

CHANGE BEGINS WITH A CRISIS: DESISTANCE AMONG DRUG-INVOLVED  
OFFENDERS

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by

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## **DEDICATION**

This dissertation is dedicated to all those who have guided and supported me in this process. First, my mentor, Dr. Gerber, who has molded me as a scholar. Second, my cohort members and friends, Tri Keah, Amanda, Alicia, Nicole, and Alondra. Third, my peer mentors Meghan and Pat for always offering the best of advice. Fourth, my family members and friends who did not understand this process one bit, but still offered invaluable love and support. Last but not least, Drs. Decker and Pyrooz, thank you for letting me be a part of the LoneStar Project.

## ABSTRACT

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In order to best explain criminality, researchers need to be able to explain the full criminal career. This entails explaining onset, duration and patterning, and termination. The latter, termination, is the study of the process of desistance, which has received less attention than other aspects of the criminal career. However, because most individuals start on the side of conformity, and will eventually return, the study of desistance is much-warranted. The purpose of this study was to examine desistance among a specific sub-set of the offending population, drug-involved offenders. Drug-involved offenders have a high likelihood of developing long criminal careers and the prevalence of drugs and alcohol in the criminal justice system is one of the most pressing criminal justice issues.

The goal of this study was to identify the internal, external and drug-related variables that were associated with desistance. As part of the Texas Study of Trajectories, Associations, and Reentry, or the LoneStar Project, data were collected from 802 male offenders. Independent variables were gathered before release and 9 months after release (wave 3) in order to examine if predictors of desistance appear before release or after offenders spend a significant time in the community. Results from survival analyses indicated that the best predictors of desistance were the static factors of age and criminal history, although marriage, peers, and drug-related variables did play a role, albeit less consistent one. A discussion of the results, policy implications, and limitations are presented.

**KEY WORDS:** Desistance; Drug-Involved; Internal factors; External factors; Survival analysis

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## **CHAPTER I**

### **Introduction**

Criminologists have long been interested in the criminal careers of offenders. This has culminated in a foundation of criminological theory that has focused on how individuals become criminal instead of how they come back from criminality. However, because most people start on the side of conformity, researchers argue that the latter should be the more important concept to study (Bottoms, Shapland, Costello, Holmes, & Muir, 2004). Further, in order to fully explain criminality, researchers need to look at its emergence, its patterning, and its abandonment (Frazier, 1976). Thus, while traditionally this body of research has focused on the reasons behind the onset and duration of the maintenance of these criminal careers, more recent research has led to studies examining criminal desistance (Bachman, Kerrison, Paternoster, O'Connell, & Smith, 2015; Cid & Marti, 2012; Colman & Vander Laenen, 2012; Van Roeyen, Anderson, Vanderplasschen, Colman, & Vander Laenen, 2017). In fact, the relatively new subfields of developmental and life-course criminology emphasize human development and change which lends itself to a heavy focus on desistance (Pyrooz & Decker, 2011; Rocque, 2017). However, despite this recent explosion, the state of knowledge on desistance is still limited (Kazemian, 2007) and desistance still remains very much an "enigma in modern criminology" (Farrall, 2000, p. xi).

Not only is more research in the general area of desistance warranted, but more specifically, within specialized offender populations. One factor that tends to delay desistance and keep offenders in a life of crime is drug and alcohol use (Hussong et al., 2004; Rocque, 2017). Laub and Sampson (2003) found that alcohol use negatively

impacts social bonds of employment and marriage. Further Schroeder, Giordano, and Cernkovich (2007) found that illegal drugs also have an impact related to antisocial peers and spousal deviance. Offenders who engage in alcohol and/or drug use but who are able to successfully desist merit further study. However, there is a dearth of research on desistance among drug-involved offenders. As a result of this gap in literature, in this dissertation I examine factors that are predictive of successful desistance. These predictors will be assessed at baseline when the offenders are still incarcerated and after 9 months in the community.

### **Criminal Careers**

As examinations of desistance have become more popular in criminological research, it has forged its own area of study under the umbrella of criminal careers (Blumstein et al., 1986; Rocque, 2017). A criminal career describes the trajectory of crimes committed by an individual (Blumstein, Cohen, Roth, & Visser, 1986). It is not a theory, but rather, a framework with which theories can be developed and tested (Farrington, 1992). By this definition, career does not imply that the offenders use criminal activity in an economic sense, but instead, it implies a longitudinal process (Blumstein & Cohen, 1987). It also does not imply career criminal which is a term that applies to serious offenders. In order to look at criminal careers, one must first look at the portion of the population that participates in criminal activity. For those who do participate, the specific parameters of the career need to be examined. Important parameters include age of onset, age of termination, mean number of crimes committed while active, and career length (Blumstein & Cohen, 1987). Stated in another way, it has a beginning (onset), end (desistance) and length in between (duration) (Farrington, 1992).

Concerning participation in criminal activity, according to Blumstein, Farrington, and Moitra (1985), innocents are those who have never offended, persisters are those who have a high recidivism probability, and desisters are those who have a low probability of recidivism. Concerning criminal career length, Blumstein (1986) found that for those committing index crimes, the adult career is approximately five years long for those who are 18, and ten years long for those who are still active in their 30s. Last, research examining age of termination remains mixed. Some studies have found that individuals who start young and remain active in their 30s have the lowest termination rates. Among offenders who remain active, mean residual career lengths rise until age 30, is flat through the 30s and declines rapidly in the early 40s (Blumstein and Cohen, 1987). However, others have found that desistance is at a peak rate between 20 and 29 (Farrington, 1992; Hirschi & Gottfredson, 1983). Gottfredson and Hirshi (1990) argue that every aspect of the criminal career comes down to criminal propensity. Thus, if propensity is high, onset will occur early, desistance will occur late, frequency will be high, and the duration will be long. They refer to this as persistent heterogeneity. However, overall, Farrington (1992) argues that the criminal career paradigm is useful for studying serious offenders when the distinction between persistence and desistance is important.

### **The Definition of Desistance**

Spontaneous remission, maturation, delinquency devolution, and the converse of persistence are just a few of the terms that have been used in throughout early research to describe what has now been termed as desistance (Rocque, 2017; Wolfgang et al., 1972/1987). Desistance as a concept is deeply complicated, involving elements that are

psychological, developmental, and sociological (Laub & Sampson, 2001). However, despite the recent emergence of research on desistance, there is not a singular agreed upon definition (Kazemian, 2007). In fact, according to Laub and Sampson (2001), the definitions used throughout different studies are sometimes vague, arbitrary, and idiosyncratic. Even more, some do not even attempt to define it while setting out to study it; in the words of Laub and Sampson (2001), “You know it when you see it” (p.4). Researchers have noted that this is a significant problem and in a narrative review of desistance studies, Van Roeyen and colleagues (2012) found that desistance definitions differed “substantially” across the studies examined (p. 609). Specifically, studies have described desistance as anything from the “voluntary termination of serious criminal participation” (Shover, 1996, p.121), which indicates an onus on the decision to end offending, to the exact moment the criminal career ends which indicates a tangible time point.

Conceptual differences notwithstanding, the vast majority of studies examining desistance focus on a sustained non-involvement in criminal offending. Desistance from crime is a common occurrence and is associated with a change of some kind in the offender and/or the offenders’ lifestyle (Farrall, Bottoms, & Shapland, 2010). Because desistance is person-specific, it may occur all at once, or it occur as a result of a slow transition from offending to non-offending. This transition may occur early, in the middle, or even late in the criminal career (Bushway, Thornberry, & Krohn, 2003). Overall, the study of desistance examines why the behavior of offenders changes from active involvement in criminal activity to no involvement (Bushway et al., 2003) or in some cases, reductions in criminal involvement (Savolainen, 2009). Regarding the latter,

while ideally analyses would include a long follow up period to detect criminal termination, because desistance is a process analyses looking at changes in criminal activity are also a meaningful focus (Rocque, 2017). Uggen and Kruttschnitt (1998) describe this as “behavioral desistance” implying that desistance has separate components: a behavioral change from offending to non-offending and the arrival at a permanent state of non-offending which is detected through official data. Contrary to official detection, Meisenfelder (1977) argues it is up to the actor himself and when he feels he has successfully abandoned criminal behavior that is desistance. Regardless, most researchers argue that desistance is in fact, a process, which Laub and Sampson (2001) say, ends in termination. It is important to note that this process may have periods of relapse into criminal activity and desistance intermittently (Piquero, 2004; Shapland, Farrall & Bottoms, 2016).

### **Importance of Desistance Research**

While being a core tenet of the criminal career, desistance is the least studied dimension (Bushway et al., 2003). This gap in research is of concern because not only theoretical, but policy implications can be gained from this work in this area. The most recent data show that 626,000 prisoners were released in 2016 from state and federal prisons (Carson, 2018). As is true with the prison population, many of them struggle with substance use and addiction, thus one of the best ways to address this is by understanding successful desistance of these offenders (Maruna, 2001). Additionally, finding out more about desistance can help with post-onset interventions (Kazemian, 2007). Last, more information about desistance patterns will help researchers better estimate the crime risk of individuals which can help with policy on prevention, detection, and treatment

(Kempf, 1989). If the field of criminal justice is meant to find ways to reduce crime, looking at successful moves away from crime can be the way to do just that (Rocque, 2017).

### **Issues Measuring Desistance**

Desistance is not an event that happens, but rather the absence of an event. This distinction inherently makes the examination of desistance difficult (Maruna, 2001). Further adding to the complications of study is that researchers have not agreed upon how long the period of sustained criminal non-involvement needs to be before one officially reaches the point of desistance. Prior studies have employed anywhere from a conservative period of 1 year (Bachman et al., 2015; Warr, 1998) to 11-18 years (Farrington and Hawkins, 1991; Martin et al., 2011). In support of shorter follow-up periods, Maruna (2001) states that twelve months of crime-free behavior while not indicative of a permanent change, is still a “significant life change worthy of examination” (p. 48). This is supported by research that suggests hazard rates for official recidivism are highest during the first two years following release from prison (Hanson, 2018).

However, it is important to keep in mind that any amount of time allotted as a follow-up period can still prove to be problematic because no amount of time can assess a permanent change. This is because the data do not allow researchers to be certain that offenders do not reoffend after the cutoff time periods they employed (Bushway et al., 2001). Similarly, Farrington (1986) argues that because termination requires a permanent change, it can only be assessed retrospectively. This would mean researchers could only truly study desistance after the offenders are deceased (Maruna, 2001). However, even if

researchers did use after-death as a time period of study, how would they pinpoint the exact moment desistance occurred? Additionally, researchers run the risk of reporting false desistance. This means a researcher's cutoff point does not show any crimes committed for an individual, but that individual normally goes that long in between crimes any way. This risk is especially present when cutoff time periods are short. Further, would the researchers look at the moment the offender decided to desist or the moment he tangibly desisted? These two are drastically different because one is a *why* question and the other is a *how* question. Maruna (2001) explains that the focus should be on the maintenance of a crime-free lifestyle to avoid this conceptual dichotomy. This puts the onus on the continuity of non-criminal behavior. Last, research on desistance remains unstandardized because findings vary based on type of data used specifically in regards to self-report vs official record use (Kazemian, 2007). Specifically, Farrington and colleagues (2014) found that when using self-reports desistance appears at an earlier age, and when using official data, desistance appears later. In Massoglia and Uggen (2007) official desistance (arrest records) showed that 85% desisted, whereas behavioral desistance (self-report) only showed 65% desisted. They posit that this stems from crimes going unnoticed and official biases.

### **Timing of Desistance Studies**

It is also important to take into consideration when a study of desistance takes place. Although experiencing incarceration has been linked to an increased risk of recidivism (Bersani & Eggleston Doherty, 2013; Lebel et al., 2008), the literature remains relatively mixed concerning whether or not mechanisms that may promote desistance appear as soon as an offender leaves a correctional institution (King, 2013). Thus, there



may be marked differences when looking at the importance of internal and external correlates of desistance in prison and then after a significant amount of time spent in the community.

Release from prison represents one of the biggest events someone may experience and comes replete with many lifestyle changes (Boman & Mowen, 2017). Offenders must not only deal with these changes when leaving prison, but these changes are imbued with the material constraints of reentry and barriers to external turning points (Grommon & Rydberg, 2018, p. 75). When leaving prison initially, offenders' lifestyles may not be conducive to holding employment (Kurlychek & Denver, 2018) and prior to release from prison, peer criminality may be established (Boman & Mowen, 2017). Individuals may be on the path to desistance even before they are released from prison. LeBel and colleagues (2008) found that cognitive shifts within individuals occur before release from prison. Other internal shifts may occur right after release. Grommon and Rydberg (2018) found that the desistance factors that are most commonly discussed right at release are those concerning identity. However, some researchers suggest that in order for identity to promote desistance, an offender must have spent some time in the community first (Healy & O'Donnell, 2008).

Despite the mixed findings, other researchers assert that the period of reentry serves as a good time to explore how theoretically-relevant variables are associated with both substance use and desistance patterns (Boman & Mowen, 2017). Groom and Rydberg (2018) noted that salient differences in variables between those who do and do not desist are more likely to be seen six to ten months after release from prison. This may be because recently released individuals may be optimistic about their ability to desist but

are then unable to follow through on those intentions once in the community (Harris, 2011).

Further, on the external side of desistance are social bonds which may have differential impacts outside prison compared to inside of prison. For example, typically fatherhood in prison is viewed separately compared to fatherhood in the free world because of the importance of institutional context (Turner, 2017). This may impact specific dimensions of parenthood such as separation and attachment. This then converges into the internal side of desistance with parents in prison not subscribing to a parent identity as much as those on the outside would (Turner, 2017). Seminal work by Maruna (2001) gave great insight into this and other internal aspects of the desistance process. However, individuals in his sample were out in the community for a year before being interviewed. This led some researchers like Grommon and Rydberg (2018) to call for extensions and replications of desistance work but within the period of immediate reentry after a prison sentence. This was especially important to examine internal factors of desistance. This may help researchers understand if desistance promoting factors such as identity change after time.

### **Limitations of Prior Research**

Traditionally criminologists have examined individual correlates to determine how to distinguish offenders from non-offenders, and this did not shift until 1950 when the Gluecks started exploring the criminal careers of offenders with specific attention to desistance (Sampson & Laub, 2003). However, interest was weak until the 1970s and 1980s with the use of longitudinal male cohort studies (Farrall, 2000). These cohorts were either predominately white, such as in the Cambridge Study in Delinquent

Development or very young with the oldest wave occurring at 13-14 years of age in the Pittsburgh Youth Study. While these samples have been used repeatedly, their merit lies in their alignment with maturational reform, or the ability to explain why some juveniles may persist into adult crime and others do not. However, this tells us little about why adult males desist from crime. One study that was able to use a subset of their youth population was Wolfgang's Philadelphia birth cohort. From the 10% that Wolfgang was able to follow up with until age 30 he identified that almost half of the chronic juvenile offenders remained chronic offenders as adults (Wolfgang et al., 1987). However, even in this study the modal age of delinquent behavior was 16, thus this study still focused on juvenile behavior. While more recent studies may use prison samples, many also use community, school and probation samples which is a limitation because studies of desistance should look at serious, persistent offenders (Bushway et al., 2001; Laub & Sampson, 2001).

Overall, the current body of desistance literature can be divided into two areas of inquiry: quantitative studies that have examined external, structural factors, albeit with the limitations mentioned above and qualitative studies that have looked at internal, agentic factors (Farrall & Bowling, 1999). These subjective factors, while they "emerge so powerfully in qualitative research" are rarely studied quantitatively (Massoglia & Uggen, 2007, p. 1). This narrative information has given a lot of richness and insight as to why people move away from crime, but it is less generalizable. It is also less generalizable because the qualitative samples have tended to be small and unrepresentative (Laub & Sampson, 2001). Last, because there is no agreed upon definition and limitations in the samples used there is no census on the causes and

correlates of desistance either (Kazemian, 2007). This has led to a body of disparate results and as a result, very few solid empirical generalizations have been reached (Uggen & Massoglia, 2003).

### **External/Internal Debate**

While often conflated into one concept, developmental and life-course criminology have different roots and different main foci. Rooted in psychology, developmental criminology examines psychological factors and factors internal to the individual, whereas life-course criminology, rooted in sociology, examines the impact of social structural events (Kazemian, Farrington, & Piquero, 2019). The main crux of desistance research involves a debate along this same vein between internal and external factors. This results in a dichotomy between items related to identity/human agency and social structural opportunities. While Farrall and Bowling (1999) call this a false dichotomy and LeBel and colleagues (2008) do not believe the factors are completely independent of one another, researchers have still continued to debate not only which comes first but also which is more important in the desistance process. Laub and Sampson (2001) refer to this as a “thorny methodological point” in the study of desistance (p. 41).

Subjective factors involve items that are cognitive, internal or identity-related. This category also consists of changes in choices, values, goals and motivation and self-concept and changes in the way individuals experience, understand, or interpret the world around them (LeBel, Burnett, Maruna, & Bushway, 2008). Specifically, LeBel et al. (2008) employed internal factors in the form of hope, defined by offenders’ ability to see that life is not fatalistic and have an optimistic view of their own self-worth and future,

and shame, defined by a change in moral beliefs about criminality. Bersani and Eggleston Doherty (2013) believe these factors to be the more enduring of desistance factors as compared to social structural factors. LeBel et al. (2008) further argue that subjective factors may differ in permanence and although research has not separated out transient subjective factors (e.g. mood, thoughts, interpretations) and more enduring subjective factors (e.g. identity, mindsets), more conceptual clarity would come with parsing these factors out.

Social structural factors are events external to the offender and largely out of their control that can be reliably measured, such as, marriage, parenthood, and employment (LeBel et al., 2008). Such factors may serve as turning points in the trajectories of offenders and may occur partially at random (Sampson & Laub, 1993). These factors may also include situational factors such as daily routines (Bersani & Eggleston Doherty, 2013).

LeBel and colleagues (2008) posit that there are three models in which subjective and social structural factors are either subordinate to one another or cooperative in the desistance process for offenders. The first model, the strong subjective model demonstrates that individuals are completely free to determine the outcomes of their lives by the choices they make. Thus, if someone decides to desist, they will. This means external events are completely unrelated to desistance. These events, like marriage, might happen in an offender's life, but only as a result of a changed mindset. Studies on desistance that find significant correlations on subjective items and non-significant correlations on social items fit this model. However, because there are not many studies

that test subjective and social items both quantitatively, there has been very little in support of this model.

Conversely, the second model, the strong social model, posits that offenders are completely reacting to the wider environment. Thus, it is life events, not their own choices that predict desistance (Farrall & Bowling, 1999). Studies that find that subjective factors are not associated with desistance outcomes but life events are, fit this model. Sampson and Laub (1993) fit this model with their theoretical framework which argues that changes that are subjective do not matter when considering social structural factors.

Last, the interactional subjective-social model explains that either (a) both subjective and social factors can have an independent effect on desistance or that, (b) subjective effects come first and social events happen afterwards. For a model like this to be tested, individual differences need to be controlled for so that heterogeneity is not the cause of the difference. Gartner and Piliavin (1988) argue that the order does matter and subjective changes trigger structural changes and dictate how offenders respond to the changes. Further in support of this model, McCord (1994), analyzing Sampson and Laub (1993), argues that an offenders' attitude must change before new social attachments have a desisting effect.

### **Purpose of the Current Study**

This dissertation explores desistance among drug-involved offenders, which is a sample of offenders who have been convicted of a past or current drug offense, and those who admit to having trouble with drugs and/or alcohol. Although defined differently throughout the literature, desistance here indicates zero rearrests within a two-year

follow-up period. This dissertation uses data from over 800 males released and followed-up from Texas prisons for a minimum of 24 months. To date, few studies have been able to assess these impacts independently and quantitatively. In order to better understand desistance, specifically desistance for drug-involved offenders, measures will be taken from baseline interviews as well as interviews after the offenders have been in the community for 9 months. These data will be used to assess survival times for drug-involved and non-drug involved individuals.

The following chapter will examine the traditional theoretical frameworks linked with desistance research as well provide an overview on correlates associated with the desistance process. Chapter three outlines the methodology, explaining the research design, data source, descriptions of key independent and dependent variables, research questions, and the analytic strategy. Chapter four will present the results, and chapter five will situate the results within the larger body of literature as well as offer implications and future areas of research.

## **CHAPTER II**

### **Literature Review**

#### **Theoretical Approaches**

Not only does the definition of the desistance vary by the methodology used in a given study, it also varies by the theoretical approach taken. Essentially all desistance theories are similar in that they include the elements of identity, the social environment, and structural opportunities (Kurleychek & Denver, 2018). Albeit these items are explored much differently and given different levels of importance within each theoretical perspective. To date, a number of theories have been postulated to explain the reasons behind desistance, especially pertaining to the “structure-agency debate” (Bottoms et al., 2004). The first study to examine the correlates of desistance was conducted by Glueck and Glueck (1950). However, research in this area remained relatively unexplored until Gottfredson and Hirschi (1990) and Sampson and Laub (1993). This has led researchers to remark that the study of desistance has been relatively neglected by theory (Farrall & Bowling, 1999).

Drawing on a life-course framework, through their various iterations, Sampson and Laub have been pioneers in the theoretical development explaining the exogenous social-structural side of the criminal desistance debate. Sampson and Laub’s age-graded theory of informal social control (Laub & Sampson, 2003; Sampson & Laub, 1993) examined desistance using the young, white males found in the Glueck and Glueck (1950) cohort and was the first to explicitly examine the association between social bonds and desistance and how they impact the individual independently of antisocial behavior and childhood propensities such as low IQ, family adversity, and juvenile delinquency



(Eggleston Doherty & Bersani, 2016). Through examination of these data, they found considerable variability in the patterns of adult criminal behavior. Sampson and Laub argue that participation in conventional roles comes first, followed by cognitive change within the individual. These roles include new bonds through marriage, military engagement, and employment. They specify it is not just the bond itself, but the attachment to the bond that impacts desistance. Thus, it is not the employment that matters, but commitment to the job and job stability. Further, it is not just a marriage that matters, but the quality and strength of the marital bond. These bonds affect internal social control and generate social capital which give an offender a greater stake in conformity. In 2001 they specified that desistance is a process that ends in the outcome of termination of offending and in fact, they believe researchers should be using “termination” and not “desistance”. Although in 2003 they added an emphasis on the importance of more subjective items such as commitment, personal involvement, and partner monitoring, the focus was still on exogenous social structures reducing criminal opportunities with an even stronger focus on the bond of marriage. In fact, they argued that desistance may occur without any cognitive change within the offender which runs contrary to other theories of desistance. Overall, although in later iterations they may scratch the surface of human agency, the emphasis has always been on processes and events external to the individual.

Given the difference in historical context, more current research has questioned if the findings from studies based on the Glueck and Glueck (1950) data fit more contemporary offending samples (Bachman, Kerrison, Paternoster, O’Connell, & Smith, 2015). These data were collected at a time when military engagement was more common

and viewed as a source of social control, and society, as demonstrated by lower divorce rates, was more family-oriented (Kazemian, 2007). Furthermore, a lack of explanation about the precise mechanisms that cause bonds to change behavior led to the development of other theories (Rocque, Posick, & Paternoster, 2016).

Examining the narratives of 65 matched serious offenders, Maruna (2001) advanced our knowledge of subjective elements of desistance. In essence, he put the “person back into the picture” (Laub & Sampson, 2001, p. 27). Specifically, he advanced the development of desistance theories with the idea that offenders who have desisted have done so because they currently view themselves in a prosocial light and have reinterpreted their past criminal activity. The desisters are not new selves, but rather they have reestablished their old selves. In essence, the offenders needed to make sense of their lives and understand why they did what they did in their past and why they would not do that now. This is not a cognitive shift, and not a change in roles, but rather a willful “cognitive distortion” (Maruna, 2001, p.9). In this perspective, offenders make good of their pasts instead of being ashamed by them. As opposed to persisters, desisters have (a) established core beliefs of their “true self,” (b) an optimistic perception over their own destiny, and (c) the desire to be productive and give something back to society. Further, Maruna (2001) found that desisters tend to find a larger cause to bring them to a higher purpose such as an impulse toward mentoring and volunteering. Overall, desistance is “another adventure consistent with their lifelong personality, not as a change of heart” (p. 154). In the broad scheme of criminological thought, this theory is consistent with continuity rather than change.

Giordano and colleagues (2002), while arguing that their work is not fundamentally incompatible with Sampson and Laub, move away from the social structural approach toward an approach that views desistance conditional on cognitive transformation. They believe the mechanisms described by Sampson and Laub are important but a full description of the change process in their work is incomplete and that negative cases were not explained, such as those who have a spouse or are employed but continue to offend or those desist without having a spouse or being employed. In fact, the results of this study showed that employment and marriage did not affect desistance. Further, they believe that Sampson and Laub's framework implies that the desistance feat is essentially accomplished by the spouse. Thus, Giordano et al. (2002) argue that prior theory tells more about the whys than the hows of desistance. Through the use of quantitative data and qualitative life history narratives, they theorized that the turning points, which in their works are referred to as hooks for change, like those mentioned in Sampson and Laub's work, are important for desistance, but they must be preceded with an openness to change as well as a placed importance on the new conventional role. Unlike prior theory, this framework places more emphasis on the offenders themselves in the transformation process. This makes this theory much more "agentic" (p.992). Overall, in this process a readiness/openness to change influences receptivity to a hook for change, hooks influence a shift in identity, and changes in identity decreases the desirability of deviant behavior which leads to desistance.

With the addition of another wave of data and a more developed critique of a social control perspective. Giordano, Schroeder and Cernkovich (2007) placed more weight on the emotional dimension of cognitive changes. They argued that emotions are

what cause the initial move into prosocial territory. When emotional transformations took place alongside the changes in roles, offenders were better able to address anger and depression in socially acceptable ways which led to being able to better stay away from crime. However, the emotional transformations may take place independently of major role transitions (e.g. parent, husband) as well. This theoretical addition also posited that those who maintain an “anger identity” will persist in criminal activity even if employed and married, and those who desist will do so because they associate less positive emotions with criminal activity. Further, they argue that the majority of offenders have conflict in their relationships and if this conflict is not ameliorated, it affects their personality negatively and crime persistence may occur. Support for this framework specifically regarding openness and readiness to change has been found in Coleman and Vander Laenen (2012).

Placing even more of a focus on cognition and individualism, one of the most recent and “forward-looking” theoretical explanations of desistance is the identity theory of desistance (ITD) formulated by Paternoster and Bushway (2009, p.1103) and subsequently revised in Bushway and Paternoster (2011; 2013). This theory posits that desistance is part of a cost-benefit process in which an offender, who is experiencing failures in multiple areas of life (e.g. getting sentenced to prison, losing custody of a child) realizes these are too costly to his/her future success and makes a conscious effort to change to a prosocial identity. Because the offender is able to attribute these failures to his/her own behavior, the shift in identity is accompanied by a desire for a more law-abiding peer group and legitimate work opportunities (Bachman, Kerrison, Paternoster, O’Connell, & Smith, 2015). They argued desistance from crime involves a change in

identity, tastes, values, and preferences. What used to matter does not, what used to not matter, now does. Contrary to prior structural theories, ITD places identity change before participation in prosocial roles and prosocial relationships. Thus, intimate relationships and employment are not essential for desistance, but a change in identity is. This element may explain the studies that find conventional social roles did not predict desistance or that conventional roles come after periods of desistance (Bachman et al., 2015). For example, Skardhamar and Savolainen (2014) who found that desistance preceded employment. Testing this theory, Bachman and colleagues (2015) found that 80% of the drug-involved offenders in their sample who had desisted made a cognitive identity transformation in-line with ITD. Further in support of ITD, the narrative results of Bachman et al. (2015) showed that while turning points and prosocial relationships were important, they did not commonly serve as the catalysts for change.

While the main debate in the desistance literature is internal vs. external also known as structural vs. agentic, some researchers have combined elements from both into an interactive framework (Bottoms et al., 2004). This line of thought is concerned with individuals and their social contexts and posits that agency is always exercised within the context of social structures (Farrall, Bottoms, & Shapland, 2010). Specifically, this focuses on five elements of programmed potential, structures, culture and habitus, situational context, and agency. First, programmed potential measures an individual's potential for reoffending. This is an assessment based on background factors similar to that of a risk assessment which gives insight about potential future behavior. Second, structures pertain to anything outside of an individual which constrains the actions of the individual. (e.g., employment). Third, culture and habitus defines the individual

dispositions that comes from certain cultural beliefs among a group. This could consist of views on gender roles and masculinity, how to interact with peer groups, and so on.

Fourth, situational contexts is a culmination of the prior three factors which collectively provide the environment for the offender. Last, agency is commonly used in desistance literature and it means that an offender has an understanding of his/her actions.

Another theory that takes middle ground in this debate is the structuration theory by Farrall and Bowling (1999). This work fits within a life course perspective but argues there is an interplay in that both agency and structures appear at the same time via the same mechanisms.

### **Drug-Involved Offenders**

All of the preceding research, while advancing the body of literature on desistance, has done so for the general offender and community samples. Only recently has desistance research focused more on specific groups of people, specifically sex offenders (Van Roeyen et al., 2012). However, another group receiving more research attention is drug-involved offender populations. This is important because research suggests that the paths for those involved with drugs and alcohol may be different than the paths to desistance for others (Best, Irving, & Albertson, 2017; Farrall, Hunter, Sharpe, & Calverley, 2014).

One of the most consistent findings concerning the criminal career is that it is often intertwined with both drug and alcohol use (Holden, 1986). In fact, the sheer strength of the connection between alcohol and drug use and criminality demonstrates that it is an element that needs to be studied when looking at criminal offending within the life-course (Schroeder, Giordano, & Cernkovich, 2007). Further, Maruna (2001)

urged against categorizing by divisions like “drug offenders” because drug use is so intertwined with other categories of criminal activity as well. Specifically, Farabee, Joshi, and Anglin (2001) found that heavy drug users are likely to engage in more diverse criminal activity.

The association of drug use and an individuals’ involvement in the criminal justice system is a result of one or more of three pathways (Staton-Tindall et al., 2011). The first is possession or sales of an illegal substance. The second is illegal money-generating activities to support a drug addiction. Last, illegal activity that is associated with a drug-using lifestyle. Criteria like the latter has helped established who the drug-involved population in the criminal justice system are. However, operationalization of drug-involved offenders tends to vary slightly. In a study by Spohn and Holleran (2002) drug-involved offenders were those who either had a history of abuse, or a prior conviction for a felony drug offense. Colman and Vander Laenen (2012) defined this group as those who used drugs “regularly” which consisted at least three times a week for a year and committed five offenses during a period of five years, which was an indication of a criminal career. Van Roeyen et al. (2012) conducted a narrative review of studies of drug-involved offenders with four criteria for inclusion: (1) the offenders needed to have currently or in the past used alcohol or any type of illicit drug, (2) the offenders needed to have committed any type of crime currently or in the past (simple use or possession did not count), (3) drug use and crime had to be present in the same period, and (4) the offenders had to be adults. This resulted in an inclusion of 15 studies that slightly differed on these terms but mostly included individuals who were currently in treatment.

Prior literature has identified the diversity in the crimes drug-involved offenders commit with anything from drug sales, to burglary and robbery (Farabee, Joshi, & Anglin, 2001). Further, Colman and Vander Laenen (2012) found that in their sample 70% of repeat offenders are regular drug users and 14% of registered property, sexual and violent crimes are drug-related. However, there is still a lack of research concerning how these offenders desist from criminal activity.

### **Importance of Knowledge about Drug-Involved Offenders**

Knowledge about desistance among drug-involved offenders is still scant which is surprising given the well-established drug-crime link. Drug-involved offenders are important to study because of the influence of drug use on the development and continuation of criminality (Colman & Vander Laenen, 2012). Sampson and Laub (2001) stressed the importance of studying desistance among serious and frequent offenders and Colman and Vander Laenen (2012) posit that drug-involved offenders have a higher likelihood of developing a long criminal career. However, many studies that have examined correlates of desistance have done so using less drug-involved cohorts than recent offender cohorts (Martin, O'Connell, Paternoster, & Bachman, 2011). This is an important oversight to address because the prevalence of alcohol and drug abuse among the correctional population is one of the most pressing problems in the criminal justice system (Bales, Van Slyke, & Blomberg, 2006). The most recent and final Arrestee Drug Abuse Monitoring Program (ADAM II) annual report in 2013 notes that 63-83% of arrestees in five counties tested positive to at least one of ten drugs. At a magnitude that is constantly increasing, 3 out of 4 state and 4 out of 5 federal inmates can be considered drug- or alcohol-involved (Bales et al., 2006). Further, prevalence of drug and alcohol



use is 4 times higher among offenders than the general population (Wooditch et al., 2013). Additionally, it must be noted that although much of the literature confounds alcohol and illicit drugs into “drug” research, Schroeder et al. (2007) state the disparate impact of alcohol on crime and impact of drugs on crime due to the unique features of drugs and drug culture. Because of this fundamental difference, drug use exerts unique and independent influences on social bonds and may compromise an individual’s ability to move away from crime. In fact, in their study they found both drug and alcohol use were significantly associated with reduced odds of desistance.

### **Drug-Crime Link**

The literature on the drug-crime nexus is well-established (Bennett & Holloway, 2004; Blumstein et al., 1986). According to Walters (1998) the drug-crime connection comes from an overlapping relationship between drug and criminal lifestyles. This is evidenced by studies in three domains: those showing crime in substance-using populations, drug use in criminal populations, and drug use and crime in the general population. Walters (1998) has developed three ways to explain the roots of this relationship.

The first explanation is epiphenomenal. This indicates that other variables are responsible for the relationship between drug use and crime. Examples of the third variable as explained in Walters (1998) are age, underlying deviancy, emotional issues, and low self-control (Gottfredson & Hirshi, 1990) or external locus of control. Additionally, both may come from ineffective socialization in the home, involvement with delinquent peers, and school-related difficulties. Both lifestyles share the same underlying features (e.g., short-term gratification, disregard of long-term consequences).

Further, both drug users and offenders may share similar self and worldviews and even if people start using drugs and committing crimes for different reasons, they may exhibit behavioral similarity later on. Last, both may be impacted by high relapse for drugs and crime, negative mood states, environmental cues, drug availability, and interpersonal pressure.

The second explanation posited by Walters (1998) is bidirectional. In this view drugs and crime are reciprocally related. As Zamble and Quinsey (1997) state, serious substance abuse is so entangled with repeat offending that the two processes may be virtually inseparable. Additionally, Reuter et al. (1990) found that drug sellers are often drug users. Further, Thornberry (1987) found offenders who commit robbery, burglary, assault, especially at high rates are characterized by high rates of juvenile drug use and use of multiple types of drugs as adults. Last, there is violence associated with those involved in the drug trade and victimization of intoxicated drug users which further demonstrates the bidirectional relationship of drugs and criminality (Bhati & Roman, 2010).

The last explanation is unidirectional which can occur with drugs leading to crime or vice-versa. This may be because drugs may impact a person's mood, judgment, respect for societal rules, and capacity for self-control. Additionally, the high cost of drugs may lead people to commit crimes to finance the habit. When drugs lead to crime, criminal behavior increases as the frequency and intensity of drug use increases thus, changes in drug use intensity is correlated with changes in frequency of criminal activity. This is why drug abuse treatment has been shown to reduce criminal behavior in drug-using offenders (Blumstein et al., 1986). When crime leads to drug use it may be because

drugs are used to ward off deterrents to crime, to celebrate a successful crime attempt or when induction into crime leads to the increasing availability to drugs. Goldstein (1985) posits that the psychopharmacological effects of drugs leads users to commit crimes while intoxicated and then subsequently users commit crimes to gain the resources to buy drugs.

### **General Correlates of Desistance**

While the theoretical frameworks presented earlier give an indication into what variables may matter in the desistance process, the body of research concerning these factors is constantly growing and changing (Rocque, 2017). While some researchers have found that the same factors that play a role in crime initiation also play a role in criminal desistance, such as delinquent peer associations and criminal propensity (Akers, 1985; Gottfredson & Hirschi, 1990; Hirschi & Gottfredson, 1983), others have found different factors entirely (Farrington et al., 1990). Specifically, using a criminal career approach, Farrington and Hawkins (1991) examined 67 correlates and found they did differ among the onset, duration, and desistance. Further, Laub and Sampson (2001) found that predictors of desistance are the reverse of predictors of offending. This is what Uggen and Pilivian (1998) refer to as “asymmetrical causation.” If this is the case, then research that has been grounded in other dimensions of the criminal career may not shed much light on desistance processes. However, while factors may differ in the criminal career stages, they remain consistent for different types of offenders in the same stages. Specifically, Van Roeyen et al. (2012) found that factors that influence desistance for drug-involved offenders are factors that are similar to desistance in the general offender

population. They posit that this may be due to the large amount of drug-using offenders in prison.

**Age.** Although there may be variability in the age distribution of age across crime types, research has shown age may be the strongest predictor of desistance (Laub & Sampson, 2001; Wilson & Herrnstein, 1985) which is perhaps why traditional explanations of desistance seek to explain the relationship between age and desistance (Bushway, Piquero, Broidy, Cauffman, & Mazerolle, 2001). This is not surprising given that studies have consistently found that crime decreases with age (Hirshi & Gottfredson, 1983; Steffensmeier & Allan, 2000). In fact, the age argument is foundational in the study of desistance (Pyrooz & Decker, 2011). As Sampson and Laub (2003) state, “crime declines with age for all offender groups...” (p.555). Although some argue that criminology is not fully capable of explaining the age-crime relationship, referred to as the “inexplicability hypothesis” (Hirshi & Gottfredson, 1983; Sweeten, Piquero, & Steinberg, 2013), there are two standard explanations. The first is ontogenic/maturational which states that age is the only factor that is significant in the desistance process (Glueck & Glueck, 1940) and two, sociogenetic which argues the importance of the social processes as people age (Maruna, 2001). For example, according to theories like social learning, as people age, exposure to delinquent peers decreases (Akers, 1973). However, researchers note that if desistance is a developmental process, then age cannot cause desistance (Bushway, Piquero, Broidy, Cauffman, & Mazerolle, 2001). Additionally, age of onset may matter because early and late onset may affect predictors of desistance (Tremblay, 1994). Overall, regardless of the theory behind it, the age/desistance association is supported by official crime statistics, self-report studies, cohort follow-ups,

and offender autobiographies. However, because of strong correlation found in age-crime curve studies, research on age and crime has typically focused on adolescents (Sampson & Laub, 1993). This creates a lack of explanatory power for studies like Quetelet (1831/1984) who find that desistance peaks between the ages of 25 to 30 and studies with even older samples.

**Race/Ethnicity.** While there has been much research examining race/ethnicity on offending, there has been much less research examining race/ethnicity on desistance. Thus as it stands desistance theory has been largely based on white males (Calverley, 2013; Fader & Traylor, 2015). One study, using the National Youth Survey data did find that over time whites desisted earlier than blacks (Elliot, 1994). However, Elliot (1994) posited that this may be due to contextual differences such as housing or employment. This is similar to other studies that note that racial/ethnic differences do occur in many of the correlates that are associated with desistance such as employment and family structure. Variation by ethnicity in these domains may mean reduced social capital for minorities. For example, regarding a social control view of desistance, African Americans may be at a disadvantage. This is shown in research by Fader and Traylor (2015) who found that African Americans are less likely to be exposed to positive turning points that promote desistance such as marriage and employment. Even when exposed to turning points such as marriage, Craig (2015) found that it is more likely to promote desistance among white parents rather than black or Hispanic parents. Calverley (2013) also argues that there may also be ethnic impacts on endogenous factors such as identity as well.

**Criminal History.** LeBel and colleagues (2008) argue that one of the strongest static factor of post-incarceration success or failure is criminal history. In fact, “delinquent behavior is determined largely by previous delinquent behavior” (Gottfredson & Hirshi, 1987, p. 592). Rhodes (1989) also found longer criminal record is associated with a lower desistance rate. The risk of recent offending and future offending is strong (Brame, Bushway, & Paternoster, 2003; Bushway, Brame, & Paternoster, 1999; Ezell & Cohen, 2005; Nagin & Paternoster, 1991; Piquero, Farrington, & Blumstein, 2003). Not only may criminal history be a predictor of desistance on its own, but it may also mediate the relationship between employment (an external turning point) and desistance, with employers being much less likely to hire those with a criminal record (Reich, 2017). Specifically, employers may make hiring decisions based on offense type and severity, number of prior convictions, and length of time spent in prison (Kurlychek, Brame, & Bushway, 2006).

**Deviant Peers.** According to Smith and Paternoster (1987), exposure to others who hold deviant values promotes delinquency among individuals. Further, as Warr (1998) argued, social bonds such as marriage and employment may mediate the impacts of antisocial peers on criminal activity. When looking at employment, Wright and Cullen (2004) found that deviant peers played a larger role in continuing criminal conduct. Breese, Ra’el and Grant (2000) found a positive relationship between levels of peer criminality and recidivism which would indicate those who have highly criminal peers would be less likely to desist. However, even with these findings, changes in social networks are generally studied using adolescent samples (Wooditch et al., 2013). This may be because researchers have found that peer groups become less influential as

individuals age (Brown, 2004; Gardner & Steinberg, 2005). Researchers posit different reasons for this lessening effect of deviant peer influence due to age. According to Walters (2018) there is a change in either incentive or motivation that accompanies the movement to adulthood.

### **External Correlates**

**Marriage/Intimate Relationships.** Standing as the most studied turning point, a majority of literature supports the desistance effect that marriage may provide, often referred to as the “marriage effect” (Eggleston Doherty & Bersani, 2016; Laub, Rowan, & Sampson, 2019). In fact, quantitatively and qualitatively marriage emerged as one of the strongest and most consistent predictors of desistance in one of the most comprehensive datasets, analyzed by Sampson and Laub. Marriage can serve as a mechanism that reinstates an investment to conventional society (Sampson & Laub, 1993). Thus, much desistance merit lies in the “love of a good woman” (Maruna, 2001, p. 30). Sampson and Laub (1993) stressed the attachment to a spouse, not just the marriage itself, and used separation and divorce as indicators of attachment, or lack thereof. Reitzes (1955) found that 78% of desisters were married compared to 45% of recidivists and particularly, of those who were married, 83% of the desisters reported having good relationships with their wives as compared to 50% of recidivists. Farrington and West (1995) found offending decreased among those in their sample who had gotten married compared to those who have remained single. Horney et al. (1995) studied marriage over a three year period and found it reduced the likelihood of offending. Warr (1998) found that the desistance effect of marriage is due to disrupted relationships with delinquent friends. Reviews of studies on marriage and criminal activity have found a significant

negative effect, but the exact causal mechanisms still remain unknown and it may be more pronounced for males who marry early and males with a low propensity to marry (King, Massoglia, & MacMillian, 2007; Skardhamar et al., 2015; Theobald & Farrington, 2009).

While much of the literature focuses on the marriage effect of desistance, marriage rates are at an all-time low and marriages are becoming less common in recent times (Laub et al., 2019; Seltzer, 2000). This warrants an examination of non-marital romantic relationships and their association with desistance. In a narrative review, Rodermond et al. (2016) found that the impact of a non-marital relationship is highly dependent on the characteristics of that relationship. Quality, cohesiveness, satisfaction, and stability are all elements which when strong, can provide a protective effect against future criminality (Capaldi, Kim, & Owen, 2008; Farrington & West, 1995; Sampson & Laub, 1993).

**Parenthood.** Marriages are not the only familial social bond that has been shown to play a role in desistance. Research has shown that parenthood may serve as a turning point associated with desistance (Sampson & Laub, 2016). Like other social bonds, the strength of the attachment dictates the stake in conformity that the parents may have. Parenthood may also be responsible for creating more routine activities and positive changes in identity (Ziegler et al., 2017). However, this body of literature has received much less attention and has yielded mixed results. It appears that it is within the qualitative research and narratives in which parenthood is identified as a meaningful transition impacting desistance (Giordano et al., 2002; Turner, 2017). In these narratives, if men link their new identity to being a “familyman” they were more likely to have



lower re-offending rates (LeBel et al., 2008). However, in quantitative empirical work parenthood has not independently provided much evidence of predicting desistance (Blokland & Nieuwbeerta; Sampson & Laub, 1993). In some cases the responsibility and stress that accompanies fatherhood may even exert more pressure leading to criminal activity and increased illegal earnings (Skardhamar & Lyngstad, 2009; Wakefield & Uggen, 2008). There may also be fundamental differences in the impact of fatherhood on desistance for young, imprisoned fathers (18-24 years old) compared to adult, imprisoned fathers (Turner, 2017). This is because this represents a unique group of fathers who may differ in certain aspects such as the ages of their children, and their own personal maturity. Further, the effect of parenthood may be mediated by marriage in that having children adds no impact on desistance on top of the marriage (Warr, 1998).

**Employment.** Offenders often face barriers to successful crime-free lifestyles when they are unable to find employment (Shapland, Farrall, & Bottoms, 2016). Sampson and Laub (1990, 1993) have also found that employment is an external factor positively related to desistance. Employment can serve as an institution that provides informal social control but it can also provide an honest income or something for an offender or ex-offender to look forward to (Van Roeyen et al., 2012). However, the literature examining the effect of employment on subsequent offending is mixed (Wooditch et al., 2013). Thus, while O'Connell (2003) found that for drug offenders employment was negatively associated with drug use and arrest, Rhodes (1989) found that employed offenders are no more likely than unemployed offenders to desist from crime and Davis et al. (2013) found that employment may provide an income which may sustain an individual's drug use habits and accompanying criminality. For this reason

Uggen and Shannon (2014) suggest that using funds gained from employment to support drug use may actually cause an offender to lose his job and return to predatory crime. Additionally, offenders when released from prison may have unrealistic expectations about quick promotions and success that is not befitting for their skill sets. This may cause frustration and job instability which would have a negative relationship with desistance (Glaser, 1969).

Perhaps it is not just having a job that is important to desistance, but having job stability (Sampson & Laub, 1993). In support of job stability, Reitzes (1955) found that 14% of “non-recidivists” had extended periods of employment, whereas 41% of recidivists were unemployed at one time. Further, through interviews, Meisenhelder (1977) found that employment gave offenders attachments but also investment in conformity. Desistance was especially likely if the offender believed the job was meaningful, economically rewarding, and would lead to some sort of career potential. It served as a behavioral, psychological, and economic investment into a conventional lifestyle. Additionally, a job may give an offender a pattern of routine activities, which is a schedule inconsistent with criminal activity (Shover, 1983). Similarly, unemployed people have more free time or are more bored and spend time with similar others which leads to more opportunity to offend (Farrington, Gallagher, Morley, St. Ledger, & West, 1986). Moreover, unemployment leads to financial hardship that may lead to crime to lessen the hardship (Farrington et al., 1986). Last, regarding employment, one must consider that other factors may mediate the impact between employment and desistance such as race and age (Siennick and Osgood, 2008). Uggen (2000) demonstrated evidence of the latter when he found employment was related to desistance but only for those over

age 27. Uggen and Wakefield (2008) attribute the latter finding to the basis of the age-crime curve, noting that older offenders may be inherently more motivated to “go straight.”

**Housing.** Turning points give an individual a fresh start that, as theorized, can lead to positive behavioral change (Kirk, 2019). While not an original turning point as indicated by Sampson and Laub, Kirk (2019) argues that residential relocation shares many of the commonalities of other theoretical turning points. Although researchers have noted the importance of stable housing for reentry success of ex-offenders, the theoretical relationship between housing and desistance is not well understood in the literature (Pleggenkuhle, Huebner, & Kras, 2016). Currently, 10-20% of offenders leave prison with no plans for housing and many others face housing instability directly following release. Stable housing provides offenders with many benefits and may lead to increased success with structural components such as employment and may also “facilitate cognitive transformation and engender agency” (Pleggenkuhle et al., 2016, p. 381). However, on the other hand, a change in living arrangements may indicate a positive change in an offender’s life that could influence behavior (Rocque, 2017). Kirk (2012) argues this is because deviant behavior is linked with social context, separating an offender from a previous deviant context, such as place of residence, may promote desistance from crime. As evidence of this point, Kirk (2009) found that for every one mile away parolees moved from a previous residence, the risk of reincarceration dropped by 1%. Further, moving away from an old neighborhood not only incorporates physical distance but severs ties to the previous community, one which was most likely lacking in informal social control, can decrease future offending and lower overall recidivism rates

(Kirk, 2019; Sharkey & Sampson, 2010). Despite the positive benefits that may accompany stable, but different housing than pre-incarceration housing, Harding, Morenoff, and Herbert (2013) found that around one-third of offenders return to their pre-incarceration place of residence and 60% within five miles of their pre-incarceration place of residence.

### **Internal Correlates of Desistance**

**Self-Control.** Propensity to offend has been conceptualized by Gottfredson and Hirshi (1990) as self-control. They argue that self-control can predict not only all social outcomes, but also all forms of crime. There is a lack of research examining self-control with other internal factors, such as agency and identity included. Studies that include external factors such as social bonds and self-control such as Evans and colleagues (1997) have also found self-control to be significant and social bonds to be non-significant. However, overall in many desistance studies self-control is not examined because it is a trait of continuity and desistance is inherently interested in discontinuity (van Ginneken, 2017). However, in order to models to avoid being misspecified, researchers like Evans and colleagues (1997) argue that self-control measures should be added. When added, in general, those with higher self-control are more likely to desist (Eggleston Doherty, 2006; Kazemian, 2007). In fact, when adding self-control in the model, the impact of relationships, marital status, religiosity, and employment are lessened (Evans, Cullen, Burton, Dunaway, & Benson, 1997). Maruna (2001) found that the desisters in his samples were those who spoke about high levels of internalized self-control.

Laub and Sampson (2001) argue that self-control may change as a result of a strengthening of social bonds. Similarly, Wright et al. (2001) found that levels of self-control mediate the relationship between social bonds and future offending. Specifically, they found that social bonds have the greatest impact among those who have low self-control. This may be because those who have lower self-control have “more room to change” within certain parameters like a stable marriage or job (Eggleston Doherty, 2006, p.811). However, this notion was not supported in Eggleston Doherty (2006) who found that social bonds were predictive of desistance independent of levels of self-control. Forrest and Hay (2011) found that the relationship between self-control and desistance is not straight forward. In fact, life events like marriage may increase self-control which then may lead to desistance.

**Agency.** Some argue that self-control is one aspect of agency (van Ginneken, 2017). However, this is not universal, nor is any exact conceptualization or operationalization for agency in desistance research. Thus, it remains wholly under-explained (Healy, 2013). Van Ginneken (2017) explains that agency is a broad cognitive category of factors that are both elusive yet omnipresent and that explain everything that cannot be explained by “income, employment, relationships, and mental health” (p. 241). Although operationalized differently, agency encompasses the motivation of the offender to change and measures his attitudes towards social bonds. Thus, while this measure is subjective, it could have a mediating effect on objective factors (Colman & Vander Laenen, 2012). Further, as Healy (2013) defines it, agency is the capacity to exercise will in the social world. The men studied in Laub and Sampson (2001) appeared to be “active participants in the desistance process” and thus human agency became prominent in their

analyses (p.49). However, they argued later in Laub and Sampson (2005) that human agency cannot be separated from situational context. Paternoster (2016) argues that Laub and Sampson (2003) details desistance essentially happens by default, without any mention of intention, which does not explain human agency. Carlsson (2016) also argues that intentionality, or an offender wanting to change and actively attempting to do so, is integral to agency. This makes agency a measure of self-efficacy, or individuals setting goals and going about actions to realize those goals (Liebregts et al., 2015). Narratives like Sampson and Laub (2003) have been the most successful with exploring agency but most quantitative, longitudinal data sets do not provide researchers with the ability to study agency (Colman & Vander Laenen, 2012; Healy, 2013).

Using the Liverpool Desistance Study, Maruna (2001) found that persisters are individuals who lack agency and feel controlled by outside structural and economic sources, whereas desisters have higher levels of hope and a positive view of the future. In fact, persisters were 5 times more likely to lack an acceptance of items related to human agency. Looking specifically at probationers, Farrall (2002) found they would be less likely to reoffend if they were confident they would “go straight” compared to those who were unsure. Because of findings like these LeBel and colleagues (2008) believe agency to be the most important predictor of desistance and Giordano and colleagues (2002) state that “agentic moves” are the most important in the desistance process (p. 992). Using self-report data from 52 case studies of desisting offenders, Mischkowitz (1994) found that the individuals identified that having free will to break with the past was the most important reason for the ability to desist from crime. However, it is

important to note that in the latter study, the social workers for the desisting offenders cited jobs and marriages for helping the men desist, not free will.

**Readiness for Change.** While generally discussed with regard to recovery from drug/alcohol addiction, readiness/openness to change has been shown to have a significant and positive relationship with sustained abstinence (Morris et al., 2018) and may prove to be an important element in criminal desistance as well. Similar to human agency, readiness to change is another element encompassing self-efficacy. This means it is a measure of the perceived importance of making a change and the individuals' confidence in taking the steps to make the desired change (DiClemente, Schlundt, & Gemmell, 2014). It cannot be assumed that all offenders are at the same readiness level for change (Kurlychek & Denver, 2018). According to cognitive transformation theory, no change will occur without an openness to change first (Giordano et al., 2002). However, when standing on its own, readiness to change is not enough to completely cause change.

**Identity.** Standing as one of the most researched internal factors, albeit without a standardized operationalization, identity work is potentially the most promising direction for research in desistance (Paternoster & Bushway, 2009). Research on identity in social sciences more generally has found that how people view themselves impacts their attitudes and behavior (Rocque, Posick, & Paternoster, 2016). Applying this criminology more specifically, changes in identity signal that an offender sees himself/herself in a new light which may lead to desistance (Rocque, 2017). In fact, desistance may require a reformulation of identity (Maruna, 2001). If an offender begins to view their identity in a positive light, it may cause some to exert self-control (Paternoster & Bushway, 2009).

Changes in identity, specifically to a non-criminal identity may come as a result of taking on different roles, successful participation in relationships or employment, or as a result of their own actions (Roque et al., 2016; Shover, 1985). Because one's identity may change, it is distinct from personality traits which tend to remain more static (Roque et al., 2016). Even Laub and Sampson (2001) who argue a social structural approach, acknowledge that those who desisted in their sample changed their identity which affected their outlook, sense of maturity, and responsibilities.

After including key theoretical and control variables, Rocque and colleagues (2016) assessed identity with multiple questions pertaining to how the offender views himself using global assessments along the good-bad dimension. They found that having a prosocial identity was significantly and negatively related to crime. Thus, it was a powerful predictor of individual desistance from crime. In fact, identity as a predictor was significant, independent of social control processes (employment, marriage, parenthood). Others using objective measures such as parenthood, found that it may provide a new, conventional identity that promotes change (Turner, 2017). However, aside from the latter studies, most desistance work that focuses on identity is qualitative. In fact, when Rocque and colleagues (2016) developed their measures of identity, they labeled them exploratory because they could not find any other quantitative measures of identity in prior literature. Regarding qualitative research, there has been support for the desistance effect of identity. However, one qualitative study that did not find an impact of identity on desistance was Colman and Vander Laenen (2017) who through narratives with drug-using offenders found that not all desisters expressed an identity transformation.



## Summary

Despite the fact that criminal desistance has been gaining considerable attention in criminology literature recently, specifically in the subfields of life-course and developmental criminology, there are still many questions that have been under-explored (Rocque, 2017). Currently much of what is known about criminal desistance has stemmed from dated, young, all-white male samples (i.e., the Glueck & Glueck [1950] sample). While this has provided insight into potential correlates of desistance, it has shown more about juvenile maturation than anything else. Further, subsequent research has used more diverse and contemporary samples, but the samples have focused on general offenders.

Taken together, the body of literature on desistance shows the importance of external and internal factors. External factors are those that are reliably measured and may occur at random, with no internal change from the offender (e.g. marriage, employment, parenthood). Internal factors are those which involve a change in subjective measures such as motivation, self-efficacy, self-control, and identity. Current theories differ in the importance and order that they allot to these factors. Typically, external factors have been measured quantitatively and internal factors have been measured qualitatively.

Given the well-established drug-crime link, there is evidence that those who are involved with drugs and alcohol are more likely to have long criminal careers compared to other offenders (Colman & Vander Laenen, 2012). They may also have desistance paths that look much different than those in the general population (Best et al., 2017). For these reasons and because a large segment of the prison population battles with some

level of drug-involvement, more research is warranted for drug-involved offender populations.

The primary purpose of this dissertation is to study desistance among those who are most heavily embedded in crime: drug-involved offenders. Specifically, this research will look at drug-involved offenders as those who have admitted to having problems with drugs and alcohol and those who have had served a past or current drug sentence. Using data from a large study of prison reentry, the LoneStar Project, this study seeks to examine external, internal, and drug-related factors impacting desistance before release from prison and after nine months in the community for drug-involved, and non-drug-involved offenders.

### **Research Questions and Hypotheses**

**Research Question 1.** Do the survival functions differ between those who are drug-involved and those who are not?

**Hypothesis 1.** It is hypothesized that the survival functions between the two groups will be statistically significantly different.

**Research Question 2.** Which internal, external, and control factors from baseline will impact survival times?

**Hypothesis 2.** It is hypothesized that those who are parents, believe they will be employed, and have high scores on internal scales will have longer survival times.

**Research Question 3.** Which internal, external, drug-related, and control factors from the 9 month follow-up will impact survival times?

**Hypothesis 3.** It is hypothesized those who are parents, have obtained employment, and continue to have high scores on internal scales will have longer survival times.

## CHAPTER III

### Methods

#### Data

Data for the current project were taken from the Texas Study of Trajectories, Associations, and Reentry, or the LoneStar Project, a National Institute of Justice funded (2014-MU- CX-0111) longitudinal study of gangs and reentry.<sup>1</sup> Baseline interviews for the study took place between April 2016 and December 2016 with 802 offenders at two male prison facilities in Huntsville, Texas.<sup>2</sup> Data were collected within one week before an offenders' release from the largest release unit in Texas, which accounts for 75% of those released by TDCJ<sup>3</sup> (Mitchell et al., 2018). Because data were collected right before release, this allowed for an examination of institutional behavior as well as reentry plans (Mitchell et al., 2018). Participants were selected using disproportionate stratified random sampling, with the stratification based on official gang and non-gang classification. Once stratified, the sample was selected using a random number generator. Because a large focus of this project was on gang membership, prisoners with non-zero levels of gang affiliation were oversampled by a factor of five (Decker & Pyrooz, 2018). Therefore, in order to draw inference to the overall population, the data for this dissertation are weighted. 95% of the offenders were housed in general population and 5% were housed in administrative segregation units (Decker & Pyrooz, 2018). Overall, 48 inmates declined to participate. Structured surveys consisting of 70 domains and 50 constructs

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<sup>1</sup> Principal investigators of this project were Scott Decker and David Pyrooz and all public information about the project can be found at <https://www.researchgate.net/project/The-LoneStar-Project>

<sup>2</sup> The author was trained in Blaise CAPI software and conducted around 65 baseline and reincarceration interviews.

<sup>3</sup> The demographics of this sample varied slightly, but not significantly from the Texas prison population (Texas Department of Criminal Justice, 2016).

incorporating demographic information, theoretically related variables, victimization and misconduct, and post-release offending to name a few, were administered by trained undergraduate and graduate students (Famy, Clark, Mitchell, Pyrooz, & Decker, forthcoming). Surveys were administered using laptops equipped with Blaise computer assisted personal interviewing software.

In addition to survey data, official record data concerning official offense, gang membership<sup>4</sup>, prior incarcerations, and post-release arrests were provided by the Texas Department of Criminal Justice and the Texas Department of Public Safety. Texas Department of Criminal Justice data is a combination of observations made by TDCJ administrators and law enforcement officials as well as information provided by inmates. Department of Public safety data is a record of statewide criminal history gathered by law enforcement officials (Pyrooz, Decker, & Owen, forthcoming).

At the end of baseline interviews, interviewers collected contact information from the offenders including prior and current addresses, phone numbers, emails, names on social media<sup>5</sup>, and contact information from up to five close family members or friends. The amount of information given by each individual varied significantly, but only 5% refused to give any information (Mitchell et al., 2018). Given the relative instability and unknowns that offenders face once released, interviewers encouraged offenders to contact the project after release if any of their contact information had changed, and 392 of these offenders did (Famy et al., forthcoming). Using the contact information collected as well as cold calls and reminders, interviewers tried to establish contact with all offenders at

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<sup>4</sup> This measure was validated with self-reported gang membership in Pyrooz, Decker, and Owen, forthcoming.

<sup>5</sup> This was not found to be a useful way to maintain post-release contact (Famy et al., forthcoming).

both 1 month (wave 2) and 9 months (wave 3) after release. At these time points follow-up interviews were conducted through a phone call using Google Voice (91%) or via prison/jail interviews if the offender was re-incarcerated by that point (9%). Further, the follow-up interview instrument contained a variety of drug questions that per TDCJ restrictions, were not included in the baseline interview instrument. Additionally, in order to avoid overlapping information, the questions in the follow-up surveys were bounded and refer only to the time “since the last interview.”

### **Baseline Sample**

Laub and Sampson (2001) asserted that a study must first construct and defend their offender pool. When studying recidivism, Spohn and Holleran (2002) examined rates among three groups: non-drug offenders, drug-offenders, and drug-involved offenders. In order to answer the research questions for this dissertation and explore how the drug-crime overlap may have an impact on desistance, this dissertation is going to slightly deviate from this three group model. The first group is drug-involved offenders who are either currently serving a sentence for a drug offense (N= 135), or have at least one prior felony sentence for a drug offense (N=515) as well as those who strongly agreed or agreed to a question indicating he needs help dealing with substance abuse (N=206), or offenders who have strongly agreed or agreed to the question indicating he is tired of the problems caused by drug/alcohol abuse (N=357). Including all of the offenders who fit into one or more category<sup>6</sup>, the overall drug-involved sample at baseline is 617. The offenders in the total sample who do not fit into any of the latter

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<sup>6</sup> In the data it was very common for an offender to satisfy more than one criteria, for example, 91% of those who were currently serving time for a drug offense are also tired of the problems caused by alcohol/drugs and 70% of those who have served a prior sentence for a drug offense said they have had alcohol/drug abuse problems.

criteria will serve as second group, the non-drug-involved group. This group consists of 185 individuals.

### **9 Month Sample**

In order to examine the most salient differences from baseline and assess the impact of a significant stay in the community, wave 3 but not wave 2 is analyzed in this dissertation. Given that this was a hard-to-reach population, due to an inability to get into touch with an individual, study attrition<sup>7</sup>, and refusal to participate due to lack of interest (n= 35) the total sample size for wave 3 (occurring approximately 9 months after release) was 514 or 64% of the total baseline sample. This final sample consists of 390 drug-involved offenders and 124 non-drug-involved offenders. However, by this time 87 offenders had experienced at least one rearrest and thus were removed from this sample, leaving 427 offenders.

**Dependent Variable.** For this dissertation the data for the dependent variable, was obtained from Department of Public Safety records. Arrest data for this variable was compiled on 12-12-18, which was 24 months after the last offender was released. This means that some offenders have been in the community for longer than 24 months at time of DPS data collection and have different calculated periods of risk.<sup>8</sup> The data indicated if an offender had been rearrested after release, and if so, when. From the initial date of prison release and first rearrest (if applicable) a time to rearrest variable was created. This variable is a continuous variable considered the survival time. 370 of the 802 (38.2%)

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<sup>7</sup> For significant predictors of attrition in this sample see Clark et al., forthcoming.

<sup>8</sup> The longest time at risk after release was 1343 days, which is about 3.6 years.

offenders have been rearrested.<sup>9</sup> For those who have been rearrested the mean time to rearrest was 359.26 days (SD=229.26, Range =0-953 days).

### **Measures for the Drug-Involved Sample**

**Independent Variables.** The independent variables at baseline have a specific emphasis on the offender's current state before release and prediction into the future. Follow-up variables measure current state as well as prediction into the future, but after the offender has been in the community for 9 months. These variables are categorized as internal, external, and drug-related. See table 7 for complete descriptives.

**External Independent Variables.** *Parenthood*, is a coded 0 if the offender has no children and 1 if the offender has at least 1 child. The majority of offenders were parents (70.7%). *Housing* is a measure of housing stability which is dichotomously coded as 1 if the offender will live in the same place after incarceration, or 0 if he will be moving somewhere new. At 9 months this variable indicates if the offender lived in one place (1) or more than once place (0) since release. 32% of offenders indicated they will be moving back to the same place and 67.4% reported they had only lived in one residence since release. *Employment* measures whether or not the individual believes he will go back to the same job he had before incarceration (1) or if he will have a new job/ no immediate job plans after release (0). At the 9 month follow up this variable indicates if the offender did get a job (1) or was unemployed (0). About half of the offenders had immediate job plans following release (47.3%) and 72.7% had a job at 9 months. *Married* measures if the offender is currently married (1) or not (0). 23.8% of offenders indicated they are married. *Relationship* measures if those who are not married are currently in a

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<sup>9</sup> Rearrests were categorized as 18.65% violent, 17.30% property, 28.11% drug, and 35.95% other



relationship (1) or if they are single (0). 18.9% of offenders indicated they are in a relationship. If the offender is in a relationship, the offender was asked questions pertaining to different facets of the relationship using the *Triangular Theory of Love Scale* (Lemieux & Hale, 1999) (Table 1). This scale is meant to encompass distinct constructs of intimacy, passion, and commitment indicating an overall measure of relationship quality with responses on a four point Likert-type scale from (0= strongly disagree to 3= strongly agree). The mean for this scale was 2.46 (SD=.58) ( $\alpha$ =.94) indicating a high level of relationship quality.

Table 1

*Romantic Relationship Questions*

Question	Factor Loadings
You and your partner share personal information with one another.	.83
You feel a powerful attraction for your partner.	.87
You think of your relationship as a permanent one.	.83
There are things you can tell your partner that you can't tell anyone else.	.75
You and your partner are very affectionate toward one another.	.84
Your partner understands your feelings.	.75
You feel close to your partner most of the time.	.85
You would rather be with your partner than anyone else.	.87
Alpha	.94

***Internal Independent Variables.*** All internal scales were created using an exploratory factor analysis after some questions were reverse coded, which is denoted

with an \*. Each scale loaded appropriately on one global factor but questions were removed from the scales if they had factor loadings below .4. See tables 2-8 for factor loadings and internal consistencies and specific questions asked.

*Agency* was measured with two scales, the first was adapted from the perceived stress scale (Cohen et al. 1983; Cohen & Williamson, 1988) (Table 2). This scale had six items that measured how often the offender felt he had agency in regard to certain decisions. This was measured in a four-point Likert-type (0= none of the time, 1= some times, 2= most times, 3= all of the time). The mean for this scale was 2.25 ( $\alpha = .64$ ), indicating that the offenders feel that most times they have agency.

Table 2

*Agency (Perceived Stress) Questions*

Question	Factor Loadings
In the past month how often have you felt...	
That you were unable to control the important things in life?	.43
Confident about your ability to handle your personal problems ?	.54
That things were going your way?*	.55
Difficulties were piling up so high that you could not overcome them?	.51
Worried or stressed about your upcoming reentry into the community?	.47
Alpha	.64

The next scale measuring agency was a three item scale adapted from a locus of control and a mastery of one's life scale (Pearlin et al., 2007; Schwarzer & Jerusalem,

1995) (Table 3). This was a four point Likert-type scale (0= strongly disagree to 3= strongly agree). The mean for this scale was 2.18 indicating an overall agreement to having control over their own actions. This scale had the lowest internal consistency ( $\alpha = .59$ ).

Table 3

*Agency (Locus of Control/Mastery of One's Life) Questions*

Question	Factor Loadings
You can do just about anything you really set your mind to.	.43
You often feel helpless dealing with the problems of life.*	.58
There is really no way to solve some of the problems you have.*	.56
Alpha	.59

*Identity* was measured through five items adapted from the Rosenberg (1965) self-esteem scale (Table 4). This scale used a four point Likert-type scale (0= strongly disagree to 3= strongly agree). The mean for this scale was 2.11 ( $\alpha = .79$ ), indicating a positive view of self on average.

Table 4

*Identity Questions*

Question	Factor Loadings
Overall you are satisfied with yourself.	.48
You feel you do not have much to be proud of. *	.65

(continued)

Question	Factor Loadings
You feel useless at times.*	.72
All in all you often feel like a failure. *	.77
You have a positive attitude about yourself.	.62
Alpha	.79

*Readiness for change* was measured using three questions targeted at the confidence the offender has in his ability to change his ways (Table 4). This was adapted from SVORI and used a four point Likert-type scale (0 = strongly disagree to 3 = strongly agree). The mean for this scale was 2.62 ( $\alpha=.76$ ), demonstrating a high level of readiness for change. These scales did not significantly vary from baseline to 9 months.

Table 5

*Readiness for Change Questions*

Question	Factor Loadings
You want to get your life straightened out.	.73
You think you will be able to stop committing crimes when released.	.73
You will give up friends and hangouts that get you into trouble.	.63
Alpha	.76

Last, *Self-control* was measured with 11 items from a low self-control scale (Tangey et al., 2004) (Table 5). This was measured using a five point Likert-type scale assessing how much the statement sounded like the offender (0= not at all like you, 1= a little bit like you, 2= somewhat like you, 3= more so like you, 4= very much like you). This scale had a mean of 1.44 ( $\alpha=.80$ ) which indicates a general disagreement and

because this is a low self-control scale, it demonstrates that offenders view themselves as having high levels of self-control.

Table 6

*Low Self-control Questions*

Question	Factor Loadings
You are good at resisting temptation.*	.48
You have a hard time breaking bad habits.	.53
You say inappropriate things.	.40
You do certain things that are bad for you if they are fun.	.61
You refuse things that are bad for you.*	.48
You have iron self-discipline.*	.47
Pleasure and fun sometimes keeps you from getting work done.	.52
You have trouble concentrating.	.53
You are able to work effectively toward long-term goals.*	.47
Sometimes you can't stop yourself from doing something, even if you know it is wrong.	.63
You often act without thinking through all the alternatives.	.56
Alpha	.80

***Drug-Related Independent Variables (Wave 3).*** These variables from wave 3 were used to assess the offender's involvement with drugs and drug treatment while he has been in the community. These variables are only examined in the drug-involved

sample. *Alcohol use* is a continuous variable indicating how many times the offender has consumed alcohol since the last interview. This variable ranged from 0-834 ( $M=24.4$ ).

*Ongoing problems with drugs/alcohol* is a dichotomous variable believes they have had a substance abuse problem since the last interview (1) or not (0). 5.84 % of the sample indicated they have a drug and/or alcohol abuse problem. *Drug influence* is a dichotomous measure indicating if anyone that lives with the offender uses alcohol around the offender (1) or if they do not (0). 18.9% of offenders indicated someone who lives with him uses alcohol in his presence.

**Control Variables.** Variables used as controls for this dissertation were those that previous literature has found to play a role in the criminal desistance process. First, *age*, which was measured at baseline as a continuous variable ranging from 19 to 73 ( $M=40$ ). Second, *race and ethnicity*, which was self-reported and coded as white (reference category) (33%), Latino (32%), Black (26%), multiracial (8%), and other (1%). Third, *education*, was coded as a dichotomous variable with 53% indicating they had less than a high school degree (0) and 47% indicating they had a high school degree equivalent or higher (1). Fourth, *gang membership* is also a dichotomous variable. In the sample 89% indicated they were not part of a gang (0) and 11 % were a TDCJ verified gang member (1). *Prior incarcerations* is a total of the number of incarcerations an inmate has experienced. This is a continuous variable ranging from 1-9 ( $M=2$ ). Last, *Deviance of peers* is a measure of how many friends the offender has that he knows he can hang out with and not get into trouble This was measured with a four point Likert-type scale (0 = none of them 1 = some of them, 2= most of them, 3 = all of them). The mean for this

question was .46 (SD=.73). These numbers did not significantly differ between baseline and the 9 month follow up.

Table 7

*Drug-Involved Sample Descriptives*

Variables	Baseline			9 months		
	Mean (%)	SD	Range	Mean (%)	SD	Range
Age	40.5	11.7	19.6-73.3	41.4	11.8	19.6-73.3
Race/Ethnicity						
Latino	(32.2)			(31.0)		
Black	(25.6)			(26.8)		
White	(33.2)			(32.4)		
Multiracial	(7.8)			(8.9)		
Other	(1.2)			(.92)		
Education						
Less than high school	(53.2)			(52.5)		
High school degree/higher	(46.8)			(47.5)		
Prior Incarcerations	2.0	1.3	1-9	2.0	1.3	1-7
Parent	(70.7)			(68.2)		
Same Residence	(32.1)			(67.4)		
Deviant Peers	.66	.83	0-3	.46	.73	0-3
Employment	(47.3)			(72.7)		
Married	(23.8)			(24.8)		
Relationship	(18.9)			(34.4)		
Relationship scale	2.46	.58	0-3	2.46	.52	1.12-3
Agency (stress)	2.25	.54	0-3	.91	.69	0-3
Agency (locus of control)	2.18	.50	1-3	1.96	.55	0-3
Identity	2.11	.53	.4-3	2.01	.52	0-3
Readiness for change	2.62	.45	1-3	2.40	.48	1.3-3
Self-control	1.44	.75	0-4	1.40	.79	0-4
Alcohol use	--	--	--	23.4	83.8	0-834
Drug influence	--	--	--	(18.9)		
Ongoing drug/alcohol problem	--	--	--	(5.84)		

### Measures for the Non-Drug-Involved Sample

Research question 4 assesses whether or not the variables that are predictive of desistance for the drug-involved population are also predictive for those who are non-drug involved. Thus, all the measures that are used are the same. The descriptives for this sample are detailed below and in table 8.

***External Independent Variables.*** The majority of non-drug involved offenders are parents (62.3%). 28.0% of the sample believe they will go back to their home before incarceration. 29.2% of the sample had definitive plans for post-release employment. Regarding relationship status, 18.1% were married and 19% were in a relationship. Their relationship quality scales had a mean of 2.5 (SD=.5) and their deviant peer scales had a mean of .40 (SD=.69) which is about a low-level of peer deviance.

***Internal Independent Variables.*** The attitude scale measuring agency had a mean of 2.3 (SD=.57) and the locus of control scale measuring agency had a mean of 2.26 (SD=.50) indicating a high overall agency scores. Scores were also highly positive for the readiness for change scale ( $M=2.7$ ) and the identity scale ( $M=2.17$ ). Self-control scores were a bit lower with a mean of 1.2 (SD=.75).

***Control Variables.*** The non-drug-involved sample ranged in age from 18.5-72.4 ( $M= 39.2$ ). The sample was 32.8% white, 26% Latino, and 32.4% Black. About half of the sample has less than a high school education (46.9%). Further, 8.8% of the sample was verified as a gang member and the average number of prior incarcerations was 1.3 (SD=.76). These numbers did not significantly differ from baseline to 9 months.



Table 8

*Non-Drug-Involved Sample Descriptives*

	Baseline			9 months		
Variables	Mean (%)	SD	Range	Mean (%)	SD	Range
Age	39.2	13.2	18.5-72.4	40.1	13.6	20.4-72.4
Race/Ethnicity						
Latino	(26.0)			(20.4)		
Black	(32.4)			(35.4)		
White	(32.8)			(33.8)		
Education						
Less than high school	(46.9)			(51.8)		
High school degree and higher	(53.1)			(48.2)		
Gang-involved	(8.8)			(7.8)		
Prior Arrests	1.3	.76	1-5	1.2	.63	1-5
Parent	(62.3)			(59.4)		
Same Residence	(28.03)			(62.9)		
Deviant Peers	.40	.69	0-3	.32	.61	0-3
Employment	(29.2)			(73.8)		
Married	(18.1)			(15.9)		
Relationship	(19.0)			(32.2)		
Relationship scale	2.59	.50	0-3	2.58	.42	1.5-3
Agency (stress)	2.31	.57	.5-3	.77	.57	0-2.5
Agency (locus of control)	2.26	.50	1-3	1.98	.47	.67-3
Identity	2.17	.54	.6-3	2.12	.45	1.2-3
Readiness for change	2.70	.43	1-3	2.48	.47	1-3
Self-control	1.20	.75	0-3.7	1.09	.64	0-2.58

**Missing Data**

Before analyses, the data were screened for missing values. Regarding the scaled independent variables, if an individual missed more than half of the scale questions, they were regarded as missing. If an individual missed questions, but less than half, their

responses for those questions received the average of their other answers. T-tests determined that the mean values were not significantly different than the missing values. For other variables, missing data only existed for 1%. Further, Little's (1998) Missing Completely at Random test showed that there were no significant differences between the missing and non-missing data. ( $\chi^2(176, N = 802) = 113.01, p = ns$ ).

### **Analytic Strategy**

Analyses for the dissertation were carried out in multiple steps. First, bivariate analyses were conducted to assess whether the independent variables have a significant relationship with the dependent variable at baseline and 9 months. This dissertation uses an interactional subjective-social model, meaning both internal and external factors were treated as independent variables in the same model (Lebel, et al., 2008). This model is used in a survival time analysis in order to examine the relationship between the external, internal, drug-related and control factors and the amount of time an individual spends in the community before first rearrest (if rearrested). Survival analysis is a statistical method used to examine time to an event. Typically, survival analysis is used in recidivism research, but analytically recidivism and desistance can be conceptually tied with hazard rates (recidivism) and trajectories of offending (desistance) essentially measuring the same thing (Brame, Bushway, & Paternoster, 2003; Paternoster et al., 2016). This type of strategy is more appropriate than any type of linear regression, including an OLS regression because these models assume that time to an event is normally distributed (Cleves, Gould, Gutierrez, & Marchenko, 2008). For the data presented in the current study, there is an instantaneous risk for the event of rearrest that remains constant over the follow-up period and thus, assumed normality is not appropriate.

The survival function indicates the proportion of people that have been rearrested by the function of time. At time 0 (baseline release) the survival function = 1 because no one has been rearrested but this declines over time. Survival analysis models assume that if the time period goes until infinity the survival function will fall to 0 because all would have failed and have been rearrested. The rearrest (event) variable is censored meaning that 1 indicates that the event has occurred and 0 indicates that the rearrest event did not occur during the follow-up period. That does not mean that some never were rearrested, but they were not within the follow up period. At-risk time differs for each individual with a minimum of 736 days and a maximum of 973 days. However, despite that time at risk differs, the real interest here is in the time to the event (Sullivan, n.d).

## **CHAPTER IV**

### **Analyses and Results**

This chapter examines the results of internal, external, theoretically-relevant, and drug-related items for drug- and non-drug-involved offenders. This chapter starts with bivariate analyses assessing the relationships between the independent and dependent variables. Next, the data are explained using lifetables and survival curves with and without covariates. Last, multivariate analyses using a survival analyses with cox proportional hazard regressions are detailed.

#### **Bivariate Analyses**

Bivariate analyses were conducted to examine the relationships between external, internal, drug-related, independent variables and control variables with the dependent variable of time to rearrest. For the drug-involved group the control variables of age, race/ethnicity, education and prior incarcerations were significantly associated with time-to-rearrest for baseline and wave 3. There were no external variables that had significant bivariate associations with time-to-rearrest for both time periods. The internal factor of self-control was significantly associated with time-to-rearrest during baseline and wave 3. Last, past month alcohol use and having an ongoing drug/alcohol problem was significantly associated with time-to-rearrest at the bivariate level. These results can be seen in table 9.

Table 9

*Bivariate Analyses for drug-involved offenders*

	Baseline	Wave 3
<b>Control Variables</b>		
Age	.00**	.00**
Latino	.00**	.16
Black	.03*	.96
White	.02*	.8
Less than High school	.04*	.01*
Gang-involved	.14	.03*
Prior Incarcerations	.00**	.00**
Deviant Peers	.17	.17
<b>External Variables</b>		
Parent	.02*	.81
Same Residence	.09	.84
Employment	.02*	.09
Married	.06	.12
Relationship	.04*	.67
Relationship scale	.40	.17
<b>Internal Variables</b>		
Agency (attitudes)	.61	.51
Agency (locus of control)	.59	.52
Identity	.42	.07
Readiness for change	.31	.05*
Self-control	.00**	.00**
<b>Drug-related Variables</b>		
Past month alcohol use	--	.01*
Drug Influence	--	.31
Ongoing problems with drug/alcohol	--	.00**

Bivariate results for the non-drug-involved group showed less consistent associations between independent variables and the dependent variable of time-to-rearrest as compared to the drug-involved offenders. In fact, there were no variables that were significantly associated in both baseline and wave 3. For baseline there are significant associations of gang-involvement, employment, marriage, and race/ethnicity, although not for Latinos. For wave 3 there were

significant associations with being white, gang-involved, identity, and readiness for change. These results can be seen in table 10.

Table 10

*Bivariate analyses for non-drug involved offenders*

	Baseline	Wave 3
<b>Control Variables</b>		
Age	.00**	.08
Latino	.08	.10
Black	.00**	.81
White	.04*	.02*
Less than High school	.07	.1
Gang-involved	.05*	.04*
Prior Incarcerations	.07	.57
Deviant Peers	.15	.94
<b>External Variables</b>		
Parent	.07	.50
Same Residence	.00**	.51
Employment	.02*	.14
Married	.14	.30
Relationship	.05*	.43
Relationship scale	.22	.24
<b>Internal Variables</b>		
Agency (attitudes)	.76	.15
Agency (locus of control)	.98	.44
Identity	.87	.02*
Readiness for change	.73	.04*
Self-control	.22	.69
<b>Drug-related Variables</b>		
Past month alcohol use	--	--
Drug Influence	--	--
Ongoing problems with drug/alcohol	--	--

### Survival Analysis

Table 11 presents the lifetable showing the time to rearrest grouped into 6 month intervals up to 36 months. This table demonstrates how many offenders had desisted but were still at risk during the beginning of the time interval (column 2), how many had

been rearrested within each time interval (column 3), how many were censored (column 4) and removed from the at-risk population without a rearrest because their follow-up period had ended before the end of the interval, and the proportion of those who had desisted (column 5). From this table we can see that approximately half of the sample experienced a post-release rearrest within the total follow-up period. More specifically, within the first 6 months, 13.4% were rearrested and by the end of the first year 25.4% of offenders were rearrested.

Table 11

*Lifetable of First Rearrest*

Interval	Total	Arrests	Censored	Survival	SE	95% CI
0-6	802	107	0	.87	.01	[.84, .89]
6-12	695	96	0	.75	.01	[.72, .78]
12-18	599	79	0	.65	.02	[.61, .68]
18-24	520	56	0	.58	.02	[.54, .61]
24-30	464	30	338	.52	.02	[.48, .56]
30-36	96	2	94	.50	.02	[.45, .54]

To visually capture the survival data, Figure 1 and Figure 2 display the initial Kaplan-Meier survival curves for the full sample and split by drug-involvement without the addition of any covariates. Figure 1 shows a shape that is similar to what is found in prior literature with a steep decline in the proportion surviving occurring relatively soon after release. Typically, research shows that 2/3 of offenders are rearrested within 3 years after release and although the majority of the data for this did not go to three years post-release, if the pattern that was shown continued, it would match with those estimates (Paternoster et al., 2016). Figure 2 demonstrates that the proportions of those surviving differs by drug-involvement. Specifically, those who are non-drug-involved are surviving (desisting) at greater proportions and for longer periods of time.

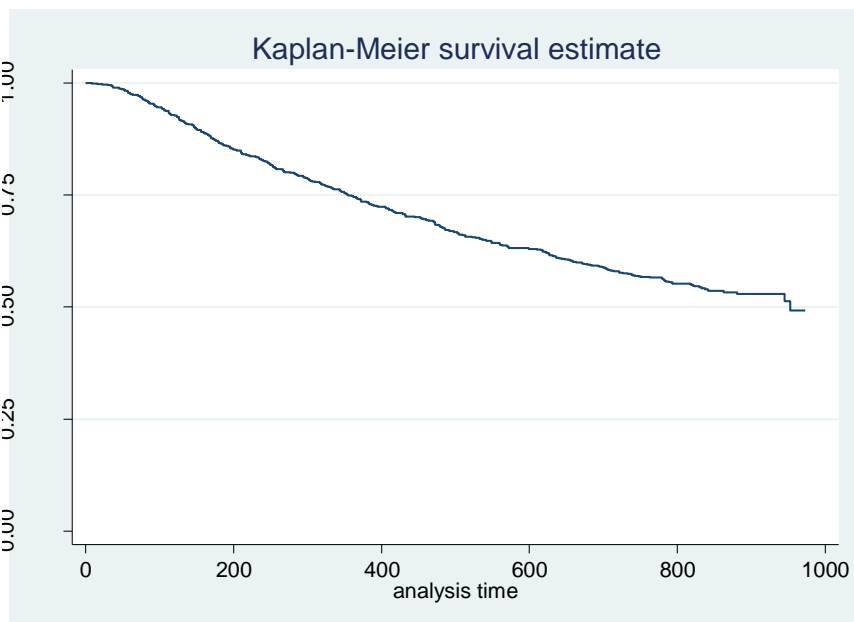


Figure 1. Full sample Kaplan-Meier survival curve.

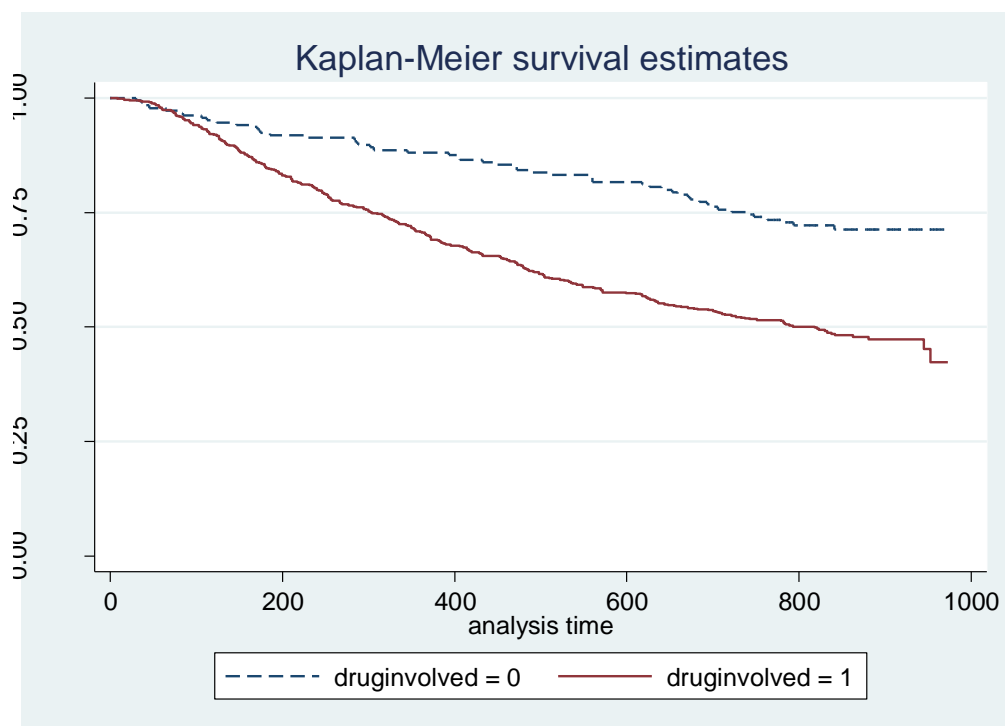


Figure 2. Kaplan-Meier survival curves separated by group.



In order to examine whether there is a difference in survival times between drug-involved and non-drug-involved offenders, a log rank test was performed. This tests the null hypothesis that there is no difference between the two groups, or no difference in the probability of failure at any point. Because the test was significant ( $\alpha = .00$ ) it shows that the survivor functions between the drug-involved and non-drug involved groups are not equal and this warrants examination of the correlates associated with each group separately.

The next step was to determine the relationship between internal, external, drug-related, and known desistance covariates with survival time. To achieve this, a Cox proportional hazards model with predictors of the hazard of rearrest was examined. The results of these regressions using baseline predictors for both the drug-involved and non-drug-involved group are found in Table 10. Results are presented using hazard ratios because they provide a “more natural way to interpret the process that generates failures” (Cleves et al., 2008, p. 13). Hazard ratios greater than one indicate an increase in hazard ratio meaning a reduced time until the first arrest. Conversely, hazard ratios less than one indicate a decrease in the hazard ratio, meaning an increased time until first post-release arrest.

For the drug-involved sample at baseline, there were three control covariates that were significantly associated with rearrest time. First, age, which demonstrated that each additional year of age decreases the hazard rate by 4% each day. Second, gang-involvement, indicating that being in a gang increased risk for rearrest 57%. Last, each additional prior arrest increased risk for rearrest 31%. Concerning external variables for this group, the only significant variable was marriage which demonstrated that those who

were married have a decrease in the hazard of rearrest by 32%. For this group at baseline, there were no race/ethnicity effects, the only significant external variable was marriage, and none of the internal factors had a significant relationship with time to rearrest. These results are presented in table 12.

Table 12

*Cox Proportional Hazard Regression Estimates (Baseline)*

*For Drug-involved (N=599)*

Variables	Hazard Ratio	S.E.
<b>Control Variables</b>		
Age	.96***	.01
Latino	.93	.20
Black	.87	.20
White	1.31	.30
Less than high school education	1.15	.14
Gang-involved	1.57***	.19
Prior Incarcerations	1.31***	.06
Deviant Peers	.93	.06
<b>External Variables</b>		
Parent	1.08	.14
Same Residence	1.09	.14
Employment	.88	.11
Married	.68**	.10
<b>Internal Variables</b>		
Agency (stress)	1.35	.22
Agency (locus of control)	.88	.13
Identity	1.05	.15
Readiness for change	.84	.11
Self-control	1.15	.10
Log likelihood	-1793.15	

$p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$ .

For the non-drug-involved group at baseline gang membership and marriage were no longer significant. For this group, age and prior incarcerations were the only variables that were significantly associated with time to rearrest. Age indicated that for each

additional year of age, the hazard rate decreases by 4% each day. Prior incarcerations indicated for each additional prior incarceration, individuals are at a 39% increased risk in the hazard for rearrest. There were also no race/ethnicity effects, and no effects of external or internal factors for this group at baseline. These results are presented in table 13.

Table 13

*Cox Proportional Hazard Regression Estimates (Baseline)*

*For Non-Drug-involved (N=182)*

Variables	Hazard Ratio	S.E.
<b>Control Variables</b>		
Age	.96*	.02
Latino	.84	.41
Black	.79	.40
White	.63	.36
Less than high school education	1.13	.42
Gang-involved	1.23	.41
Prior Incarcerations	1.39*	.24
Deviant Peers	.78	.13
<b>External Variables</b>		
Parent	.84	.29
Same Residence	.74	.28
Employment	1.35	.44
Married	.73	.33
<b>Internal Variables</b>		
Agency (stress)	.95	.46
Agency (locus of control)	1.08	.37
Identity	.98	.35
Readiness for change	1.36	.55
Self-control	1.20	.26
Log likelihood	-241.45	

$p \leq .05$ ,  $**p \leq .01$ ,  $***p \leq .001$ .

Cox regressions were also conducted with the follow-up data, 9 months after release (wave 3) to assess the potential impact that spending time in the community could have on the correlates of desistance. For the drug-involved sample at the nine-month follow-up age and prior incarcerations remained significant. Age indicates that for each additional year, the hazard rate continues to decrease by 4%. Each prior incarceration increases the hazard for rearrest 41%. During the follow-up, peers became a significant correlate, with a one unit increase in the amount of prosocial peers, the hazard for rearrest drops by 28%. Additionally, for the drug-involved group, two of the drug-related variables were significant. Past month alcohol use demonstrated that for a one-unit increase in the amount of alcohol consumed since the last interview, the hazard for rearrest increases by one percent. For those who indicated they have had an ongoing alcohol/drug problem since the last interview their hazard rates increased by a factor of 2.82, indicating a significantly shorter time to rearrest. For this model there were no significant race/ethnicity effects, no effects of any external variables except peers, and no effects of internal variables. These results can be seen in table 14.

Table 14

*Cox Regression (9 month follow-up) for drug-involved offenders (N=230)*

Variables	Hazard Ratio	S.E.
<b>Control Variables</b>		
Age	.96**	.02
Latino	1.77	.92
Black	1.06	.59
White	1.11	.64
Less than high school education	.93	.26
Gang-involved	1.03	.27
Prior Incarcerations	1.41***	.17
Deviant Peers	.72**	.16
<b>External Variables</b>		
Parent	1.15	.33
Same Residence	1.0	.27
Employment	1.17	.41
Married	.65	.21
<b>Internal Variables</b>		
Agency (stress)	.84	.21
Agency (locus of control)	.86	.26
Identity	.94	.36
Readiness for change	.87	.24
Self-control	1.24	.25
<b>Drug-Related Variables</b>		
Past month alcohol use	1.01***	.00
Drug Influence	.79	.29
Ongoing problems with drug/alcohol	2.82*	1.54
Log likelihood	-354.60	

p ≤ .05, \*\*p ≤ .01, \*\*\*p ≤ .001

For the non-drug-involved offenders, age, prior incarcerations, and deviant peers were not significantly correlated with desistance. In fact, the only correlate that was significant at the nine month follow-up was the identity measure, but in the opposite direction as theoretically expected. This result showed that for each one unit increase in identity, the hazard rate increased by a factor of 4.33, indicating a shorter time to rearrest, which is contrary to prior literature. These results can be seen in table 15.

Table 15

*Cox Regression 9 month follow-up for non-drug-involved offenders (N=230)*

Variables	Hazard Ratio	S.E.
<b>Control Variables</b>		
Age	.96	.03
Latino	.94	.66
Black	.63	.48
White	.50	.51
Less than high school education	1.65	1.08
Gang-involved	2.76	1.70
Prior Incarcerations	.91	.40
Deviant Peers	.98	.22
<b>External Variables</b>		
Parent	1.11	.56
Same Residence	1.35	.66
Employment	1.29	1.19
Married	.35	.31
<b>Internal Variables</b>		
Agency (stress)	.38	.25
Agency (locus of control)	.56	.37
Identity	4.33*	3.23
Readiness for change	2.66	1.58
Self-control	2.48	1.24
Log likelihood	-82.73	

In sum, from these models we can see significant predictors of time to re-arrest were age, gang-involvement, prior arrests, marriage, past month alcohol use, having a drug or alcohol problem and identity. All of the significant predictors were dependent on the group the offender belonged to (drug-involved and non-drug-involved) as well as the time period (baseline and 9 months). Last, all predictors were in the expected direction with the exception of the identity measure.

## **CHAPTER V**

### **Discussion**

This final chapter will thoroughly discuss and expand on the key results of this dissertation along with providing policy and practical implications. The chapter will then end with outlining ideas for future research in this area.

### **Summary of Extant Scholarship**

In criminal career research, there are many studies concerning the onset and persistence of criminal activity, especially for juveniles and their transitions into adulthood. This body of literature has identified correlates that are associated with these facets of the criminal career, although only relatively recently in the subfields of developmental and life-course criminology have researchers tried to assess whether it is these factors or other factors entirely that lead to the termination of criminal careers. This venture has been further complicated by the differing definitions of desistance (Kazemian, 2007). This has led to the operationalization of desistance consisting of no criminal activity during the follow-up period (Maruna, 2001), a reduction of criminal activity during the follow-up period (Savolainen, 2009), or even a zig-zag pattern of intermittent criminal activity/unstable desistance during the follow-up period (Piquero, 2004; Schroeder et al., 2007).

Throughout this exploration, researchers have come to agree that desistance is unlikely to occur suddenly, but rather, is a process that unfolds over time (Kazemian & Walker, 2019). However, researchers disagree on the mechanisms that promote change during this process (Kurlychek & Denver, 2018). This disagreement has led to research examining both the internal and external factors that may promote change among



individuals. On one side are researchers that posit individuals need positive, external factors such as a job, a spouse, or a child (Sampson and Laub, 1993). On the other side are researchers that argue that change must come from internal factors such as a displaying human agency, a positive identity, or a readiness to change (Giordano et al., 2007).

The body of literature examining desistance has come a far way since the first true exploration of desistance mechanisms found in Glueck and Glueck (1950) followed up by Sampson and Laub (1993). However, much of what is known is still based on non-contemporary samples and samples of juveniles. Further, although it is known that drug and alcohol use can complicate the desistance process, there are few studies that focus on drug-involved offenders and how they desist from criminal activity.

In 2019, the Department of Justice in combination with the Office of Justice Programs, and the National Institute of Justice issued a solicitation for papers advancing knowledge on desistance from criminal activity, deeming it a critical area of need (NIJ, 2019). Specifically, they are seeking information about not only psychological states, but also on life events that could serve as desistance mechanisms for specific subgroups of offenders. Ideally this call will garner much support for research on desistance to fill the many gaps that currently exist. This dissertation is an attempt to fill one of those gaps regarding drug-involved offenders.

### **Summary of Current Study**

Data for this dissertation were taken from a large national study and focused on the reentry of 802 male prisoners released from two prisons in Texas. The sample ranged in age from 19-73, was highly diverse with 33% White, 32% Hispanic, and 26% Black,

and 11% were TDCJ-verified gang members, about half had less than a high school education, and the average number of prior incarcerations ranged from 1.3 to 2. Among the 802 offenders, 432 had desisted for the two-year follow-up period (53.9%). For those who were rearrested, 13.4% of arrests occurred within the first 6 months and 25.4% occurred within the first year.

The overall sample of offenders was divided into drug-involved and non-drug-involved offenders. The purpose of this study was to examine internal, external and drug-related correlates of desistance among these two groups using an interactional subjective-social model (LeBel et al., 2008). Using time-to-rearrest as the key dependent variable, independent variables from right before release and after nine months in the community were used. Specifically, this dissertation examined if correlates associated with time to rearrest, and thus desistance, were the same for the drug-involved and non-drug-involved offenders. To address research question #1, a log-rank test was conducted and results demonstrated that non-drug-involved offenders and drug-involved offenders do have statistically significantly different survival functions starting from their release from prison.

**Control Variables.** To answer research question #2, using baseline covariates, for both groups, age and prior incarcerations remain statistically highly significant predictors of time to rearrest. These findings were very much in line with prior literature. In fact, the association between age and desistance is well-validated in criminological research (Laub & Sampson, 2001; Wilson & Herrnstein, 1985) and Glueck and Glueck (1940) argue it is the only factor that that is significant in the desistance process. It is an association that has been found across countries, demographic groups, and historical

periods (Britt, 2019). Prior incarcerations have also been shown to be one of the strongest static factors related to desistance (Lebel et al., 2008). To address research question #3, after spending nine months in the community, the static factors of age and prior incarcerations still remained significant correlates with time to rearrest but only for the drug-involved group. For the drug-involved sample, gang membership was a significant predictor of time to rearrest. Gang-involvement indicates a constant state of high-risk for criminality, in this case, rearrest (Sweeten, Pyrooz, & Piquero, 2013). Cepeda, Saint Onge, Nowotny, and Valdez (2016) found drug-involvement to be indicative of more long-term gang membership which then could lead to more serious and violent offending behaviors. However, gang status is no longer significant during the nine month follow-up. Caudill (2010) found that gang affiliation significantly impacts time to rearrest with a low prevalence of recidivism occurring right away, but a pronounced effect for gang members around 4 months after release. If this is the case for these data as well, those who were at most risk due to their gang status would have already been incarcerated by the nine month follow-up and thus removed from the sample, rendering gang affiliation non-significant.

The last significant control variable is the effect of peers which was consistent with prior literature. However, this was only seen at the nine month follow up and for the drug-involved group. This was an important control measure because of the peer effect on drug use and criminality. Not only are drugs primarily used in groups (Warr, 1993), but there are many effects of peer deviance leading to offending (Thornberry & Krohn, 1997). Taking these two ideas together, we can see that drug users may associate with deviant others regularly which is not likely to lead to ending a life of crime (Schroeder et

al., 2007). Further, research has found that when peer effects were controlled for, marriage and employment had no impact on drug and alcohol use (Giordano, Cernkovich, & Holland, 2003; Warr, 1998).

**External Factors.** Perhaps the most studied social bond, marriage, did have a significant effect on time to arrest, but only for the drug-involved sample at baseline (research question 2). Marriage effects are situational, not enduring (Bersani & Eggleston-Doherty, 2013). This finding is surprising in that these effects did not endure though nine months. Research has found that heavy alcohol use can lead to persistent patterns of offending (Schroeder et al., 2007) and Sampson and Laub (1993) discussed the negative impacts this can have on marriage. This is perhaps why divorce rates are particularly high among those who are incarcerated with substance abuse problems (Shamblen et al., 2013). However, the marriage effect can also protect against drug use and criminality. For example, Horney et al. (1995) found that men were more likely to commit offenses when using drugs but less likely to commit these offenses when married. In a study by Zamble and Quinsey (1997) conflict with a partner has the second strongest correlation with recidivism. Echoing these findings, Mowen and Visser (2015) found that following release, increased conflict has been found to lead to increased drug use and crime. Research has shown that it may not be the marriage itself, but the marriage quality that provides the mechanism for desistance (Laub and Sampson, 2003). However, marriage quality was not significant in this study. In fact, not only was it not significant at the bivariate level, it was not significant in either wave for either sample.<sup>10</sup> This dissertation used the *Triangular Theory of Love Scale* (Lemieux & Hale, 1999). This

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<sup>10</sup> Relationship quality was removed from final models due to lack of significance

scale has questions pertaining to intimacy, passion and commitment, that when combined result in consummate love in a relationship. The items in this scale loaded globally and were used as an overall measure of relationship quality. However, when Sampson and Laub (1993; Laub & Sampson, 2003) discussed the impact of relationship quality, it was stemming from concepts of partner monitoring and changes in routine activities that come from the marriage. While other studies have operationalized the quality of marriages with questions pertaining to concepts like love and happiness (Giordano, et al, 2007; Simons et al., 2002), no criminological studies have examined the relationship aspects of passion and intimacy. It is quite possible that these different conceptualizations of what makes a “quality” marriage have marked differences regarding their impact on criminal desistance. In this case, they resulted in no impact.

Other external factors of parenthood, employment, and housing were also not significant predictors of time to rearrest and thus had no impact on desistance in this study at either the baseline or follow-up time periods (research question 2 and 3). Although all three of these variables have generated mixed support in the literature, the lack of significance could also be a function of how they were operationalized. First, parenthood was a binary measure indicating if the offender was a parent or not. Many studies have found that the mere fact of parenthood may have no impact on criminal desistance (Blokland & Nieuwbeerta 2005; Giordano et al., 2002; Mulvey & Aber 1988; Rand 1987). However, for the studies that find parenthood to be a significant predictor of desistance, they also find that it may be dependent on if they reside with the child or not. Staff et al. (2010) found that if the parent lived with the child it resulted in a reduction in

drug use and Craig (2015) found that residing with a child resulted in decreased criminal activity, but only for white fathers.

Second, employment was measured as a binary measure indicating if the offender knew that he would have a job when he was released (baseline) or if he was currently employed (follow-up). The data in the Glueck and Glueck (1950) study showed a desistance effect from employment, but during the 1950s there were good paying industry jobs for the men in their sample. Not only did this dissertation not take into account the income of the jobs the men got, but if the jobs matched their skill sets (Wadsworth, 2006). The latter two factors could be key in indicating job stability and satisfaction. Despite a complicated relationship between employment and crime, and thus the mixed findings in the literature, in general, stable employment is needed for a successful reentry period from prison to the community (Rich, 2016). Further, for those who have many prior incarcerations, perhaps they have never had an attachment to the labor market and thus employment may not have as big of an impact on desistance (Savolainen, Aaltonen, & Skardhamar, 2019).

Last, housing was a measure examining if the offender will live in the same place after incarceration that he did before incarceration (baseline) or if the offender lived in more than one place during the 9 months before wave 3 (follow-up) in order to capture both relocation and stability. Regarding relocation, research has found that drug use and recovery are impacted by macro-level housing situations (Whipple, Jason, and Robinson, 2016). However, there were no variables measuring neighborhood-level effects in this dissertation. It is possible that neighborhood disadvantage may lead to reoffending (Kubrin & Stewart, 2006) and the presence of social and economic resources in the

neighborhood may lead to greater desistance outcomes (Kirk, 2019) but neither of the relationship are consistent in the literature. Additionally, there were also no measures how far the offender moved away from a prior residence, if he did move. Farrall and colleagues (2014) found that moving far away was particularly important in the desistance process for those who used drugs. Also important in the desistance process is residential stability. Research has found that many moves can lead to reduced desistance (Roman & Travis, 2006), especially when it severs an offenders' ability to maintain employment (Kirk, 2019). 67.4% percent of the current sample indicated that they had only lived in one place since release, indicating a high level of stability, especially when compared the average parolee who moves an estimated 2.6 times per year (Harding, et al., 2013). However, this relative residential stability was not a significant predictor of time to rearrest.

**Internal Factors.** Researchers have relatively recently begun to question whether Sampson and Laub's age-graded theory of informal social control (Laub & Sampson, 2003; Sampson & Laub, 1993) provides a relevant explanation for desistance among contemporary samples. In order to make sure desistance theories are relevant currently, a number of theories have diverted attention away from social structural events and instead focused on internal factors (Bushway & Paternoster 2011, 2013; Giordano et al., 2002, 2007; Maruna, 2001; Paternoster & Bushway, 2009). These theories have emphasized the importance of elements such as reconciling one's identity (Maruna, 2001), human agency (Bachman et al., 2015) and an openness/readiness for change (Giordano et al., 2002; 2007). According to Giordano et al. (2002), the first step in the desistance process must be for an offender to have an openness/readiness to change, demonstrating that change is

both not only possible, but necessary and wanted. In this dissertation in models for both groups, readiness for change was not significant and neither were the factors of agency or identity at either baseline or after 9 months in the community (research question 2 and 3). Carlsson (2016) suggests that agency is not only context- but time-dependent and needs much more theoretical unpacking before it can be fully understood. This dissertation used two scales pertaining to locus of control, mastery of one's life and perceived stress in an effort to capture agency. Although both scales loaded onto one factor, the factor loadings were relatively low (.43-.58) and both measures were found to be non-significant. Further, in a study of released lifers, even those who had positive identity persisted in criminal activity (Liem & Richardson, 2014). As posited by Kazemian and Walker (2019), incarceration may not be conducive to the development of a positive or reformed identity. In studies that have found that internal factors may impact desistance, the samples were adolescents, specifically juvenile delinquents (Giordano et al., 2002;2007) and those from the Cambridge Study in Delinquent Development (Paternoster & Bushway, 2009). It is possible that these internal effects do not generalize to older, male offenders after incarceration as shown in this study.

Further, internal correlates of desistance have emerged strongly from qualitative research but have yet to be replicated in the same manner quantitatively (Massoglia & Uggen, 2007), this dissertation included. While the data for this dissertation were generated from an in-person survey, the software used had the capability to record additional comments and explanations made by the offenders. From these comments it was clear that those who voluntarily offered up words indicative of internal change were not any more likely to desist than those who did not. One offender who had detailed that



he was proud of the changes he had made internally, was later rearrested for a violent crime. Another one citing mental changes and maturing in prison was rearrested for traffic crime. Yet another has served his sentence as his “rehabilitation.” his time to “get straight,”<sup>11</sup> was rearrested for a violent crime. This trend continued for men who were tired of the lives of crime (drug rearrest). When the men began to voluntarily address their substance use problems and acknowledged that a life of crime-free living was contingent upon their ability to stay clean, desistance was more of a pattern. One offender who has not been rearrested detailed how prison taught him about drinking thresholds, how drugs affected his body, and ways to have fun that are not chemically-induced. Another said he came to prison because he had an alcohol addiction and liked to party. He commented to an interviewer that “prison was a blessing in disguise because he has been sober” and he has continued to stay away from crime after release. However, addressing one’s substance use problem was not a guarantee of later desistance. One of the interviewers commented about another offender: “he is an alcoholic- when he goes out he cannot do drugs, cannot drink, and cannot hang out with the people he used to hang with. He knows that he will come back to prison if he does any of those bad things.” He was later rearrested for a drug crime.

It is important to note that given the oversampling of gang members in the current sample, when an offender directly mentioned desistance in the interview, it usually was in reference to reasons behind desisting from gang activity. While this action may be an important factor in overall criminal desistance, the motivations behind the two concepts are not completely synonymous. Desisting from gang activity may be more a result of

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<sup>11</sup> Such terminology was used in Maruna (2001) to indicate a steady state of desistance.

push and pull factors (Pyrooz, Decker, & Webb, 2014), rather than, as explained in this dissertation, internal and external factors.

**Drug-related Factors.** Laub and Sampson (2003) acknowledged the role that alcohol played in the Glueck and Glueck (1950) sample they followed, noting that alcohol can complicate the desistance process and lead to either a more persistent offending or a zig-zag pattern of offending. Thus, giving up alcohol was found to be a predictor of desistance. For the drug-involved sample both an increase in the amount of alcoholic drinks consumed in the follow-up period and reporting an ongoing substance use problem led increased risk for rearrest after spending 9 months in the community (research question 3). Research still cannot conclude if recovery from drug and alcohol use comes before criminal desistance, after, or occurs at the same time (Bachman et al., 2015), but these findings demonstrate that desistance is not likely if alcohol and drugs are still being used. Acknowledging this fact, Bales and colleagues (2006) point to the importance of prison-based substance abuse treatment programs for drug-involved offenders and their post-prison outcomes. However, Karberg and James (2005) found that that only about 15 percent of the incarcerated population actually receive drug treatment in prison. Many of the offenders in this sample, except those who were in administrative segregation, those who said they were banned due to official gang status, or those who did not have enough time in their sentence left, took part in any number of drug programs<sup>12</sup> at some point during their sentence. However, when all were asked which two programs were the most helpful only 11% indicated a drug-related program, and another

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<sup>12</sup> Some of the programs the offenders mentioned were DWI courses, AA/NA, Peer Recovery, Christians Against Substance Abuse, Drug Awareness, and general substance abuse courses

8% said drug-related programs were one of the least helpful programs they took part in in prison.

### **Limitations and Future Research**

While this dissertation had strengths, there are many limitations that lend themselves well to future research in this area. First, the dependent variable from this dissertation was collected from Texas Department of Public Safety rearrest data, rendering it a measure of official desistance. Although official records are thorough and provide accurate dates of rearrest (Blumstein & Cohen, 1987), research has shown that when official measures are used, the reliance upon being caught may artificially inflate the desistance percentages. Le Blanc and Frechette (1989) found that for their sample, use of official data showed that 62% of their sample desisted but the desistance decreased to 11% when self-reports were used. This dissertation utilized no self-report measures of desistance which could have provided a different picture completely, although these responses could suffer from social desirability, over-exaggeration of criminal activity, and potential memory issues (Walker, Bowen, and Brown, 2013). Future research should include both official and self-reported measures of desistance in order to get the most accurate estimates of desistance. Bachman and colleagues (2015) achieved this aim by including a qualitative interview component that allowed them to assess the level of participant engagement in self-reported crime and substance use.

Second, there was no measure of criminality of the spouse. Although this is an often-overlooked aspect of marriages, prior research has found that criminal spouses may contribute to persistent offending, irrespective of relationship quality (Schoeder et al., 2007; Simons et al., 2002). This association is especially salient in the research on

relationships among young adults. For example, Capaldi, Kim, and Owen (2008) found that antisocial behavior of the female partner was predicted by criminal persistence for the male partner. However, it is less known how partner behavior may mediate the association between the marriage effect and criminality (Rhule-Louie & McMahon, 2007). Future research should not only take into account relationship quality, but independent of that, the deviance of the spouse.

Last, this dissertation used a sample of drug-involved offenders. In order to be considered drug-involved, an offender was either currently serving a sentence for a drug offense, had at least one prior felony sentence for a drug offense, indicated he needed help with substance abuse and/or was tired of the problems caused by alcohol/drugs. This is a proxy measure and is by no means a perfect measure because it does not disentangle alcohol from drug use, which could have different implications for desistance. For example, drug use, as opposed to alcohol use, was more likely to be associated with offending, in both cross-sectional and longitudinal analyses in both the United States and the United Kingdom (Ministry of Justice, 2010; Schroeder et al., 2007). Regarding this, there were no questions in the follow-up survey that asked specifically about continued alcohol and continued drug use. Following the work of Schroeder and colleagues (2007), problem alcohol and drug use scales could be used in future research. Being able to put drugs and alcohol in the same model would allow for examination of differential impacts.

### **Policy Implications**

There are challenges in translating theoretical advances concerning desistance into tangible policy advances and this has created a disconnect (Kirk, 2019). As stated prior, desistance is a process. There should be policies to address opportunities to

reinforce desistance along a continuum. Thus, the first step in policy application is identifying those who are ready to engage in desistance work, or those who have already begun the process (Kurlychek & Denver, 2018). This identification would help assist in obtaining resources and services for those who are ready to utilize them. This may involve identifying offenders who have demonstrated a readiness for change, as that may be the first step (Giordano et al., 2002). However, because desistance may be dependent on the individual, the processes may look very different for different offenders. In fact, those who desist in more of a zig-zag, intermittent offending pattern, may need services and resources along the way to reach complete criminal inactivity. This type of pattern also looks very different to recidivism researchers compared to desistance researchers. Any rearrest looks like a failure to a recidivism researcher, but to a desistance researcher it may just be a signal that the offender needs extra help and services (Kurlychek & Denver, 2018). This dissertation identified a lack of significant results, perhaps pointing to a number of individuals who are not ready to engage in desistance work. For that reason, the policy implications that follow are more theoretical than practical for this specific sample.

The first way desistance research can translate into policy is through the recognition of invisible punishments/collateral consequences (Schneider, 2010). Specifically, acknowledging that criminal history plays a large role in the future success of offenders. Studies suggest that up to 40% of employers would not hire someone with a criminal record (Holzer, Raphael, & Stoll, 2007) and if they do, it may be for less pay and fewer hours compared to their non-criminal counterparts (Rich, 2016). This results in around 60% of offenders who are not able to secure employment even up to a year after

release (Rich, 2016). Although there have been efforts to “ban the box” there are still many hurdles that ex-offenders face in gaining employment during the reentry period. To help ameliorate employment barriers that may come from a criminal record, there is the adoption of Certificates of Rehabilitation, also referred to as “Certificates of Good Standing,” “Certificates of Relief from Disabilities,” “Certificates of Good Conduct,” and “Certification of Qualification for Employment,” to name a few (NIC, 2016). These documents are judicially or administratively granted and while they are not a full expungement of an offender’s criminal record, they are an official record of desistance that potentially serves as a very valuable assurance to potential employers (Rich, 2016). However, as of 2016 only 15 states plus the District of Columbia have some form of certificate program enacted, and the state under examination for this dissertation was not one of those states (NIC, 2016). The states that have these certificate programs differ on the terms and eligibility in which an offender may receive one. For example, in Arkansas, an offender must remain crime free for five years after incarceration and in California it is three years. In Georgia, an offender must have completed vocational training while incarcerated and in Illinois, only those who have had only one felony conviction can apply.

This formal, external recognition of change may be important in the desistance process (Kurlychek & Denver, 2018) when it comes to employment, as aforementioned, but also for purposes of identity reformulation. According to Maruna (2001), the labels that society give may be embedded into the personal narratives of offenders rendering their internal states dependent on societal reflections. Giving offenders a positive label like these official certificates, when internalized, could help assist in the positive self-

reconstruction that is crucial to desistance for offenders (Maruna et al., 2009). This is especially important in developing a sense of agency among those with “fragile emerging desisting identities” (Anderson & McNeill, 2019, p.617).

The second way desistance research can translate into policy is through cognitive behavioral therapy. Cognitive behavioral therapy (CBT) is designed on the premise that maladaptive cognitions about the self and the world lead to emotional distress and behavioral problems (Beck, 1970; Ellis, 1962). In order to address this notion and change an offenders’ thinking, mood, and behavior, cognitive behavioral therapy uses a variety of individualized methods although all are based on the same general core approach (Hofmann et al., 2012; Zara, 2019). Especially in line with research emphasizing internal changes and addressing specific levels of agency and readiness to change (Zara, 2019), this therapy may help offenders assume responsibility for their mistakes in the process of self-discovery (Bachman et al., 2015). Comparing multiple types of psychological interventions for criminal activity, cognitive behavioral therapy fared the best with the largest effect sizes (Illescas, Sanchez-Meca., & Genoves, 2011). For this reason, CBT has been linked with desistance for participants, specifically those who are high-risk, although more research examining the effects of cognitive behavioral therapy for offenders is warranted (Lipsey, Landenberger, & Wilson, 2007; Van Voorhis et al., 2013). Cognitive behavioral therapy can be tailored to the specific criminogenic needs of the offenders and has shown marked success for substance users (Aos, Miller, & Drake, 2006). However, the effectiveness of treatment may depend on the type of drug the offender was addicted to, with greater effectiveness seen in cannabis and nicotine addictions and lesser effectiveness seen in opioid and alcohol addiction (Hofmann et al.,

2012; Powers, Vedel, & Emmelkamp, 2008). Further, cognitive behavioral elements can be used in conjunction with alcohol treatment and offenders that have participated in this type of post-release therapy were two times less likely to reoffend (Needham et al., 2015). The effectiveness of cognitive behavioral therapy is not dependent on where it is located, and thus it could be instituted in institutional or community settings (Van Voorhis et al., 2013).

Last, given that two of the drug-related variables in this study were significant predictors for time-to-rearrest for drug-involved offenders, one of which indicated if an offender had an ongoing drug or alcohol problem, drug treatment may have a substantial impact on desistance for drug-involved offenders. This perhaps makes drug treatment the strongest policy consideration to come from this dissertation. According to simulation analyses interpolated from a manufactured dataset by Bhati and Roman (2010), drug treatment has the potential to reduce recidivism risk by up to 23%, depending heavily on treatment modality. Holloway, Bennett. & Farrington (2006) found even slightly larger estimates, demonstrating through a meta-analysis that drug treatment can reduce recidivism by 29-36%. While the latter results seem promising, often treatment intensity varies greatly, as does the quality of treatment offered. Thus, Kleiman, Kilmer, and Hawken (2016) argue for a “desistance-mandate” treatment approach. This does not force an offender into treatment who does not want it, targeting only those who have specifically requested it, thus having demonstrated the readiness for change that was discussed throughout this dissertation. This would allow for treatment resources to be more concentrated on a certain segment of offenders, increasing both intensity and quality, rather than being spread thin for all offenders mandated into treatment. This



approach has yet to be tested but comparing post-program drug/ alcohol and criminal desistance rates to that of criminal justice-mandated treatment is a promising area for future drug research.

## **Conclusion**

Although the criminal career has been well-studied in criminology, especially since the early 1990s (Colman & Vander Laenen, 2012), the least studied dimension is desistance (Bushway et al., 2003). However, research has shown that the path to desistance is not a simple one, but one rife with obstacles, barriers, and temptations (Anderson & McNeill, 2019). Thus, it is rare than an offender will make a smooth, straight transition from criminality to conformity (Bottoms et al., 2004). This is especially true when examining the complex desistance process for drug-involved offenders (Colman & Vander Laenen, 2012).

The prevalence of drug and alcohol use among offenders is significant and constantly increasing (Bales et al., 2006). There is an intimate connection between drugs and crime that has led to a large body of literature. This has resulted in evidence of a positive relationship that cannot be ignored when studying criminality (Schroeder et al., 2007). Research has shown that although all individuals in criminal offending samples face economic and social challenges, those who are drug-involved fare much worse than similarly situated others (Schroeder et al., 2007). This is because drug involvement may hamper someone's ability to move away from crime even if they were otherwise inclined to do so.

Sampson and Laub (1993) explained desistance within a life-course perspective, acknowledging that the path to termination of criminal activity may be especially tough

during times of transition. This dissertation examined a transitional period from prison release to life in the community after 9 months for drug-involved and non-drug-involved offenders. Relying on grounding from developmental and life-course criminology in order to build a full picture of desistance, this dissertation examined internal, external, and drug-related correlates in an interactional subjective-social model (LeBel et al., 2008). Using longitudinal, prospective data has provided this dissertation with many strengths. First, this approach minimizes the bias that comes with retrospective data. Second, causality is more clearly established (Kazemian et al., 2019). This dissertation also used a large, diverse sample of adult offenders in one of the largest criminal justice systems in the country.

The results from this study have demonstrated that static correlates such as age and total prior incarcerations have the strongest correlation with time to arrest, but there were also effects of being in a gang, being married, having prosocial peers, amount of alcohol consumed, and having an on-going drug/alcohol problem. This dissertation did not, however, find any support for the desistance effects of any internal variables. Specifically, the internal factor of agency has been described as the “black box” of identity change (Bachman et al., 2015, p.170) and the “missing link” in desistance research (Laub et al., 2019) and unfortunately, this dissertation did not add much clarity in this area. Further, Bushway and colleagues (2003) noted that there is little agreement in both the timing and the correlates of desistance. However, given that recidivism rates have remained relatively unchanged for the past decade (Kirk, 2019) and drug and alcohol abuse contribute to this lack of reentry success (Bales et al., 2006), there is still much research needed. Walters (1998) argued that change begins with a crisis and future

research should continue to examine desistance of those most in the toughest of crises, drug-involved offenders.

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- Ziegler, J.A., Kuhl, D.C., Swisher, R.R., & Chavez, J.M. (2017). Parenthood residency status and criminal desistance across neighborhood contexts. *Deviant Behavior*, 38(1), 17-33.

## VITA

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Kate Angulski

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### EDUCATION

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Sam Houston State University

- Ph.D. Criminal Justice (2015 –August 2019 [Expected])
- DISSERTATION: Change Begins with a Crisis: Desistance among Drug-Involved Offenders
  - Committee: Dr. Jurg Gerber (Chair), Dr. Yan Zhang, & Dr. Solomon Zhao

Sam Houston State University

- M.A. Criminal Justice and Criminology (2015 )
- THESIS: Heroin- Assisted treatment as Part of a Harm Reduction Drug Policy in Switzerland
  - Committee: Dr. Jurg Gerber (Chair), Dr. Ryan Randa, & Dr. Dennis Longmire

Truman State University

- B.S. Justice Systems (2013)

### REFEREED PUBLICATIONS

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**Angulski, K., & Gerber, J.** (2019). The drugs may be synthetic but the consequences are not: Analysis of synthetic cannabinoid user accounts. *Deviant Behavior*. DOI: 10.1080/01639625.2019.1572097

Jensen, E., Mosher, C., Gerber, J., & **Angulski, K.** (2019). Progress at the state level vs. regress at the federal level: Recent changes in the social consequences of the war on drugs. *Contemporary Drug Problems*. DOI: 10.1177/0091450919829087

**Angulski, K.**, Armstrong, T., & Bouffard, L. (2018). The influence of romantic relationships on substance use in emerging adulthood. *Journal of Drug Issues*, 48(4), 572-589.

Gerber, J., & **Angulski, K.** (2016). The law and foreign prisoners in Texas: A socio-legal analysis. *Polish Journal of Criminology*, 2, 21-30.

Copes, H., Kerley, K., **Angulski, K.**, & Zaleski, S. (2014). “Meth’s not my cup of tea”: Perceptions of methamphetamine among African-American women. *Journal of Drug Issues*, 44(4), 430-441.

## NON-REFEREED PUBLICATIONS

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- Gerber, J., & Angulski, K. (Forthcoming). Inmates and work in American prisons: A socio-legal analysis. *New Codification of Penal Law*.
- Gerber, J., & Angulski, K. (2017). Religion and multicultural prisons: A brief review of issues in American prisons and jails, with special emphasis on Texas. In A. J. Szwarc (Ed.), *Panorama prawnych aspektów wielokulturowości społeczeństwa (Panorama of Legal Aspects of Multicultural Society)*. (pp. 95-105). Poznan, Poland: Wydawnictwo.
- Angulski, K., & Gerber, J. (2017). Human Rights and Drug Policy: A Comparative Study Using Freedom Indexes. In E. W. Plywaczewski *Current problems of the penal law and criminology*. (7<sup>th</sup> Ed). (pp.302-318). Warszawa, Poland: Wolters Kluwer.
- Gerber, J., Angulski, K., & Burris, A. (2016). *The global governance of policing: Police, societies, and markets*. Proceedings of the 2016 Annual Conference of the Asian Association of Police Studies. Huntsville, TX: Sam Houston State University, College of Criminal Justice (<http://www.the-aaps.org/proceedings-2016-aaps-annual-conference/>).
- Angulski, K. (2012). Book review of S. Messner & R. Rosenfeld, *Crime and the American Dream*. *Internet Journal of Criminology*. ([http://www.internetjournalofcriminology.com/Book\\_Review\\_Angulski\\_Crime\\_and\\_the\\_American\\_Dream\\_IJC\\_April\\_2013.pdf](http://www.internetjournalofcriminology.com/Book_Review_Angulski_Crime_and_the_American_Dream_IJC_April_2013.pdf))

## CONFERENCE PRESENTATIONS

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- Angulski, K.,** Armstrong, T., & Bouffard, L. (2018). The influence of romantic relationships on substance use in emerging adulthood. Presented at the 3 Minute Thesis Competition held at Sam Houston State University
- Angulski, K.,** & Gerber, J. (2018). The drugs may be synthetic but the consequences are not: Analysis of synthetic cannabinoid user accounts. Academy of Criminal Justice Sciences Annual Meeting- New Orleans, LA.
- Angulski, K.,** Armstrong, T., & Bouffard, L. (2017). Drunk in love: The influence of romantic relationships on substance use in early adulthood. American Society of Criminology Annual Meeting- Philadelphia, PA.
- Dittmann, L., **Angulski, K.,** & Zhang, Y. (2017). The spatial relationship between methadone treatment centers (MTC's) and drug crimes: Exploring the not-in-my-backyard phenomenon (NIMBY). Presented at the Southwest

Division of the American Association of Geographers (SWAGG),  
Huntsville, TX.

Gerber, J., & **Angulski, K.** (2017). Religion and multicultural Prisons: A brief review of issues in American prisons and jails. Presentation for the Polish Prison Association Annual Meeting (Poznan, Poland).

**Angulski, K.** & Gerber, J. (2017). Multicultural workforce in Texas prisons: Opportunities and concerns. Presentation for the School of Law at Adam Mickiewicz University (Poznan, Poland).

**Angulski, K.** (2016). Comparative drug freedoms. Academy of Criminal Justice Sciences Annual Meeting- Denver, Colorado.

**Angulski, K.** (2015). Heroin-assisted treatment in Switzerland: A policy comparison. American Society of Criminology Annual Meeting- Washington D.C. Panel Chair.

**Angulski, K.** (2013). "Meth's not my cup of tea": Perceptions of methamphetamine among African-American women. McNair Symposium, University of California- Berkeley. Plenary Speaker.

**Angulski, K.** (2013). "Meth's not my cup of tea:" Perceptions of methamphetamine among African-American women. Southern Criminal Justice Association Annual Meeting- Virginia Beach, VA.

## RESEARCH EXPERIENCE

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- *Measuring the effects of correctional officer stress on the well-being of the officer and the prison workplace and developing a practical index of officer stress for use by correctional agencies* (National Institute of Justice funded) (2017-2018)
  - Principal Investigators: Dr. Melinda Tasca and Dr. Daniel Butler, Sam Houston State University
  - Conducted baseline and follow-up correctional officer interviews
- *LoneStar Project* (National Institute of Justice funded) (2016-2017)
  - Study of Offender Trajectories, Associations, and Reentry
  - Principal Investigators: Dr. David Pyrooz, University of Colorado, Boulder and Dr. Scott Decker, Arizona State University
  - Conducted baseline prison interviews and reincarceration interviews
  - Certified and trained in interviewing techniques and protocols for at-risk populations
  - Certified and trained in Blaise computer assisted person interviewing
- *Using the Social Sciences, Natural Sciences, and Mathematics to Study Crime* (National Science Foundation funded) (2013)
  - Principal Investigators: Dr. Heith Copes and Dr. Kent Kerley. University



- of Alabama, Birmingham.
- Research Assistant and Interviewer
- University of Alabama, Birmingham, AL

## **TEACHING EXPERIENCE**

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### Face-to-Face Undergraduate courses

- Victimology (Spring 2019)
- Introduction to the Criminal Justice System (Fall 2018)
- Introduction to Research Methods, Writing Enhanced (Summer 2018, Fall 2017)
- Corrections and Juvenile Justice 2 week course at Zhejiang Police College (Spring 2017)

### Online Undergraduate courses

- Substance Use and Abuse (Spring 2019)
- Introduction to Research Methods, Writing Enhanced (Fall 2018, Spring 2018)

### Online Teaching Assistant

- Juvenile Justice and Delinquency (Summer 2018)
- Introduction to the Criminal Justice System (Summer 2015)
- Police Systems and Practices (Summer 2015)
- Introduction to Research Methods (Fall 2014)
- Criminal Justice and Social Diversity (Summer 2014)
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## **PROFESSIONAL DEVELOPMENT**

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- Attended the 15<sup>th</sup> Annual SHSU Teaching & Learning Conference hosted by Sam Houston State University
- Attended FERPA training hosted by Sam Houston State University (2018)
- Attended the Executive Leadership Forum hosted by Sam Houston State University (2017)
- Completed an ethics training course hosted by Sam Houston State University (2017)
- Attended a seminar by the Professional and Academic Center (PACE) at

Sam Houston State University titled: Excellence on Effective Strategies for Evaluating Student Writing (2017)

- Black Board Teaching Online Certification (2016)

## **SERVICE**

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- Manuscript reviewer for the *International Journal of Drug Policy* (2019)
- Manuscript reviewer for *Deviant Behavior* and *Asia Pacific Journal of Police & Criminal Justice* (2018-2019)
- Manuscript reviewer for the *Journal of Qualitative Criminal Justice and Criminology* (2017)
- Criminal Justice Graduate Student Organization's Social Networking Committee member (2016-2017)
- Program committee member for the Asian Association of Police Studies Annual Meeting (2016)
- Volunteer for the ACJS Employment Exchange (2016)
- Panel chair at the American Society of Criminology Annual Meeting (2015)

## **AWARDS**

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- Margaret A. Farnworth Graduate Scholarship (2017)
- Rolando V. del Carmen Student Endowed Criminal Justice Scholarship (2016)

## **MEMBERSHIPS**

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- American Society of Criminology
- Academy of Criminal Justice Sciences
- Criminologists Without Borders