ages to a decrease in propensity to commit crime. Both Quetelet and Parmelee did not formally define desistance; rather, it was inferred from distributions of crime by age.

The Gluecks' longitudinal studies were a departure from most research up to the early 20th century. They followed samples of youth involved in the juvenile justice system into adulthood, generally after the individuals had served time in a correctional institution. For example, in 500 Criminal Careers (Glueck & Glueck, 1930), they examined males in the sample five years after release. Their primary analyses focused on behavior, reporting the percentage who recidivated or committed new crimes. They found 80% of the men reoffended in the first five years after release.

In Later Criminal Careers (Glueck & Glueck, [1937] 1966), the Gluecks followed the same males for another five years, for a total of 10 years of post-release data. In this follow-up, they did not simply examine the percentage who had reoffended (this may be called a "binary" measure of recidivism or desistance). They also recorded the men's "progression or retrogression" ([1937] 1966, p. 9). They classified the sample as ([1937] 1966, p. 10-11):

- Successes: No crimes and no dishonorable discharges.
- Partial failures: Conviction for two minor offenses or arrest for three minor offenses (more for less serious offenses).
- Total failures: Arrests for three or more serious offenses with no convictions, arrests for three or more minor offenses with no convictions, convictions for one or more serious offenses, five or more convictions for less serious offenses, dishonorable discharge from the Army or Navy, identified serious criminal behavior, or a trend of repeated minor crimes.

In the third follow-up (Glueck & Glueck, [1943] 1976), the Gluecks classified the sample into persons committing serious offenses, minor offenses, and no offenses by the end of 15 years post-release. Thus, their examination of desistance — or maturation — included the proportion of those involved in crime, the number of crimes, and the seriousness of offending over time.

Finally, in the follow-up to their well-known *Unraveling Juvenile Delinquency* (Glueck & Glueck, 1950) — a study that followed 500 boys involved in the justice system matched to 500 boys not involved in the justice system — the Gluecks (1968) categorized the sample into those who had been arrested before age 17, between ages 17 and 25, and between ages 25 and 31. They paid attention to the timing of arrests, such as when offending began or ceased. For example, they found that of the 442 youth who had not been involved in the justice system at baseline, 62 had been convicted of crimes after age 17. In addition, of the 438 who had been involved in the justice system followed to age 31, 19.2% had no arrests between ages 17 and 25, and 39.3% had none between ages 25 and 31. The study also examined the frequency and severity of criminal behavior for the sample. These classifications recognized the complexity of pathways through a criminal career, but they may be a bit overwhelming for practical use. Additionally, they are essentially categorical measurement strategies, which may not be ideal for studying desistance as a process.

Like the Gluecks, Matza used the term "maturational reform," which means that juveniles committed delinquency but they did not do so in adulthood. Using available statistics, he suggested that "[a]nywhere from 60-80 per cent of delinquents do not apparently become adult violators" (Matza, 1964, p. 22). Thus, his definition of desistance was binary, referring to the cessation or termination of offending.

Finally, two pieces of work sparked the development of life-course criminology and the study of desistance from crime. Hirschi and Gottfredson's (1983) essay on age and crime brought the criminological focus squarely on how crime changes over the course of a person's life. They argued that across time and place, crime decreases after a late adolescent peak. Their empirical evidence was a series of line graphs plotting various indicators of criminal behavior on the y-axis against age on the x-axis. Each graph was cross-sectional, or a snapshot in time. Hirschi and Gottfredson argued that because this pattern was consistent across time and place, desistance is a universal phenomenon and longitudinal data are not necessary to further examine the process (see also Gottfredson & Hirschi, 1987).

Criminal career researchers put forth an opposing view, arguing that longitudinal data were essential to best understand how crime develops and changes (or does not change) over the life-course. These scholars (Blumstein et al., 1986) also made the case that criminologists should closely examine different facets of a criminal career, such as onset, prevalence, persistence, and desistance. In their *Criminal Careers and "Career Criminals*" report to the National Academy of Sciences, Blumstein and colleagues defined desistance in various ways, but typically regarded it as a lack of criminal behavior following some evidence of such previous behavior. Thus, like past scholars, they thought of desistance in a categorical manner, referring to the cessation or "termination" of offending (p. 405). However, they did note that to properly identify desistance, time to follow up was an important consideration, as an absence of offending could be random and simply "false desistance" (p. 91). One criminal career scholar, David Farrington (1986), also noted that aggregate crime trends may be misleading; they may suggest that persons committing crimes decelerate offending as they age, when, in fact, those actively committing crimes may continue at the same rate.

In sum, desistance from crime has been recognized for nearly 200 years. However, because desistance was not often a focus of investigations, early scholarship lacked attention to definitions and measurement. The literature on desistance developed in earnest beginning at the end of the 1980s. This work includes empirical examinations of desistance using a variety of measurement strategies. This paper turns to that work in the next section.

## **Definitions of Desistance From Crime**

In the context of research, two primary types of definitions are used to make sense of subjects like desistance. First, conceptual definitions provide "theoretical meaning" (Burns & Groves, 2011, p. 178) to phenomena. Conceptual definitions seek to illuminate what is meant by a concept. With respect to desistance, it is the answer to the question posed in the title of this paper: But what does it mean? Interestingly, the conceptual definition of desistance is not as

straightforward as it may first appear. The second type of definition — the operational definition — refers to how a concept is measured in research.

With respect to conceptual definitions, it is perhaps instructive to first discuss a concept — recidivism — that is far more established and straightforward in the criminal justice literature. Recidivism simply means engaging in a new criminal offense after a previous commission of a crime. Recidivism is typically examined in reference to some involvement in the criminal justice system because it is a measure of effectiveness (or lack thereof) of correctional approaches. For example, Maltz (2001, p. 1) defines recidivism as "reversion of an individual to criminal behavior after he or she has been convicted of a prior offense, sentenced, and (presumably) corrected." The National Institute of Justice similarly defines recidivism as a new crime after punishment or correction for a previous crime. Maltz also questions whether recidivism should take into account only the type of offense for which the individual was originally convicted.

If recidivism is the continuance of crime and desistance is the cessation of crime, it may appear logical to consider them simply different measures of the same phenomenon (Maruna & Toch, 2005). However, definitions of recidivism emphasize involvement in the criminal justice system. Recidivism, therefore, is more of an indicator of criminal justice effectiveness than of a natural progression of a criminal career. Additionally, considering recidivism and desistance to be simply opposite ends of the same spectrum (as some research continues to do; see, e.g., Cochran & Mears, 2017; Maruna & Toch, 2005) may perhaps encourage researchers to view desistance in a binary manner, as something that has occurred if recidivism has not. Recidivism, after all, is an event, which is likely why initial research considered desistance in a similar manner, as an "abrupt and complete cessation of offending" (Healy, 2016, p. 179). Later work began to view desistance as a process that unfolds over time.

Desistance is often thought of as a natural process, taking place outside of the criminal justice system, as opposed to recidivism, which is defined in relation to some criminal justice intervention (Laub & Sampson, 2003; Maruna & Toch, 2005; Uggen & Massoglia, 2003). In other words, by definition, recidivism cannot occur without some criminal justice involvement. In fact, Shover (1996) specifically defined desistance as "voluntary termination" of offending (p. 121). Thus, when and how desistance occurs is likely not fundamentally linked to involvement with the criminal justice system, but it may be facilitated or impeded by it. This is an important distinction. As Rocque and colleagues (2017, p. 188) argued, "The factors that are focused upon in criminal justice practice may differ whether one emphasizes recidivism or desistance as well." As will be made clear below, recidivism is often viewed as an all or nothing type of outcome: If you recidivate, you have failed. Desistance, as a process, implies that a certain amount of failure may be expected on one's journey toward cessation of criminal conduct. In other words, recidivism does not necessarily equate to failure. In sum, recidivism and desistance are related, but they are conceptually distinct, which is important for practitioners and researchers to keep in mind.

## Conceptual Definitions of Desistance

Developing a comprehensive list of conceptual definitions of desistance from crime is beyond the scope of this paper. However, it will be helpful to briefly review definitions to illuminate how scholars understand desistance. Conceptual definitions are also a useful starting point because without them, measurement strategies have no context.

It is not uncommon for scholars to omit clearly specified conceptual definitions of phenomena.<sup>2</sup> This seems to be especially true in later years, when desistance as a concept became more established in the literature. It may have seemed unnecessary to provide a specific and detailed conceptual definition.

This paper categorizes conceptual definitions of desistance into two "eras" (see Appendix 1) because of the evolution of the term's meaning. Era I spans from 1979 to 1999. Although some scholars mentioned desistance briefly before this period, desistance as a research focus began in earnest in the 1980s.

<sup>&</sup>lt;sup>1</sup> National Institute of Justice, "Recidivism," https://nij.ojp.gov/topics/corrections/recidivism.

<sup>&</sup>lt;sup>2</sup> Some work does not explicitly state definitions, but they can be inferred from the discussion of desistance. For example, Sampson and Laub (1993) do not define desistance conceptually, but early in the book they discuss the age-crime curve and the decrease in crime in adulthood, which is immediately followed by the introduction of the term desistance.

Era II begins in 2000 and takes us to the present. In some ways, this is an arbitrary delineation. But in the early 2000s, three landmark desistance studies were published: Maruna's (2001) qualitative study of 30 desisting persons, Laub and Sampson's (2001) essay on desistance, and Bushway and colleagues' (2001) article on understanding desistance as a process. Thus, since 2000, thinking about desistance has been more nuanced and more likely to appreciate the process-like nature of the phenomenon.

## Era I (1979-1999)

Early scholarship rarely considered desistance as a process. Work in Era I generally tended to view desistance as the termination of offending — that is, the end of a criminal career. Shover and Thompson (1992) defined desistance as the "termination of a criminal career" (p. 89). Many of the 15 definitions in Era I conceptualize desistance as being the opposite of recidivism. Blumstein and Moitra (1980), for instance, refer to desistance as "not recidivating" (p. 323). In general, most of these definitions — while not comprehensive — suggest that desistance is an event, not a process.

There were hints, though, that desistance may not be the same thing as termination. Fagan (1989) defined desistance as a process whereby the frequency and severity of violence decrease, culminating in the end of criminal behavior. Bushway and colleagues (2001) argue that Fagan was the first to separate desistance from termination. Additionally, the work of Laub and Sampson, two of the pioneers of "life-course criminology," has consistently viewed desistance as something that happens over time. However, their most detailed and complex discussion of desistance (Laub and Sampson, 2001) did not occur until Era II.

## Era II (2000-Present)

A very clear shift in thinking occurs in Era II. No longer are definitions of desistance dominated by cessation- or termination-like language. Instead, "process" becomes more prevalent in the conceptualizations. At this point, it seems to be generally accepted that desistance "supports" termination (as Laub and Sampson (2001) argued) and takes place over a period of time, which is variable.

In 2001, Shawn Bushway and a group of fellows at the Violence and the Life Course Summer Institute published a seminal article on how to think about and measure desistance. They argued that, historically, desistance had been thought of as an event (e.g., termination of offending). Drawing on the work of Laub and Sampson (2001), Fagan (1989), and Loeber and Le Blanc (1990), they made a clear case for thinking about desistance as a process that leads to termination. Their definition of desistance went further than others in arguing that desistance means a decline in "criminality," not offending. Previous scholars had stated that desistance was a decline in, or the termination of, offending, which suggests that criminal behavior is the appropriate indicator to measure desistance. Reframing desistance to reflect criminality — or the propensity to offend — is consistent with other work (Laub & Sampson, 2001) and has profound implications for criminal justice evaluation.

If desistance is a process by which criminality declines, then its measurement (discussed in the next section) may not have to rely on behavior or crime. Bushway and colleagues' (2001) definition suggests that desistance is a process that involves a decrease in the rate of offending over time, where offending is used to measure criminality. It is not, however, clearly the case that criminality must be measured via crime.

## Stages of Desistance

Other advancements in conceptualizations of desistance from crime have built on the distinctions between desistance and termination, and assert that desistance is not a uniform or monotonous process that, once begun, is gradual and continuous.

Aggregate, cross-sectional graphs of age and crime do give the impression that the desistance process is continuous. However, panel or longitudinal data following the same individuals over time present a different story. In some ways, Matza's (1964) description of engaging in and exiting delinquency applies here. He argued that youth "drift" between conventional and delinquent society — sometimes they go straight, and other times they fall back into delinquency.

Piquero (2004) argued that many criminal careers involve "intermittency." In other words, "offenders experience brief lapses and sporadic episodes of crime occurring at sometimes unpredictable intervals" (p. 105).

Although criminologists have long noted this zigzag or intermittency with respect to criminal careers, this observation has only recently found its way into definitions of desistance. It is a vital part of understanding just what desistance is. It suggests that to properly diagnose desistance from crime, researchers must pay attention to more than simply whether an individual has a crime-free gap.

Maruna and Farrall (2004) provided a useful definition of desistance that explicitly incorporates stages. They proposed that desistance has two stages. Primary desistance is "any lull or crime-free gap." Secondary desistance — which should be of much more interest to practitioners — is a more permanent change from offending to nonoffending and involves the transition to a noncriminal identity (p. 4). McNeill and Schinkel (2016) added tertiary desistance to this delineation, which is when the community views the individual as a person not committing crime.

Others have similarly delineated desistance into stages, such as early- and late-stage desistance (Healy, 2010; King, 2014; Shapland & Bottoms, 2017). For example, Farrall and Calverley (2006) classified their sample of persons on probation into three groups: (1) no offending; (2) showing signs of desistance; and (3) continued offending, which was further broken down into increasing or serious offending.

The stage-based approach implies that definitions focusing on termination will not adequately capture desistance. Termination, on the other hand, is a bit more straightforward: It is the cessation of a criminal career, or the last offense committed. In some respects, the study of recidivism seeks to identify termination. It cannot, as recent definitions imply, capture desistance from crime.

## A Working Definition of Desistance

The evolution of scholarship over the last 40 years clearly shows that desistance is best represented as a process, rather than an end state. Further, that process is not likely to be uniform, smooth, or irreversible.

Nonetheless, it appears that desistance is a general phenomenon and applies to individuals who may have engaged only in minor delinquency, as well as to persons engaging in serious, chronic criminal activity. Some have questioned whether desistance can occur for those who have committed only a few criminal acts, or for those who offend at low rates (Laub & Sampson, 2001; Maruna, 2001). Is it really desistance, they wonder, when an individual who was never seriously engaged in criminal behavior stops offending? Others (Maruna & Farrall, 2004) suggest that practitioners should focus on internal, identity-based changes, rather than initial or perhaps temporary forays into reduced offending.

If desistance is a universal phenomenon that affects all individuals — albeit at different points in their life-course — then it does not make sense to restrict its study to only those involved in serious, chronic criminal activity. Additionally, if desistance truly occurs with a change in identity or attitudes, then arguably its conceptualization should shift from a focus on criminal behavior. Thus, Bushway and colleagues' (2001) definition of desistance seems to be closest to the appropriate way to understand the phenomenon. Desistance is about criminality, not necessarily crime. This conceptualization allows researchers to examine the desistance process without concern for level of offending.

Criminality is defined as a propensity to engage in offending, however, and so the two are very clearly connected. A useful conceptual definition of desistance, then, is "the process by which criminality, or the individual risk for antisocial conduct, declines over the life-course, generally after adolescence." Thus, desistance may or may not occur even if an individual recidivates or does not engage in antisocial behavior. This again implies that recidivism measures are not likely to sufficiently capture desistance. The concept of false desistance — when a particular measurement strategy, often using a binary or event-like definition, indicates desistance that has not yet occurred — would be avoided using this conceptualization.

For practitioners and researchers, this conceptual definition means that they should use criminal behavior as an indirect measure when studying desistance. Desistance may occur even if criminal conduct continues. The key is to capture criminality and build in assessments that allow for an examination of how criminality is — or is not — changing. Criminality can change in several ways, resulting in less serious offending, less frequent offending, or less variety in offending. Additionally, the desistance process generally concludes with termination, or the cessation of criminal conduct.

## Operational Definitions of Desistance

Operational definitions in research are akin to measurement strategies used to capture phenomena of interest. For example, although the definition of crime may appear straightforward at first, how researchers actually measure it varies substantially because of data availability or the sample under examination. Some may use self-report measures of how many times an individual has engaged in a number of offenses, which is then summed to create an overall scale of criminal behavior. Others may use a slightly different version of a criminal behavior scale, focusing on whether an individual has engaged in any of a particular number of offenses, with higher scores indicating a greater variety of offenses committed. There are various reasons why researchers use a particular type of measurement strategy (see Sweeten, 2012).

Recidivism is also measured in different ways, despite its conceptual clarity. For example, some may measure recidivism using official reports (arrests, convictions, sentences) or self-reports of criminal conduct. Then researchers must decide the length of follow-up, which is crucial for assessment. Many more individuals will "fail" the longer the follow-up period. And so it is with desistance: the longer the follow-up period, the less likely desistance will be found if using binary or event-like measurement strategies.

Like conceptualizations, operational definitions of desistance have evolved over time. Operational definitions are linked to conceptual definitions because the way something is measured is ideally guided by how that phenomenon is understood. Early operational definitions followed early conceptualizations of desistance. Once desistance was widely acknowledged to be a process, measurement strategies changed to reflect that. Appendix 2 divides operational definitions into Eras I and II. Again, this list is not comprehensive; it is meant to reflect the evolution of how research has measured and examined desistance over time.<sup>3</sup>

#### Era I (1979-1999)

Early measurement of desistance often examined whether individuals had reoffended in a certain period of time. For example, Cusson and Pinsonneault (1986) used a five-year window for persons imprisoned for robbery who had recidivated. Those who had not been arrested during that time had desisted. Barnett and Lofaso (1985), using the Philadelphia Birth Cohort study, considered desistance to have occurred if there were no arrests between the last arrest and age 18. The length of follow-up and ages varied substantially across studies. Some used one year (e.g., Paternoster, 1989), others three years (Shover & Thompson, 1992), and some more than 10 years (Farrington & Hawkins, 1991).

At the same time, it is clear that some scholars had begun to think of desistance and measure it in a more complex manner. For example, using follow-up data to the Philadelphia Birth Cohort study, Rand (1987) defined desistance with a bit more nuance, using seriousness and frequency of offending for those who had engaged in serious delinquency. Laub and colleagues (1998) also sought to measure desistance in a process-like manner; they were perhaps the first authors to use trajectory analyses to plot desistance from crime.

#### Era II (2000-Present)

By Era II, the understanding of desistance as a process had become entrenched in the literature. After the early 2000s, researchers increasingly used specific analytical techniques to measure desistance. Although Laub and

<sup>&</sup>lt;sup>3</sup> This list is based in part on the work of Kazemian (2007) and Rocque (2017), who both provided lists of operational definitions of desistance from crime.

Sampson (2003) operationally defined desistance as an absence of new offenses (arrests) up to age 70 (p. 91), they also examined trajectories of offending and modeled desistance using multilevel models. These approaches allow researchers to model changes in crime, including factors that increase or decrease offending over time. This appears to be relatively standard in recent work; Abeling-Judge's study (2020) is one of the latest examples.

Some scholars in Era II have continued to use the absence of offending during a particular period of time to represent desistance (e.g., Maume, Ousey, & Beaver, 2005). If the desistance process has begun for individuals, then there will likely be an absence of offending during that period. However, if the conceptual definition proposed in the previous section accurately captures desistance, then binary or event-like measurement strategies will not be adequate.

It is important to note that nearly all studies have measured desistance using some form of antisocial behavior. That is consistent with the conceptual definition of desistance as a decline in, or absence of, criminal conduct. However, if desistance supports such a decline and is, in fact, a change in criminality, then it could potentially be measured without reference to actual behavior. Researchers could use other indicators such as self-control, which some regard as the cause of criminality (Gottfredson & Hirschi, 1990), or attitudinal measures examining how individuals view crime. Scholarship has shown, for example, that over time, those engaged in crime tend to view such behavior less favorably and as less likely to pay off (Giordano, Cernkovich, & Rudolph, 2002; Shover, 1996). These attitudes have been associated with desistance, measured behaviorally; however, it is possible that the attitudes are themselves indexing desistance defined by a decline in criminality.

Criminological researchers have developed measures of criminality. For example, Walters and colleagues created a 14-question measure of lifestyle criminality that included offending behavior and outcomes such as education, marital failure, and job stability (Walters, White, & Denney, 1991). Some items in their measure may need to be revised or updated. Another measure of criminality — risk assessments — are generally used to develop a "risk of recidivism" score. Risk assessments often use offending history (e.g., crime) along with dynamic (e.g., changeable) components like employment, family relations, and attitudes. Criminality measures should be constructed using a variety of attitude and behavioral indicators.

As noted, scholars typically use criminal behavior to study desistance (and recidivism). The definition offered in this paper suggests that criminal behavior represents an indirect indicator of desistance. Criminality is the propensity to engage in criminal behavior, and so such behavior is, clearly, conceptually relevant. When using criminal behavior for evaluation research, particularly in a binary format, there is a potential to overlook desistance. In other words, criminal behavior may take place while an individual is desisting, for a variety of reasons.

Research using criminal behavior should be explicit about what is being measured and the drawbacks of such a strategy. For example, relying on purely official measures of crime (e.g., arrests, convictions) is problematic due to racial biases in the application of the law (Tonry, 2010). However, official measures of crime may be all that are available to researchers or practitioners. Clearly, from a public safety standpoint, if a large percentage of people commit new crimes, whether they are in the process of desisting may seem less important. Additionally, and importantly, criminal behavior can help identify the end point of desistance, that is, termination. Without criminal behavior, in fact, it is difficult to know when the desistance process has completed. Thus, it is recommended that researchers measure both criminality and crime — perhaps as part of the same underlying trait — in evaluation and policy research.

## **Methodological Techniques Used To Examine Desistance**

Scholars have used distinct methodological approaches to examine and understand the desistance process. This section discusses some of these approaches: qualitative and quantitative data, official and self-report measures, sample and population, and types of modeling techniques. Some approaches are more common than others, but each has value. It is important to recognize what information each technique or approach can provide — and what it cannot provide.

## Quantitative vs. Qualitative Methods

Quantitative approaches to studying desistance have used varying measurement strategies, reviewed in Appendix 2. Often desistance is quantitatively measured in terms of whether new involvement in the criminal justice system or new involvement in antisocial behavior has occurred over a set period of time. Additionally, the use of multilevel models or trajectory analyses is clearly a quantitative strategy and not applicable to qualitative methods. Qualitative approaches seem more useful in using subjective definitions of desistance. For example, in-depth interviews allow researchers to probe attitudes toward antisocial behavior and intentions to make changes.

At the same time, it is possible to operationally define desistance in a quantitative manner (e.g., no new arrests over the last three years) and analyze the data qualitatively. One example is the work of Haggård and colleagues (2001). In their qualitative study of individuals who had committed violent crimes, they defined desistance as not having been convicted of a crime for the past 10 years or more. They analyzed the sample using qualitative techniques to determine how desistance had occurred.

Researchers can use the same definitional approach in both quantitative and qualitative methods. Maruna (2001) asked respondents if they were in the process of desisting and whether they had engaged in any crimes over the past year. This type of definition is ideal for qualitative methods but can also be used in quantitative work. Massoglia and Uggen (2007) used quantitative methods but were able to provide two forms of measurement: one asking individuals if they were engaged in less antisocial behavior than they had been in the past, and another asking about their behavior in relation to their peers.

Both qualitative and quantitative approaches can be valuable in measuring desistance. It is important to note, though, that the two methods provide different information. Qualitative approaches are useful for understanding mechanisms by which correlates of desistance promote behavioral reform (Veysey, Martinez, & Christian, 2013, p. 235). This does not mean, however, that mechanisms cannot be studied via quantitative means.

Ideally, to best understand the when, how, and why of desistance, researchers should use a mixed-methods approach. However, for practitioners, the type of data available for evaluation are likely to be official records. Thus, quantitative methods — including quantitative operational definitions — are more applicable to evaluation research. Definitions that are more subjective, or ask individuals to indicate their intentions to desist, may be less relevant to such work. Quantitative methods also allow researchers to examine statistical correlations or predictors of desistance, which will likely be relevant for policymakers. In sum, the selection of qualitative or quantitative measurement strategies must be based on the availability of data and the purpose of the study.

Qualitative approaches have led to novel theoretical perspectives on desistance (e.g., Giordano, Cernkovich, & Rudolph, 2002), and, thus far, qualitative work does not appear to contradict quantitative studies (Veysey, Martinez, & Christian, 2013). In fact, in their review of desistance scholarship, Bersani and Doherty (2018) argued that the two approaches often focus on different factors (e.g., structural factors examined quantitatively and subjective factors examined qualitatively).

## Official vs. Survey Data

Another consideration is the source of data used for assessing desistance. Although desistance from crime is often considered a process of devolution from engaging in antisocial behavior, researchers are limited in the data available for analysis. Historically, criminologists and policy researchers have used official records (e.g., police reports, court convictions) to measure offending. However, the limitations of this approach have long been documented (Sellin, 1931). For example, what researchers have called "the dark figure of crime" — or the large portion of criminal behavior that goes undetected by the criminal justice system — clearly causes problems for desistance scholars. Also, the notion of false desistance initially emerged in response to the use of official data. An individual may appear to have desisted when looking at official records (e.g., arrest-free over the last three years), but he or she may have engaged in antisocial behavior during that time.

This does not mean that official records should be disregarded. Other forms of data collection (e.g., surveys or interviews) that do not follow up with individuals until their death or imprisonment for life can also lead to false desistance. Official records do have value and can be used to gain insight into desistance. If desistance is conceptually defined as a process, however, binary (e.g., arrested or not) measurement strategies may not be ideal. In that case, researchers can look at the frequency of arrests across a number of years (the longer, the better), explore a decrease in "seriousness" of offending over time (Loeber & Le Blanc, 1990), or incorporate timing into assessments.

Government studies may be restricted to using official records when examining desistance. For example, the Bureau of Justice Statistics regularly releases reports on recidivism of individuals involved in the justice system. Recidivism is measured in the manner discussed previously — the percentage of individuals released from state prison who were arrested by year. One report (Alper, Durose, & Markman, 2018) included an examination of desistance from crime, but defined it as having no additional arrests after a particular year (e.g., the opposite of recidivism). They found that only 17% of released individuals were not arrested within nine years. A nine-year follow-up may be long enough to capture desistance, given some research that has shown that the risk of rearrest is similar for persons convicted of a crime who have completed any court-ordered punishment and for the general population after about six or seven years (Kurlychek, Brame, & Bushway, 2006). However, other research has indicated that the time frame for the risk of a person convicted of a crime reoffending to match the general population's risk is 10 years (Hanson, 2018). Measuring desistance using binary "arrested or not" variables also seems more relevant to capturing termination, rather than the process of desistance. Additionally, if only a handful of post-release years are available, the absence of arrests may capture a temporary lull in offending or undetected offending.

Researchers have also used surveys or interviews that rely on individual reports of behavior to examine desistance. This method ostensibly addresses the dark figure of crime issue because it does not require the criminal justice system to have been aware of the acts. It also requires strong assumptions regarding individual honesty and memory. In the past, longitudinal data were difficult to come by. In fact, certain scholars argued against their use because we already know what happens over the life-course: Crime declines with age (Gottfredson & Hirschi, 1987). Today, there are numerous projects that follow the same people over time (a longitudinal, panel design). These projects provide a deeper understanding of how crime patterns change over the life-course.

A few studies have compared the use of official and survey data when examining desistance from crime. Uggen and Kruttschnitt (1998) compared self-reported "illegal earnings" with arrest and found that men and women differed with respect to desistance on both measures, though gender- and race-based differences in predictors of both types of desistance emerged. Massoglia and Uggen (2007) expanded on this type of comparison, using four operational definitions of desistance that included an official measure (no arrests in the last three years). This was compared to a subjective measure that asked individuals to think about the last five years and whether they had engaged in less crime, a reference group measure that compared individuals to their peers, and a behavioral measure that used self-reports of offenses for the last three years. The highest rate of desistance was found using official records (85% had desisted from crime), and the lowest was found with the reference group measure (60% had desisted from crime). Interestingly, there were race and gender differences with respect to these measures (whites were more likely to desist compared with nonwhites using the behavioral variable, but less likely to desist using the reference group variable).

More recently, Farrington and colleagues (2014) examined data from the Cambridge Study in Delinquent Development, a sample of 411 working class boys that began in 1961. They argued that, theoretically, desistance may occur later using self-reports compared with official reports because it is logical that people may continue to commit crimes and not get caught. According to self-reports, the age of desistance varied by type of crime (from 15.24 to 38.18), with an overall average age of 35.20. Removing theft from work and fraud, the average age of desistance derived from self-reports was much younger — 19.50 years old. Using convictions (official records), the average ages also varied, but the overall average for the same crimes was older — 25.07 years old. Removing theft from work and fraud reduced the age of desistance to 23.38, which was older than the age of desistance for these crimes using self-reports.

It should be noted, however, that research has indicated considerable agreement between self-reports and official records (Krohn et al., 2010; Maxfield, Weiler, & Widom, 2000), lending support to the idea that with some variation, self-reports are reasonably accurate. Piquero, Schubert, and Brame (2014), for example, found that for a group of

youth involved in the juvenile justice system who commit serious offenses, self-reported arrests and arrest records were generally in agreement, with few race differences. However, they did find gender differences, with males reporting more arrests than would have been expected from their self-reported level of arrests. Early work has also indicated that African American males may underreport criminal behavior (Krohn et al., 2010).

## Sample and Population

Another important consideration is the type of sample used in desistance research. For example, much desistance scholarship relies on community samples and is heavily weighted toward persons committing nonserious offenses or persons committing no offenses. The earliest desistance research, however, did use samples of those convicted of a crime (e.g., Glueck & Glueck, 1940) and, with the publication of the Pathways to Desistance Study data, more scholarship on desistance with samples of persons committing serious offenses is emerging. But such considerations should not be overlooked. Laub and Sampson (2001) argued that, since desistance is the norm for groups of persons not committing criminal acts, they should not be the focus of scholarly attention. Laub and Sampson raised an important question regarding whether an individual can be said to have desisted after only one offense. Meanwhile, Maruna and Farrall (2004) noted that researchers do not know much about why persons committing nonserious offenses desist.

It seems safe to say that to understand desistance, it is essential to examine both community samples (e.g., individuals not involved in the criminal justice system) and samples of those convicted of a crime. Policy-relevant information may be derived from nonoffending or community samples. For example, Warr's (1998) analysis of the National Youth Survey found that peers are an important part of whether one continues to offend, and recent work with samples of persons not committing criminal acts supports this finding (Copp et al., 2020). This information can be used to support parole orders concerning the routine activities of individuals released from incarceration. For example, orders preventing individuals from socializing with former peers may be important in helping facilitate desistance. This information may also help explain why those who are released from incarceration and move away from their previous locales have more positive behavioral outcomes (see Kirk, 2020).

At the same time, if researchers are interested in evaluating the effects of criminal justice practices or interventions on desistance, then samples of persons convicted of a crime are clearly necessary. There are several well-known desistance studies using such samples from specific criminal justice agencies, including Delaware (Paternoster et al., 2016), California (Ezell, 2007), and Maryland (Caudy et al., 2014; Wooditch, Tang, & Taxman, 2014). But studies examining how criminal justice interventions affect desistance (rather than recidivism) are lacking. More information is needed on which approaches facilitate desistance.

## **Modeling Techniques**

The final consideration examined here is how scholars model desistance from crime. As noted previously, some studies have defined desistance as binary, meaning that it is considered to have occurred if no offenses are recorded within a certain time frame. Persons who desist can then be compared to persons who persist. Defining desistance as a process, however, requires other modeling strategies. The conceptual and operational definitions researchers use should inform the ways in which desistance is modeled. Desistance has been modeled several ways in the literature, including regression analysis, trajectory group analysis, growth curve analysis, and survival analysis.

Modeling techniques vary by conceptual definition and are more relevant to quantitative approaches. If desistance is considered a binary phenomenon, and individuals in the sample are coded as having desisted or not, then a logistic regression approach can be used (see Shover & Thompson, 1992; Warr, 1998). Daniel Nagin introduced trajectory group analysis to criminology; it allows the researcher to identify latent groups of individuals who follow similar offending pathways over time. This approach is useful because it does not assume each person has the same trajectory of offending (see, e.g., Bushway, Thornberry, & Krohn, 2003; Cochran & Mears, 2017; Laub, Nagin, & Sampson, 1998). Growth curves also allow the researcher to model the overall process of change in offending over time, but it does not break the sample into distinct groups (see Hussong et al., 2004; Laub & Sampson, 2003; Rocque, Posick, & Paternoster, 2016).

Survival analyses take into account behavior (e.g., offending or not) and time to that behavior. Bushway and colleagues (2004) suggested that survival analyses allow scholars to truly model the process of desistance, marrying recidivism and desistance scholarship. "Thirty years ago, recidivism and desistance were complementary measures. Those who failed after a certain period were recidivists, and those who did not were desisters. Now, cutting-edge recidivism studies focus on hazard rates of offending over time and cutting-edge desistance studies focus on measuring trajectories of offending over time" (Bushway, Brame, & Paternoster, 2004, p. 91). They then demonstrated that these two measures are actually conceptually similar, with one including time and the other allowing the estimation of multiple trajectories. Bushway and colleagues called for survival analyses and trajectory analyses to be integrated to best study desistance from crime.

Finally, Paternoster and Bushway (2009), in their exposition of a new theory of desistance, recommended time-series analyses as a way to model desistance (and theoretical predictors) over time. Time series are used when panel data are available, typically to examine trends or breaks in trends, such as crime rates. Interestingly, they argued that their approach is consistent with a view of desistance as a "latent propensity to commit crime over time" and that their method allows one to "study the continuous latent propensity and not the realization of this propensity" (p. 1137). Paternoster and Bushway then showed that if a time series is nonstationary (as would be expected from trajectories of offending over time), then scholars can determine if there is evidence of a structural break that led to changes in the trajectory. This seems applicable to researchers and practitioners who wish to evaluate whether a program or intervention was effective in reducing criminal conduct.

Modeling techniques are not without consequences. Research has shown that varying approaches to examining desistance arrive at varying conclusions. For example, Bushway and colleagues (2003) used the same dataset to explore two methods of measuring desistance. The first method defined those who committed a crime before age 18 but not after age 18 as having desisted; this method identified 27.6% of the sample as having desisted. The second method used trajectory analyses, which produced seven latent groups. One group was labeled "bell-shaped desisters" and represented 8.4% of the sample. Importantly, they found that "there is only agreement by the two methods in 4.8% of the cases" (p. 146). Another study, by Lussier and colleagues (2015), used four methods — the binary approach, trajectory modeling, dynamic classification tables, and survival analyses — and similarly showed variations in conclusions across methods.

As an additional point, modeling techniques can only get the research so close to identifying causality. When evaluation research is the focus, randomized trials are preferred.

## **Unanswered Questions and Recommendations to Practitioners**

The conceptual and operational definitions of desistance have evolved over time. It appears that a consensus has been reached that, conceptually, desistance is a process and is distinct from a state of termination. Thus, static definitions and modeling strategies are inadequate. However, the best approach to operationally define the process remains in dispute. The choice between survey and official records, quantitative and qualitative methods, types of samples, and various modeling techniques is consequential for the researcher.

## Type of Data

The type of data used — official records or surveys — will clearly be related to data access. If survey or interview data are available, they should be used because they allow a more accurate picture of actual behavior than arrest and convictions, which are contaminated by legal decisions. Additionally, surveys allow the inclusion of other indicators, such as antisocial attitudes, self-control, and job and marital stability, that may be used to construct criminality measures. In other words, whether a person is arrested is contingent on whether he or she committed a crime (ideally), whether that crime came to the attention of the police, and whether the police considered a crime to have occurred and had the necessary resources and evidence to make an arrest. A survey or interview question asking someone if he or she engaged in a particular type of crime is simpler and more direct.

#### Oualitative vs. Quantitative Method

The choice of a quantitative or qualitative method is more complex. If only official data are available, quantitative approaches are generally necessary. However, survey and interview data enable both quantitative and qualitative methods. The choice between the two depends on the purpose of the study. If the goal of a project is to identify the correlates of desistance, quantitative approaches are more appropriate. However, if the purpose is to understand the mechanisms by which desistance occurs, including how particular policies or interventions influence that process, qualitative approaches are warranted. The purpose of the project should guide which method is chosen.

If data access is not an issue, researchers should assess both correlates and mechanisms of desistance. This may lead to a mixed-methods approach, but there is precedent for that approach in the field (e.g., Giordano, Cernkovich, & Rudolph, 2002; Laub & Sampson, 2003; Sampson & Laub, 1993).

## Type of Sample

The choice of a sample of persons who have been convicted of a crime or a general sample is again dependent on the purpose of the project. Thus far, it does not appear that the findings from samples of persons who have committed a crime contradict those from more general samples. If the goal is to understand which informal processes are related to desistance (and how), general samples can be informative. However, as is generally the case, if researchers and practitioners are evaluating a criminal justice intervention or program, samples of persons who have committed a crime are necessary.

## Follow-Up Time Frame

Another unanswered question is how long the follow-up time frame should be to adequately capture desistance. Researchers have assessed recidivism using varying windows, often one to three years. Although this is certainly adequate to determine whether an individual has reoffended, and data show about 68% will do so within three years (Alper, Durose, & Markman, 2018), it is not long enough to capture the desistance process. Studies to date have indicated that the risk of recidivism for persons convicted of a crime declines to a point indistinguishable from persons never convicted of a crime after nine or 10 years (Hanson, 2018). Thus, a follow-up period of at least nine to 10 years seems necessary to capture the desistance process.

It would be useful if researchers and practitioners had access to historic data so they could use previous cohorts to provide longer-term assessments. For evaluation research, however, short follow-ups may capture only certain stages of desistance. Further, research has shown that the effect of the criminal justice system on desistance may take some time to emerge (Farrall & Calverley, 2006; Farrall et al., 2014).

## Measures and Modeling of Desistance

If desistance is considered to be the termination of offending, then binary measures (committed a crime or not) are sufficient. If they are restricted to using official data, researchers should consider the number or variety of arrests or convictions to better capture the desistance process. This would allow a more nuanced examination of whether criminal conduct is decreasing or remaining stable, as well as a more accurate assessment of whether an absence of offending during a particular time period is more than a temporary "lull" in such behavior.

However, there appears to be a consensus on the idea that desistance is a process and that it is best measured using a model that captures trends over time, such that trajectories can be estimated. Survival analyses or growth models appear to be well-suited to this task. Group-based modeling is also useful, but there are questions about the interpretation of the groups that emerge (Sampson & Laub, 2005). Group-based modeling seems more suitable for theoretical tests than for evaluations of policy and practice.

#### Indicators of Desistance

Almost without exception, scholars have measured desistance using behavioral indicators (e.g., arrests, self-reports of crime). If desistance is a process, then binary indicators are insufficient. The question then becomes which behaviors represent the most useful indicators of desistance.

Frequency and variety scores are among the most used measures of criminal behavior. They provide slightly different information. Frequency scores record the number of offenses committed over a particular time period. These indicators are useful for evaluating whether criminal behavior rates decline over time. However, frequency scores have been criticized for being skewed by nonserious behaviors. For example, if a frequency score includes 10 items, one of which is speeding, a person who speeds a lot might be coded as a person who offends at high rates or chronically. For that reason, Sweeten (2012) recommended the use of variety scores, which are constructed by summing the number of distinct offenses an individual engaged in over a period of time.

A question that desistance scholars have not addressed thus far is whether desistance can be measured using noncriminal indicators. Laub and Sampson (2001) argued that desistance is a process that supports termination from offending, and Bushway and colleagues (2001) suggested that it is a reduction in criminality. The reduction of criminal behavior is the outcome or result of desistance from crime. As such, it is an appropriate indicator — but an indirect one. Direct measures of criminality could ostensibly better capture desistance. For example, scholars should explore self-control, antisocial attitudes, and antisocial or prosocial identity. They should also explore other measures of criminality, such as popular correctional risk assessments. None of these indicators, however, will perfectly align with criminal behavior over time, as crime is the result of criminality, opportunity, and contextual and other factors.

Focusing on criminality, however, avoids some of the pitfalls associated with using crime to measure desistance. Issues like false desistance, temporary lulls in offending, and time to offense are not as salient if researchers focus on criminality. Criminality is a latent trait that, if properly operationalized and measured, may more accurately assess whether desistance is occurring or has occurred than behavior, which is the result of criminality plus random noise. Thus, researchers should explore using indicators of criminality in desistance scholarship. Because criminality is theoretically a continuous latent trait, binary or dichotomous indicators would not be adequate. If desistance is the process by which criminality declines, then reductions in the trait would be evidence that desistance is occurring. Researchers could use criminal behavior to measure termination — once offending ceases, the process is complete. Termination, under this specification, would be slightly trickier to measure, given the well-known difficulty with establishing that offending truly has ceased.

## Conclusion

The study of desistance from crime has matured from historical recognition that crime, in the aggregate, has a curvilinear relationship with age, to sophisticated modeling strategies meant to capture the process. This paper examined the conceptual and operational definitions of desistance as they have evolved in the last 20-30 years. In addition, the paper offered a conceptual definition that, following Bushway and colleagues (2001), views desistance as a process that causes a decline in crime and is best measured via criminality, rather than via crime.

The paper explored conceptual and operational definitions using a somewhat arbitrary delineation of eras, but one that clearly demonstrates how research on desistance has changed over time — from the opposite of recidivism to the modeling of a process. Defining desistance as a process necessitates somewhat complex measurement or modeling strategies, such as survival analyses, growth curves, or group-based trajectory analyses.

The measurement of desistance also varies according to whether researchers use survey data or official records and qualitative or quantitative methods. Generally speaking, self-reports are preferable to official records, but researchers can use either to effectively measure desistance. However, if desistance is a decline in criminality, then official records are only able to measure the process indirectly. Qualitative methods differ from quantitative methods in the type of information they produce; if possible, researchers should use both qualitative and quantitative methods. This will help them best understand the ways in which policies and practices influence desistance (or do not).

The last section reviewed recommendations and suggested that desistance can be measured using indicators other than criminal behavior. This is somewhat novel but is consistent with the idea that desistance is a process by which criminality (not necessarily crime) declines. Using indicators of criminality may help avoid the complications that arise when using crime to measure desistance.

Overall, the literature on desistance from crime is rich and continually expanding. New and innovative ways to define and measure desistance will likely emerge in the near future. Researchers, practitioners, and policymakers need to keep abreast of these developments so they can integrate the work into evaluations and make criminal justice policy as effective as possible.

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# **Appendix 1. Conceptual Definitions of Desistance From Crime**

	Citation	Definition
	Era I: 1979-1999	
1	Trasler (1979)	"Giving up altogether the habit of" crime (p. 315)
2	Blumstein & Moitra (1980)	"Not recidivating" (p. 323)
3	Shover & Thompson (1992)	"Termination of criminal careers" (p. 89)
4	Cusson & Pinsonneault (1986)	"The decision to give up crime" (p. 73)
5	Rand (1987)	When individuals "stop offending" (p. 134)
6	Feld & Straus (1989)	"The cessation of a pattern of criminal behavior" (p. 145)
7	Fagan (1989)	"A process of reduction in the frequency and severity of family violence, leading to its eventual end when 'true desistance' or 'quittin occurs" (p. 380)
8	Loeber & Le Blanc (1990)	"A slowing down in the frequency of offending (deceleration), a reduction in its variety (specialization), and a reduction in its seriousness (de-escalation)" (p. 382)
9	Farrington (1992)	"End" of a criminal career (p. 521)
10	Sampson & Laub (1993)	"Decline (in crime rates) across the adult life span" (p. 6)
11	Sommers, Baskin, & Fagan (1994)	"The cessation of a pattern of criminal behavior" (p. 127)
12	Warr (1998)	"Reduce(d) deviant behavior during adulthood" (p. 184)
13	Uggen & Kruttschnitt (1998)	"The transition from criminal to noncriminal conduct" (behavioral desistance) and "desistance in the eyes of the law" (official desistance (p. 339)
14	Laub, Nagin, & Sampson (1998)	"The movement away from criminal and antisocial behavior patterns (p. 225)
15	Farrall & Bowling (1999)	"The moment that a criminal career ends" (p. 253)
1	Era II: 2000-Present  Laub & Sampson (2001)	"The underlying causal process" leading to "termination" of crime
•	2440 & 54111p3011 (2001)	(p. 1)
2	Bushway et al. (2001)	"The process of reduction in the rate of offending (understood conceptually as an estimate of criminality) from a nonzero level to a stable rate empirically indistinguishable from zero" (p. 500)
3	Maruna (2001)	"The process by which stigmatized, former offenders are able to 'make good' and create new lives for themselves" (pp. 6-7)
4	Giordano, Cernkovich, & Rudolph (2002)	"Movement away from a criminal lifestyle" (p. 990)

5	Bottoms et al. (2004)	"Significant crime-free gaps" (p. 368)
6	Maruna & Farrall (2004)	Primary desistance: "Any lull or crime free gap"; Secondary desistance: "The movement from the behaviour of non-offending to the assumption of a role or identity of a non-offender or 'changed person" (p. 4)
7	Farrall & Calverley (2006)	"The process of ending a period of involvement in offending behavior" (p. 1)
8	Massoglia & Uggen (2007)	General: "The steady movement away from antisocial behavior," (p. 91) but broken into subjective and reference group desistance
9	Bersani, Laub, & Nieuwbeerta (2009)	"A reduction in offending across the life course" (p. 3)
10	Paternoster & Bushway (2009)	"Eventual termination of crime" (p. 1104)
11	Healy (2010)	"Terminat(ion of) criminal careers" (p. 1)
12	Glynn (2013)	"Cessation of offending behaviour" (p. 1)
13	Weaver (2016)	"Abstinence from offending to include the process by which people come to cease and sustain cessation of offending behaviour" (p. 8)
14	Thomas & Vogel (2019)	"The decline in criminal behavior from adolescence to young adulthood" (p. 2)
15	Fredriksson & Gålnander (2020)	"A series of complex processes by which individuals transform from offenders into nonoffenders" (p. 1)

# **Appendix 2. Operational Definitions of Desistance From Crime**

	Citation	Measure/Definition of Desistance
	Era I: 1979-1999	
1	Barnett & Lofaso (1985)	No arrests between Kth (where K is the number of arrests the individual had accumulated) arrest and age 18
2	Jolin (1985)	Been involved in serious offending in the past but have not had a felony/misdemeanor arrest for five years
3	Cusson & Pinsonneault (1986)	Individuals released from prison who had not been arrested for five years
4	Rand (1987)	Number of crimes and seriousness of crimes before and after life events
5	Paternoster (1989)	No participation in delinquency one year following admission of any engagement in delinquency
6	Feld & Straus (1989)	Presence of spousal assault one year following assault in year one
7	Farrington & Hawkins (1991)	Conviction at age 21 but not between ages 21 and 32
3	Loeber et al. (1991)	Nonoffending throughout a period of less than one year
9	Shover & Thompson (1992)	No arrests in the 36 months following release from prison
10	Farrington & Wikström (1994)	Age at the last officially recorded offense up to age 25
11	Mischkowitz (1994)	Last conviction having occurred before age 31 and lack of conviction or incarceration for at least 10 years
12	Pezzin (1995)	Individuals who reported having committed offenses in the past but who did not report any criminal income in 1979
13	Uggen & Kruttschnitt (1998)	Behavioral desistance: Absence of self-reported illegal earnings during a three-year follow-up period
14	Laub, Nagin, & Sampson (1998)	Trajectory analysis of offending: A decline over time to "negligible" levels represents desistance
15	Warr (1998)	Individuals who did not report having committed any offenses in the past year
	Era II: 2000-Present	
1	Kruttschnitt, Uggen, & Shelton (2000)	Absence of new officially recorded offenses or probation violation throughout a two-year period
2	Haggård, Gumpert, & Grann (2001)	During the follow-up period, no reconviction in the previous 10 years (at least)
3	Maruna (2001)	Individuals who identified themselves as those involved in long-term habitual offending, who claimed that they would not be committing offenses in the future, and who reported at least one year of crime-free behavior

4	Giordano, Cernkovich, & Rudolph (2002)	Criminal involvement between 1987 and 1995 for a sample of institutionalized (at 1987) youth; for official crimes, desistance was defined as having no arrests for at least two years prior to second interview
5	Maruna et al. (2002)	Absence of reconviction after release from prison during a 10-year window
6	Laub & Sampson (2003)	Absence of arrest (follow-up to age 70)
7	Stouthamer-Loeber et al. (2004)	Individuals involved in persistent serious delinquency in adolescence and who did not commit serious delinquency during early adulthood (ages 20-25)
8	Farrall & Calverley (2006)	Gradual slowing down of offending, self-identified and measured through official records
9	LeBel et al. (2008)	Whether the individual was reconvicted or reimprisoned within a 10-year follow-up
10	Bersani, Laub, & Nieuwbeerta (2009)	Log-odds of conviction from age 12-79, using multilevel models
11	Sweeten, Pyrooz, & Piquero (2013)	Multilevel Poisson models of offending for a serious juvenile delinquency sample over five years
12	Aaltonen (2016)	Three definitions: Return to prison, reconviction, or new fine in four-year follow-up
13	Paternoster et al. (2016)	Survival time from release to incarceration to arrest or end of study period
14	Thomas & Vogel (2019)	Separate negative binomial regression models for adolescents and adults on a variety of offending
15	Abeling-Judge (2020)	Multilevel binomial models of offending for a serious juvenile delinquency sample over 36 months

Source: Kazemian, 2007; Rocque 2017, with additions.

# **About the Author**

ichael Rocque, Ph.D., is an associate professor of sociology at Bates College in Lewiston, Maine. His research interests are life-course criminology, corrections, and race and justice. He is the author of five books, including *Desistance From Crime: New Advances in Theory and Research* and *Great Debates in Criminology*, with Chad Posick.