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DESISTANCE FROM CRIME OF SERIOUS JUVENILE OFFENDERS: EXAMINING THE SOCIAL AND INDIVIDUAL DIFFERENCES

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DESISTANCE FROM CRIME OF SERIOUS JUVENILE OFFENDERS: EXAMINING
THE SOCIAL AND INDIVIDUAL DIFFERENCES

DISSERTATION

A dissertation in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in the College of
Education at the University of Kentucky

By

Lisa Dunkley

Lexington, Kentucky

Director: Dr. Debra Harley, Professor of Rehabilitation

Counseling

Lexington, Kentucky

2018

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ABSTRACT OF THE DISSERTATION

DESISTANCE FROM CRIME OF SERIOUS JUVENILE OFFENDERS: EXAMINING THE SOCIAL AND INDIVIDUAL DIFFERENCES

There is an overrepresentation of youths with disabilities in the juvenile justice system. As a result, each year thousands of juvenile offenders despite of the seriousness of the crimes committed, are released from incarceration with the hopes of living a successful life in society. Despite progressive research on identifying factors associated with desistance, it is still unclear what factors contribute to desistance for serious juvenile offenders and especially those with disabilities. The current study investigated the individual differences (e.g., moral disengagement, motivation to succeed and impulse control) and social factors (e.g., employment, education and maternal warmth) that are important in the process of desistance for serious juvenile offenders. The sample of 14 to 17-year-old male and female offenders ($N=1354$) was composed primarily of ethnically marginalized youths who have committed serious offenses. Results of the study indicated that both social and individual factors are significant predictors of desistance from crime. However, varied significance was found as it relates to Aggressive, Income Offending and desistance. Results obtained are applicable to scholarship across multiple disciplines, as well as inform policy, practice and future research on desistance from crime. Limitations of the study were also stated.

KEYWORDS: Juvenile Offenders, Desistance, Intellectual Disability

Social and Individual Factors

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For my family and friends!

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CHAPTER 1

Introduction

Background and Significance

Studies have shown that over 100,000 juvenile offenders who commit serious (e.g., drug offenses and homicides) and minor offenses (e.g., shoplifting and truancy) are released from incarceration with the hopes of living a successful life in society (Anthony et al., 2010; Terry, 2012). Of the many incarcerated juveniles, youths with disabilities are overrepresented in the juvenile justice system. Recent data suggest that 65 to 70 percent incarcerated juveniles have disabilities such as learning disabilities (LD), emotional and behavioral disorders (EBD), psychiatric or mental health disorders (MH), physical disabilities (PD), visual impairments, deaf or hard of hearing, and acquired brain injury (Davis, 2015). According to Zhang, Barrett, Katsiyannis, and Yoon, (2011) individuals with disabilities are more likely to become repeat offenders and experience longer stays in correctional facilities. The average time it took for a juvenile offender with a disability to be referred to the study was 2.75 years compared to seven years for those without disabilities. In other words, juvenile offenders with disabilities are more likely to have their first contact with the juvenile justice system at an earlier age than those without disabilities.

The overrepresentation of individuals with disabilities in the juvenile justice system can be explained by multiple theories and most notably the school failure theory. According to Quinn, Rutherford, Leone, Osher, and Poirier, (2005), the school failure theory states disabilities (e.g., learning, emotional/behavioral and intellectual disability) lead to school failures or difficulties which then lead to problems in school resulting in

school dropout, suspensions and delinquency. In addition, individuals with cognitive and personality disabilities possess characteristics of impulsivity, irritability, suggestibility and an inability to interpret consequences (Miechenbaum, 2017) which predisposes them to criminal/delinquent behavior. Furthermore, the metacognitive deficits hypothesis asserts juvenile delinquents have poor and less developed problem-solving skills than socially competent adolescents. Poor social cognitive development observed in those with disabilities predisposes them to and magnifies the risk of criminal activities and delinquent behaviors (Quinn et al., 2005). The desistance paradigm began to view rehabilitation as a relational process, which is best looked at in the context of the person's environment and relationship with others.

To better understand the outcomes of these youths, research on desistance (i.e., the abdication of criminal offending) have gained increased attention in the criminological literature (Laub & Sampson, 2001; Farrington, 2007; Laub & Boonstoppel, 2012; Runell, 2015). Research addressing the factors that promote successful behaviors that facilitate a life without criminal offending have begun to take shape, however, there is still limited information relating to desistance from crime when compared to the emphasis on recidivism in criminological literature. In fact, criminological literature has heavily explored the causes of crime and factors contributing to recidivism rather than exploring the factors contributing to desistance. Although studies have shown that not all juveniles continue on into adult offending (persistent offenders) and some juveniles do have a desire to do away with criminal offending (Fields & Abrams, 2010), juvenile offenders will encounter various social, environmental and personal barriers that will impact community reintegration. Although some

researchers have raised the question whether factors promoting desistance and recidivism from crime should be considered as separate entities (Laub & Sampson, 2001), and despite research focused on identifying the factors associated with desistance (e.g., marriage, military service, parenthood, motivation and employment), it is still unclear what individual factors contribute to desistance for serious juvenile offenders.

Desistance Defined. Just as important as the factors that contribute to desistance is the definition of desistance. Without clear theoretical understanding of desistance from crime, it is very difficult for rehabilitation service providers and policy makers to engage in the steps necessary to promote desistance from crime. Desistance has been casually defined as the abandonment of crime or the “cessation of criminal behavior” (Laub & Sampson 2001, p. 369). While this helps to define desistance, it provides limited knowledge on the underlying process involved in the termination or cessation of criminal behaviors. Thus, Bushway, Piquero, Broidy, Cauffman, and Mazerolle, (2001) attempted to expand on this definition by describing desistance as a process by which offenders arrive at a state of non-offending from a state of offending. Laub and Sampson (2001) included in their definition of desistance that it is a “process consisting of interaction between human agency, salient life events, and historical context” (p. 4). They go on to clarify that desistance from crime is not an event that occurs in one instance, but a sustained absence of this activity over time. In essence, desistance assumes a reduction in offending behavior in both frequency and offending variety leading to complete termination of criminal behavior. Laub and Sampson’s definition is used to operationally define desistance in the current study because it encapsulates the interaction of human agency and the environment to achieve a sustained cessation of criminal activities.

A Problem of Measurement. The absence of clear measurement and a consistent definition of desistance pose considerable challenges. For example, some studies suggest a one year crime-free period while others prefer a time frame of up to five years as being ideal for measuring desistance (Basto-Pereira, Comecanha, Ribeiro, & Maia, 2015). Given the varied definitions and measurement, studies will yield different results that make generalization a challenge. Clearly, there is a need for a universal definition of desistance to establish uniformity in measuring and studying desistance in the literature. Cools, Easton, Ponsaers, Pauwels, and Ruyver, (2011), reiterate that desistance is difficult to assess, as it is measured in terms of an absence of committing offences although one cannot be sure that a person has stopped offending. The only true way of ensuring desistance is with death. Despite no clear resolution on the measurement of desistance, Bushway, Thornberry, and Krohn, (2003) made a convincing argument that the best way to investigate desistance is as a developmental process across the life course through longitudinal data. They go on to state that this trajectory approach provides information on the causes of desistance such that inferences can be made regarding the increase or decrease in offending. Emphasis is placed on the ‘transition’ to a state of non-offending rather than the ‘state’ of non-offending.

Influencing Factors of Desistance

Understanding criminal desistance requires a comprehensive outlook on the idea that disruptions in criminal activities are the products of complex decisions and represent a multi-layered process. The literature suggests several important factors that influence the desistance process: *social factors* (e.g., romantic relationships/marriage, maternal warmth, education, and employment), and *individual factors* (e.g., motivation to succeed,

impulse control, and moral disengagement) (Crank, 2014; McNeill et al., 2012; Sampson & Laub, 1993). Engaging in healthy social relationships and prosocial institutions has shown to reduce the risk of criminal behaviors (Durrant, 2017; Hirschi, 1969; LeBel, Burnett, Maruna, & Bushway, 2008; Terry, 2012; Unruh, Povenmire-Kirk, & Yamamoto, 2009; Warr, 1998). Social bonds provide support for social investments that ties them to other community. The social bonding model predicts that individuals who have more social capital and bonds to society are more likely to desist from crime (Devers, 2011). Other researchers have emphasized the ties and bonds produced through attachments to create life-changing phases in one's life. Researchers refer to the points of life where transition from criminal activities occurs as 'turning points' (Carlsson, 2011; Sampson & Laub, 1993). The occurrence of turning points (e.g., marriage, employment and enrolling into the military) allows for the desistance from crime. These important predictors of desistance are especially important in early adulthood and the desistance process (Crank, 2014; Wright & Cullen, 2004; Uggen, 2000).

Individual Differences and Desistance

Another influencing factor of desistance is agency. Agency is defined as the capability of individuals to make their own choices within their social environment (Liem & Richardson, 2014). Individuals make conscious decisions to move away from crime that are influenced by internal motivations. Therefore, agency governs all individual differences experienced by individuals. To understand desistance, it is important to fully examine the person as a whole. Healy (2013) conceptualized agency to be a sense of control over one's destiny as a result of internal motives. Moreover, it entails the capacity

to exercise willpower during interactions with the environment in a free, planned and purposive manner.

Ozkan (2016) asserts that serious juvenile offenders' future orientation and temperance (e.g., motivation to succeed) is an influential factor in their criminal behavior. Moreover, Maruna (2001) explained that offenders have the power to shape their own future and outcomes, which are in return molded by self-worth, beliefs, and other cultural influences. An offender's *motivation to succeed* is found to be a predictor of desistance and encompass an offender's willpower to be successful at living a crime free life (Pittaro, 2008). In addition, offenders hold positive views about overcoming adversities upon leaving the confinement of a correctional institution. Offenders are positive views about successful reintegration.

The process of moving away from crime includes a change in the individual's personal outlook on life. Important to a person's outlook is the individual factor of *moral disengagement* (LeBel, Burnett, Maruna, & Bushway, 2008). Changes in moral beliefs have a strong effect on desistance as offenders begin to reevaluate past behaviors and regrets. This motivates a change in cognition and criminal thinking which helps offenders to reconsider their criminal behavior. Having a sense of shame for what they have done serves as a catalyst for change and to give up a life of crime.

A popular individual factor that has been researched across disciplines is *impulse control* and is found to be a predictor of desistance (Maruna, 1999; Monahan et al., 2015; Mulvey et al., 2010; Shulman et al, 2015). The practice of self-control characterized by the control of impulsiveness and display of aggression is an important trait for juvenile offenders. Practicing appropriate behavioral impulses considering environmental

interactions is associated with better problem solving and future-oriented thinking. Impulse control is found to develop in childhood and may be sustained throughout developmental stages (Monahan et al., 2015).

Social Factors and Desistance

With positive relationships and strong emotional supports, an individual can lead an adult life free from criminal activities. For some juveniles, supports may not be available in all aspects of their lives. Juveniles rely on the stability provided from their families and peers, however, this form of support is often lacking in the communities of many juvenile offenders (Unruh et al., 2009). Furthermore, adolescents' criminality may not only affect social relationships, but jeopardize their opportunities for employment/career and independent living options as adults.

The role of *employment and education* has proven to be impactful on the process of desistance (Barry, 2010; Sampson & Laub, 1993; Uggen & Massoglia, 2003; Warr, 1998). For juvenile offenders, employment and education serve as a means of prosocial bonds and attachment as well as provide structure in everyday life. For some juvenile offenders these factors serve as turning points perceived as a change in the life course from one behavior to another. This allows juveniles to positively contribute to the community and dedicate their time in a more productive manner as opposed to engaging in antisocial behaviors.

The effects of parental role such as *maternal warmth* have been associated with juvenile behaviors (Caspi et al., 2004). Maternal warmth is one factor of positive parenting where mothers display positive relationships with children, effective communication, and promotes a supportive atmosphere for children (Sanders, 2008).

High levels of maternal warmth and support displayed to children have predicted low levels of antisocial behaviors. The opposite is also found true with low levels of maternal warmth and children. Therefore, maternal behavior could reduce criminal trajectories and aggressive behaviors in children (Holmes, 2013), and therefore encouraging desistance.

Despite researchers acknowledging the importance of individual differences and social factors of desistance, LeBel et al., (2008) have expressed the need for more research in the area. A better understanding of the influence of individual differences and social factors serve to provide important policy implications and the foundation for effective rehabilitation support services. Individual and social factors will further be discussed in subsequent section in further detail as it relates to the process of desistance.

Theoretical Background

Like desistance, development of social bonds and the movement away from crime and antisocial behavior are processes developed over time (Laub, Nagin, & Sampson, 1998; Tripodi, 2010; Carlsson, 2012). Therefore, a life course theoretical perspective is ideal for studying desistance and will be the theoretical approach used to guide the current research. As a research paradigm, this approach builds on the social and individual influencing factors of desistance. Life course perspectives take into consideration the psychological factors, sociological changes and the importance of agency (capacity for individuals to make their own choices) as it relates to behavior. Researchers who adopt this approach seek to understand and address the pathways taken that are influenced by resources and opportunities available to offenders as well as past social circumstances (e.g., socioeconomic status, family support and values). Researchers such as Moffitt (1997) and Carlsson (2011) noted that individuals choose their life

choices based on opportunities available to them, culture and social structures. Life course transitions are attributable to changes in an individual's social control, routine activities and self-image. Life course theory attempts to capture the complexity of lives that are lived interdependently with social relationships and other environmental factors. New relationships can impact turning points that lead to change in behavior or maintain behavior (positive or negative). However, differences in levels of support and environmental factors may greatly affect the trajectories of juveniles as they reintegrate into society. In essence, life course theory highlights that individuals cannot be examined in entirety if separated from their environmental network of relationships or deny internal influences. Also, a single event or condition is rarely sufficient to bring about change or other events on its own. It is imperative to take into consideration the nature of human social activity influenced by past experiences and perceptions of future self (Carlsson, 2011).

Purpose of the Study

Recent criminological literature emphasized the role of formal and informal supports systems in helping juvenile offenders develop lifestyles and activities that promote desistance from crime. However, the research is inconclusive as to how these factors operate to help serious juvenile offenders and especially those with intellectual impairments become desisters (Kazemian, 2007; LeBel et al., 2008; Loeber, Hoeve, Slot & van der Laan, 2012). According Hoeve and van der Laan (2016), there are several factors that play an influential role in desistance and especially from adolescence to early adulthood. They believe advantageous individual differences, early brain maturation, prosocial commitments (e.g., employment) and low behavioral risk factors encourage the

process of desistance. Furthermore, the importance of context (environment) in the process of desistance as what happens to an individual is dependent on the individual themselves taking into an account their personality, history, social circumstances and events in their environment (Loeber et al., 2012). According to Kazemian (2007), it is important to comprehend the internal and external factors that promote desistance and not merely the contrast of desisters versus persisters. Similarly, Loeber et al., (2012) explain that understanding the reasons why individuals persist or desist from crime yields more information critical to desistance research. These reasons helped to coin the purpose of this study which was to identify the factors that contribute to a trajectory of desistance. Specifically, the role of both social factors and individual differences on the pathways to desistance was examined. Using a cross sectional design, this study investigated the following research questions:

1. Which social factors are most effective for increasing desistance for serious juvenile offenders?
2. Which individual factors are most effective for increasing desistance for serious juvenile offenders?
3. Does type of offending (aggressive and income) have an effect on the social factors for desistance for serious juvenile offenders?
4. Does type of offending (aggressive and income) have an effect on the individual factors for desistance for serious juvenile offenders?
5. Which interaction of social and individual factors predicts the best model for desistance for serious juvenile offenders?

6. Which interaction of social and individual factors predicts the best model for desistance for serious juvenile offenders with intellectual impairment?

Conclusion

The intent of knowledge generated from this study is to help address gaps in criminological and rehabilitation research by providing important insight into which social and individual factors promote desistance and may help to explain inconsistencies regarding pathways to desistance for serious juvenile offenders. Due to the sparseness of research on this population, it is important to concentrate and build upon the social and individual factors leading to desistance. This study can contribute to the criminological and rehabilitation literature by exploring a sparsely investigated area. Research in this area could assist in development of new policies and interventions to support desistance among serious juvenile offenders. Moreover, implications for rehabilitation professionals are provided to assist in the successful rehabilitation efforts as these individuals transition into adulthood.

Dissertation Roadmap

This dissertation is separated into various chapters. Chapter two provides a detailed overview of the desistance literature as it relates to juvenile offenders and their pathways to desistance. It explored the disproportionate involvement of offenders in the criminal justice system and their individual experiences with the larger community (i.e., internal motivations, social bonds and social factors). In addition, this chapter provides conceptual challenges and theoretical frameworks in understanding the process of desistance. More detailed focus on the life course perspective is provided.

Chapter three provides an overview of the Pathways to Desistance longitudinal dataset and its use in this dissertation. This chapter discusses the methodology used as well as statistical analyses employed to answer the six research questions. Notably, this study examined the predictive nature of certain factors that are important in explaining desistance from crime. Measures of individual differences, social factors and a description of the study sample is also presented.

Following the methodology (chapter 3), chapter four provides the results of the current study based on the binary logistical regression analyses conducted. This is organized in order of the research questions stated in the previous chapter which ends with the regression analyses on intellectual impairment and desistance. Further description of the data is provided as well. Lastly, chapter five discusses the findings reported in chapter four within the context of the theoretical framework and extant literature outlined in chapter two. In conclusion, implications for policy, practice, and future research are provided. Limitations of the current is also included in this chapter.

CHAPTER 2

Literature Review

The increased attention to rehabilitation efforts for serious juvenile offenders have prompted increase in research on how best to support rehabilitation efforts. Having a thorough understanding of the of the factors that impact desistance from crime is beneficial to those working with serious juvenile offenders and the offenders themselves. Having knowledge of these factors will guide interventions necessary for successful reintegration and desistance from crime. In addition, this information provides juvenile offenders with an awareness of how their perceptions and interaction with their environment influence their individualized pathway to desistance. The combination of social and individual factors promoting desistance from crime is important but serves an even greater importance examining its impact for serious juvenile offenders. Furthermore, serious juvenile offenders with an intellectual disability may experience their own unique pathways as individuals with disabilities experiences their environments differently than their non-disabled peers (Roulstone & Mason-Bish, 2012). Therefore, it is important to further investigate their experiences and individual differences as it pertains to juvenile offending.

Serious Juvenile Offenders

Serious violent juvenile offenders are a distinct group of offenders who tend to engage in offending behaviors in their earlier years. In addition, these offenders are sometimes multiple problem youths who may have several or a combination of issues (e.g., truancy, mental health issues, substance abuse and victims of violence) (Farrington, 1998; Fox, Perez, Cass, Baglivio & Epps, 2015). These juvenile offenders comprise of a

small segment who commit the most serious offenses categorized as serious and violent based on the level of harm they inflict on individuals and society (Baglivio, Jackowski, Greenwald, & Howell, 2014). According to Fox et al., (2015), serious juvenile offenders commit an estimated 50% of all serious and violent offenses despite making up only a small population of all juvenile offenders (10%). This small population of most serious violent and chronic offenders perpetrate the most harm and economic costs on society and the correctional system due to the severity of crimes committed. Fox, Piquero & Jennings, (2014) add that serious juvenile offenders are not to be perceived solely as perpetrators of crime as they are more likely to be victims of trauma, abuse and maltreatment during childhood.

Juvenile Offenders with Intellectual Disabilities

Intellectual disability is defined as a significant deficit in cognitive and adaptive functioning with an onset in early childhood (Sheehan, 2015). Of the population of serious juvenile offenders, those considered to have an intellectual disability comprise of an estimated 7-11% (Hellenbach, Karatzias & Brown, 2016). The disproportionately represented intellectual impairment population funneled through the school-to-prison pipeline (justice involvement due to school related behaviors) far outweigh the numbers of their non-disabled youthful offenders. These individuals experience a high number of school suspensions, adjudicated at a younger age and are more likely to experience extended stays at juvenile detention centers (Mallett, 2014). In addition, juvenile offenders with intellectual impairment experiences difficulties with social attachments. According to Rayner, Wood and Beal (2014), these offenders experience a ‘double bind of dependency’ in which the need for positive affections from others resulted in the

experience of negative harmful relationships. When juveniles with intellectual impairment get involved with the justice system they often feel alone in the situation, experience confusion about judicial system and express the lack of support from others (Hyun, Hahn & McConnell, 2013).

Desistance Paradigm

Research on desistance continues to grow despite challenges in definition, conceptualization and measurement. Desistance research seeks to explain why some individuals continue to engage in criminal offending and why some individuals abstain from crime (Basto-Pereira, Comecanha, Ribeiro, & Maia, 2015). Studying and measuring desistance from crime poses several challenges and offers itself to myriad of theoretical perspectives. For instance, some researchers have postulated that the effects of social bonds and relationships contribute to desistance (Carlsson, 2012; Sampson & Laub, 2005; Tripodi, 2010). On the other hand, others have mentioned that desistance is a naturally occurring phenomenon that comes with age (Shulman, Steinberg & Piquero, 2013). Yet, others have made the argument for subjective factors or internal influences that drive desistance (Maruna, 2001; Terry, 2012). Theoretical perspectives associated with desistance, as well as, a review of the literature on desistance research are discussed in this section.

Desistance as a Process

Traditionally, desistance has been perceived as an event or abrupt ending to offending behaviors. Despite the increased attention to desistance research, very few researchers have provided a solid definition of desistance (Hoeve & van der Laan, 2016; Maruna, 2001; Parker, 2010). However, understanding criminal desistance requires a

comprehensive outlook on the idea that interruptions in criminal activity is a product of complex decisions and processes. Laub and Sampson (2001) provide a convincing argument for the understanding of desistance as a process while acknowledging the difficulties in adapting a uniform definition. According to their argument, a solid definition of desistance is difficult to develop and “developing a definition of desistance for the sake of having a definition is not worth the effort” (p. 9). Furthermore, Maruna (2001) highlighted that desistance as an abrupt ending to a criminal career is unacceptable and should not be viewed as a single abrupt event. Rather, it is the long-term absence of criminal offending as a result of processes (social and individual) leading to sustained non-offending.

Other researchers have attempted to define desistance while acknowledging that operational and conceptual difficulties that surrounds this variable. Cools, Easton, Ponsaers, Pauwels and Ruyver (2011) explain that desistance is difficult to assess, as it is measured in terms of an absence of committing offences. The problem lies with the uncertainty that an individual has ceased offending without any shadow of a doubt. The only way to guarantee complete cessation is when the person is deceased. Earlier researchers such as Shover (1996), defines desistance as the voluntary termination of serious criminal offending, which is similar to the definition of Farrall and Bowling (1999). They describe desistance as the moment that a career of criminal offending ends. Although the efforts of these researchers in defining desistance is commendable, these definitions provide little explanation as to the processes involved leading to the ending of a criminal career. Furthermore, these definitions do not take into consideration the complexities that capsule desistance.

While research has predominantly focused on desistance as a behavioral factor, other researchers have acknowledged the significance of individual differences during the process of desistance. Currently, more researchers perceive desistance as a complex multi-processed phenomenon that occurs over time (Basto-Pereira et al., 2015). As some of the earlier influential researchers on promoting desistance as a process, Laub and Sampson (2001) and Maruna (2001) maintain that desistance should not be considered as a single event but a state of non-offending. This understanding of desistance has now been widely accepted by many desistance scholars. Notably, desistance may be seen as a process that happens for most offenders but should not be explained solely based on chronological age. However, factors that may be influential to the desistance process can vary across age groups and onset (early vs. late onset) of criminal offending (Hoeve & van der Laan, 2016; Laub & Sampson, 2001). Influential processes of desistance stem from all aspects of the individual's environment as well as the individual themselves. The developmental, sociological and psychological complex processes of desistance tend to have similarities based on types of offending. In contrast, Fagan (1989), one of the earliest researchers to classify desistance as a process had opposing ideas. Fagan explains that a state of non-offending is unique in nature which is similar to the pathways individuals take to arrive at the non-offending state. Offenders have their own individualized pathways to desistance influenced by their unique situation and experiences. This is also true for offending varieties as desistance from each is unique to the offender and should not be generalized across offending type. What makes Fagan's understanding of desistance different than Sampson and Laub's is Fagan believes the

causes of desistance, speed and probability at which desistance occurs will vary between individuals (Bushway et al., 2001).

Measuring Desistance

Similar to conceptualization of desistance, operationalizing desistance has led to discord among researchers. On one hand, researchers support the view that criminality is constant with a spontaneous decline to zero (desistance). While on the other hand, researchers support that desistance is a developmental process and is gradual in nature (Bushway et al., 2001). Another realization is that “false desistance” can occur if criminal offending re-surfaces after the conclusion of desistance studies (Laub & Sampson, 2001). Also, the possibility of false desistance may arise when an error of misclassification occurs where an ex-offender is deemed a desister merely as a result of no new observation of criminal activity, which leaves room for uncertainty (Bushway, Brame, & Paternoster, 2004). The paucity of data surrounding criminal activities later in life makes it difficult to correctly assess desistance as findings can only reflect the cutoff period of observations (e.g. at a specific age). Therefore, a true life-long analysis of desistance may not be achieved (Sampson & Laub, 2001). Some researchers have examined the process of “temporary desistance” stating desistance is not a permanent state but may be seen as a period of quiet (lulls) in offending for persistent offenders (Maruna, Lebel, Mitchell, & Naples, 2004). Researchers embracing the idea of intermittency in criminal careers should incorporate the concept of remission in desistance models (see Nagin & Land, 1993).

Another important measurement debate stems from the mode of data collection. Some researchers have made the point that the use of self-reports and offending records

are the primary collection agent for information on desistance from crime (Mulvey, 2001; Piquero, Schubert & Brame, 2014). Self-reported criminality yields rich information of criminal behavior but does not go without its criticisms. It has been criticized for primarily relying on personal recollection, which may not always be factual, and information may be skewed (Farmer & Dawson, 2017). Evidence suggests some individuals may admit to not committing criminal acts but engage in other deviant behaviors (e.g., gambling and substance use). This does not suggest that relying primarily on criminal records is the superior way of capturing desistance from crime. The same can be argued for this mode of analysis because not every act of crime will be noted in criminal records. Moreover, Laub and Sampson (2001) has cautioned against studies that solely rely on official documentation such as criminal records as such studies may miss other criminal offending behavior. Therefore, the use of both criminal records and self-reports should be practiced in desistance research.

In their attempt to coin an empirical framework for studying and measuring desistance as a process, Bushway et al. (2001) explain that desistance may be observed as a state of zero offending. They further explain that desistance may be perceived as the quantitative change in the frequency of criminal offending from higher levels to an ultimate zero. In addition, identifying a statistical framework that effectively models the level of change is necessary to observe the changes in criminality. Following a definition and framework for the study of desistance, one can then examine the characteristics of the individual and their environment that can predict the correlates of desistance. Research on the factors most influential in shaping criminality such as personality and

social bonds are explained in the upcoming sections. In addition, theoretical frameworks most prominent in desistance research are discussed.

Theoretical Perspectives and Desistance

There is no single desistance theory or approach and desistance lends itself to a myriad of theoretical perspectives. A criminological theory of desistance is stated to incorporate the persons' individual characteristics and their interaction with their social environment (Cools et al., 2011). The offender as well as the criminal behavior cannot be understood in isolation (Sampson & Laub, 2001). Theories such as Hirschi's (1969) social control theory and Sampson and Laub's (1995) life course perspective of crime incorporate the person environment interaction on criminal behaviors. Sampson and Laub's life course perspective is used as the theoretical framework guiding this research study. However, one of the most common and consistent finding in desistance research is the relationship between age and crime. Therefore, it is worth discussing as it relates to desistance from crime (Blonigen, 2010).

Age and Crime

One of the longest correlation found in the criminal justice literature is that criminal activities peak during the teen years and declines with age referred to in the literature as the 'age crime curve' (Carrington, 2001; Farrington, 2017; 1986; Kazemian, 2007; Rocque, Posick, & Hoyle, 2015). The natural biological process (e.g., puberty) that occurs with maturation helps to guide the process of 'growing out of crime' and settling down. Sampson and Laub (2001) explains that desistance theory hypothesizes that crime declines with age because of the factors associated with growing older that reduced criminality (e.g. physical, psychological, biological factors and the desire for

stimulation). Similarly, Blonigen (2010) states that age by itself does not convey a relationship with crime. However, the covariates of age are the primary influence on crime. Aspects of aging and characteristics of social and environmental engagement associated with maturation positively contribute to living a more conventional lifestyle (Basto-Pereira et al., 2015; Loughran et al., 2016; Maruna, 1999; Terry & Abrams, 2015). Biological factors (e.g., impulse control) and behavioral factors (e.g., hopefulness) are associated with decreased offending. A decreased interest in offending as one ages may be seen as a normative stage as one transition into adulthood and the desire to commit crimes has dissipated, replaced by living a more mature focused lifestyle (e.g., marriage, parenthood and employment). Those offenders who continue into adulthood with a life of offending have been hypothesized to have biological or neurological disabilities that may have affect the normal maturation process (Massoglia & Uggen, 2010).

Desistance is a product of the changes in behavior (behavioral shift) that is a reflection of the age of the individual. A part of maturation is becoming financially independent and as well as other behavioral markers such as getting married and owing a home (Sampson & Laub, 2005). Furthermore, younger adolescents commit more crimes than older ones owing to differences in economic status. Younger youths are poorer than older youths and as a result commit more crimes to compensate this lack of economic independent (Shulman et al., 2013). Likewise, older juveniles are more likely to desist from crime than younger juvenile offenders because younger juveniles will not have had the adult experience of marrying and finishing school. Therefore, younger juveniles have not yet accumulated deep-rooted social ties associated with conventional standards of society (Hayford & Furstenberg, 2008).

Another important relationship between age and criminal offending is the 'age crime curve'. The 'age crime curve' assumes offending tends to increase from late childhood with a peak in later juvenile years (e.g., 15-19 years old). Crime will decline as juveniles get older, especially in their early twenties (Blonigen, 2010; Loeber & Farrington, 2012). Differences in peak points are observed between gender and types of crimes in some cases. For example, girls peak earlier than boys in offenses and the same is said for property crimes as opposed to violent crimes. The 'age crime curve' tends to be higher for minority males stemming from a disadvantaged background (Loeber & Farrington, 2012).

Incorporating personality into the age crime literature, Blonigen (2010) asserts that during the late adolescence into early adulthood, normative changes in personality (maturation) may play a significant role in desistance from crime and antisocial behavior. The extensive psychological growth that takes place during this developmental phase is referred to as the maturity principle (Allport, 1937 as cited by Blonigen 2010). This phase parallels desistance from crime over time. More so, juveniles show a continual increase in agreeableness and conscientiousness and a decline in neuroticism throughout adulthood is observed. Some theorists however, dismiss personality traits as an explanation for desistance in juveniles (Loeber & Farrington, 2012).

Unfortunately, for juveniles with disabilities going through transitions they may be faced with a lack of support and transition services to help with age appropriate goals leading to independence (Kohler & Fields, 2003). Juveniles with disabilities may often be under the care of a family member which may also have not received parental transition services. These services are needed to aid in the successful transition into young

adulthood of juveniles with disabilities and the lack of needed services may lead offenders with disabilities to engage in criminal behaviors (Anthony et al., 2010). Lack of effective transitional services include but are not limited to continued education, employment training and independent living skills. Ultimately, with poor transitional services, and limited services allocated to those with the most severe of disabilities, individuals with disabilities such as intellectual impairment will result in high unemployment rate and restricted participation in community activities (Cummings, Maddux, & Casey, 2000).

Theory of Social Control

One of the major theories in criminology literature is social control theory. Dating back to the 1950s and 1960s, this theory was made prominent by the early writings of Hirschi (see “Causes of Delinquency”, 1969). The theory of social control predicts that the formation of informal bonds to work, social roles, and institutions results in increased investment in conventionality (Opsal, 2012). Social control theory proposes that individuals who commit crimes or are delinquent, fail to form appropriate bonds to society consisting of attachment, commitment, involvement, and belief. The stronger the bonds the less likely delinquency will occur (Wiatrowski, Griswold, & Roberts, 1981). In contrast, social control theory makes the assumption that individuals will engage in criminal activities when an individual’s bond to their community and society are weak (Britt, 1990). Therefore, where social bonds are stronger criminal activities will decrease.

Social bonds are comprised of four units (1) attachment, (2) commitment, (3) involvement and (4) belief (Hearn, 2010; Hirschi 1986). The four bonds are not independent of each other but are interrelated and are the foundation for healthy

psychological development (Britt, 1990; Parent, 2003). Attachments to others (family, friends, religious, respect, love), especially to parents, are the most important as they are the first forms of socialization where norms and values may lead to deterrence from crime. Commitment refers to the extent individuals build up investments and assets in society (e.g. education and the thought of criminal activities will be outweighed by the risk of losing such investments). Involvement refers to the amount of time spent in societal activities (e.g. spending time with friends, family and extra-curricular activities). The assumption is that if individuals are too busy participating in social activities, they will be less likely to engage in crime. Belief refers to the level at which an individual accepts and respects the laws and authority of society (Parent, 2003). The theory further suggests that the absence of close relationships with others can give individuals a significant amount of free time, allowing them to engage in delinquent behaviors. Alternatively, close relationships with delinquent peers can lead individuals to criminal activities (Kempf-Leonard, & Morris, 2012). Therefore, peer relationship may have a positive or negative effect on individuals. The basic findings on the correlates of desistance from crime relating to the theory of social control is similar to those found using a life course theoretical framework. In addition, findings obtained are the same whether a cross sectional or longitudinal design is used (Hirschi & Gottfredson, 1995).

Life Course Perspective

Sampson and Laub (2003) modeled elements for the life course perspective from Hirschi's social control theory. They emphasized the importance of social factors in the role of desistance and added concept of turning points in moving away from a life of crime. The life course theory declares five general principles, which includes "social

pathways, developmental trajectories, and social change” (Elder, et al., 2003, p. 11). The first principle of lifespan development is the notion that human development and aging is a lifelong process and does not end at age 18. The principle of agency is the second principle which states, individuals follow their own life course through personal choice and pathways taken are influenced by resources and opportunities available to them as well as past social circumstances (e.g., socioeconomic status, family support and values). It is with their individual choices and limitations of their environment that contribute to their future trajectories. For example, juvenile’s intellectual investment to further their education may result in educational and occupational success, society involvement and life satisfaction. Schubert, Mulvey, and Pitzer (2016) found that purposeful psychological changes and entry into the job market as possible mechanisms, which promote desistance during the developmental period of individuals.

The principle of time and place postulates that the life course of individuals is influenced by past occurrences over their lifetime (Elder, Johnson, & Crosnoe, 2003). The same experiences may have different effect on different individuals depending on the time frame of experiences throughout the life course (or developmental stages). This is considered to the fourth principle called ‘the principle of timing’ (Elder et al., 2003). This fourth principle helps to put into perspective why juveniles of the same age/cohort may be affected differently by the same event. The fifth principle highlighted by Elder and colleagues is the ‘principle of linked lives’. The assertion is that lives are lived interdependently with social relationships and socio-historical influences are often a reflection of this shared relationship. New relationships can impact turning points that lead to change in behavior or maintain behavior (positive or negative). The essence of the

developmental life course theory is to highlight that individuals cannot be represented entirely if separated from their network of relationships. Moving away from an age specific theoretical framework, this theory moves towards the recognition of individual choice and social history in the determination of developmental trajectories.

Another contributor to the life course perspective is Moffitt (1997). In his book on developmental theories on crime and delinquency, Moffitt (1997) noted that individuals choose their life choices based on the opportunities, culture, and social structures. However, differences in levels of support and environment greatly affects the trajectories of juveniles. Moffitt explains that positive events in the transition phase (e.g., marriage and employment) may provide opportunities for desistance as well as may promote continuity for antisocial behavior. Individuals may choose to live a conventional lifestyle with healthy relationship and civil involvement or may pursue these opportunities with individuals that support their antisocial behavior. Additionally, unlike persistent offenders, juveniles who are desisters have more to lose (e.g., family and career) if they continue into crime beyond juvenile years. Therefore, this may serve as a deterrent to criminal behaviors.

The life course perspective theory is a good theoretical model for the current study as it allows for the incorporation of a variety of influences in the desistance process (e.g., employment, marriage and children). It emphasizes social ties and external influences that facilitate changes in behavior and encourage desistance from crime. Furthermore, it emphasizes the role of agency where individuals have the power to shape their own lives and criminal pathways. The internal motivations and interpersonal workings of an individual will allow researchers to understand the connectivity and social

ties influencing behavioral outcomes and pathways to desistance (Farrington, 2011; Laub, 2006). Sampson and Laub (1993) described these informal social controls to link interpersonal bonds to individuals and social institutions in society (e.g., school, work and family). Change in behavior over the life course are systematically linked to social bonds and attachments to work, family and institutions in adulthood supporting desistance into adulthood (Farrington, 2017). In essence, manifestations of crime or the dynamics of desistance can be explained by the life course perspective through processes of social control, human agency and the role of routine activities.

Disability and Core Aspect of the Theoretical Framework

Further examining the theoretical framework of desistance delves into a closer look at the social conditions of individuals with disability in society. Social conditions and interactions with disability indicate vulnerability in this population due to stigma (Gargiulo, 2016), employment barriers (Cook, 2006), structural barriers (Swain, French, Barnes, & Thomas, 2013) and social barriers (Burchardt, 2004). Social factors associated with Hirschi's theory can be explored by examining the basic factors that constitutes this theory.

Attachment and Bonds. Weak social bonds and attachment among individuals can lead to deviant activities (Hirschi, 1969). Individuals with disabilities experience negative perceptions, which may lead to weak attachment in society. Traditionally individuals with disabilities have been perceived as passive and unable to maintain normal social relationships with others (Swain et al., 2013). Individuals with disabilities are often placed in oppressive relationships and seen as incapable with a devalued social status. People with disabilities experience disadvantages in all areas of life (employment,

education, housing, transportation, and civil rights) and through disablism (social imposition of avoidable restrictions on all aspects of the life of people with disability) experience social oppression or exclusion (Swain et al., 2013). Moreover, stigma, discrimination, and stereotypes result in social isolation and impaired social networks for individuals with disability especially for those with mental illness. Consequently, in some this may lead to suicidality, hopelessness and the co-occurrence of biological and psychological vulnerability (Rusch, Zlati, Black, & Thornicroft, 2014). According to Hirshi's theory, attachment to others particularly parents control delinquent tendencies and the more attachment an individual has, the less likely they are to be involved in delinquent behavior (Parent, 2003). However, Hirschi believed attachment to parents are of high importance because they are the first unit of socialization. Raising a child with a disability can pose several challenges for families (e.g. economic hardship) and may lead to significant stress which may lead to isolation and embarrassment for the family. Mothers are especially affected as they are often the primary caregivers and experience the most vulnerability. As a result, attachment difficulties to the child may arise as a result of the general stress and guilt associated with raising a child with a disability (Findler, Jacoby, & Gabis, 2014).

Commitment and Involvement. Commitment and Involvement refers to the investment of one's time and energy into activities within the community such as education/school and employment. Several studies have found that individuals with disabilities are less likely to be employed, have a poor education and this is exacerbated for those with multiple disabilities (Mitra & Vick, 2013). Employment related stigma and discrimination experienced by individuals with disability causes inequality within the

workplace. Barriers experienced include cognitive, attitudinal, behavioral and structural issues received from employers and fellow employees alike. This may result in negative self-confidence and isolation among individuals with disabilities (Stuart, 2006). With the barriers faced by individuals with disabilities such as discrimination in hiring practices and poor accommodation in schools, individuals with disabilities may not feel motivated and confident to fully commit to career and educational goals. As a result, individuals with disabilities will have lower investments and social output in society.

Similar to commitment is involvement. Hirschi (1969) and Sampson and Laub (2003) postulate that the time spent participating in societal activities (e.g. spending time with the family and studying for school) will cause the individual to utilize their time productively and as a result is likely to not get involved in criminal activities. Due to the barriers individuals with disabilities may experience will prevent them for participating in conventional activities, which causes detachments from society. For example, transportation serve as a primary barrier for individuals with disabilities (Friedman & Rizzolo, 2016) and this will affect them going to school, library, participate in extracurricular activities and socializing with distant friends and family. As a result, individuals with disabilities resort to unplanned activities, which may be close to home or within the house. Hirschi (1969) posit that individuals want to be involved in conventional activities where possible but other conventional activities (e.g. work) may place restriction on the amount of time allotted for these activities. Excessive amounts of leisure (or sensation seeking) activities may lead to deviant activities but individuals with disabilities may or may not resort to deviant activities despite having the extra time for recreation due to environmental and social barriers.

Morals and Belief. Belief and morals refers to the acceptance of socially acceptable attitudes, sensitivity to others, behaviors and laws. Alston, Harley, & Lenhoff, (1995) explain that prior to the onset of disability, the moral beliefs of individuals associated with a person with a disability are often in accordance with the laws and regulations of society. They provided examples in substance abuse where individuals have respect for appropriate substance use and the non-use of illegal substances. However, with the onset of a disability laws and regulations may be perceived in a less rigid manner. Persons with disabilities may be perceived as being entitled to participate in drug use owing to perceived loss of societal involvement and independence. As a result, family members and other persons may encourage as opposed to discourage the use of substances as a result of pity, guilt and compromise. Hirschi (1969) highlights that compromise may lead to deviant activities as the values and norms of society are not made primary in the decision making in committing deviance activities. Hirschi goes on to state that if allegiance to a society's belief system is weak or do not exist, the individuals may behave without consideration of that or belief system and this may lead to engaging in deviant activities. Those who conform are more likely to embrace society's value system.

Factors Influencing Desistance from Crime

Scholars acknowledge that not all juvenile offenders continue a criminal career into adulthood becoming persistent offenders as some move away from their criminal background. However, this is not a straight forward process to understand and there are many variables that come into play to attempt to explain why some juvenile offenders desist from crime. The focus of the current study seeks to highlight the social and

individual factors that contribute to desistance for serious juvenile offenders. Therefore, it is important to take a closer look at the definitions of social and individual differences.

According to LeBel et al., (2008) *individual differences* (e.g., which is also referred to as subjective factors or agentic factors) is explained as the “changes in the way individuals experience, understand, interpret, and make sense of the world around them” (p. 133).

Walters (2002) explained that desistance begins with a shift in conscious awareness, which then influences a shift in behavior. However, this shift in consciousness is debated to be a response to structural turning points (e.g., employment and positive social bonds) in an individual’s life (Sampson and Laub, 2003). Therefore, *social factors* refer to the “institutions, developmental events and processes” (LeBel et al., 2008; p. 133).

Individuals live interdependently within their communities and rely on elements in their environment to affect significant life changes. Social ties to the environment create a limitless accumulation of social capital that influences positive behavior and eventually desistance from crime (Savolainen, 2009). The observation of attachments or commitments to various social institutions in the environment is classified by Hirschi (1969) as *social bonds*.

Social Bonds and Relationships

The development of social bonds has undoubtedly played a role in desistance literature. Sampson and Laub (2001) in their study using Glueck’s historical sample, found desistance from criminal offending is governed by three main social factors: employment, marriage and military service. Beaver, Wright, DeLisi, and Vaughn (2008), postulate once individuals accumulate social capital like employment and marriage they are more invested in conforming to conventional society. On the other hand, those who

fail to develop social bonds will have less investment in society and less to lose by engaging in criminal activities. These individuals are likely to become persistent offenders throughout adulthood. McNeill, Farrall, Lighthowler, and Maruna (2012) corroborate Sampson and Laub's (2001) perspective by adding formal and informal institutions help to solidify the connection between the individual and society. For juveniles, institutions such as school, peer groups, and the family, influence the bonds between the wider society. While marriage and parenthood encourage bonds for older adults.

The role of social bonds undoubtedly encourages a path from criminal offending to more conventional behaviors through forms of social support (Crank, 2014). Most important, is the mere presence of social bonds in desistance than the quality of the bonds formed. These important predictors of desistance are especially important in early adulthood and the desistance process (Crank, 2014; Wright & Cullen, 2004; Uggen, 2000). Barry (2010) examined youth transitions of 40 young ex-offenders (20 males and 20 females) and their reasons for, and the advantages and disadvantages of continuing or cessation from offending. Barry found that with more legitimate opportunities available for juveniles, desistance is more likely to occur. Individual determinants are seen as the most influential in young adults' desistance from crime. Results of the study indicated that, for female participants in the study, attention and contact from peers or partners as well as drug using partners were most influential in starting offending. This was a result of the need for attention from interaction with their peers, which was not obtained from their families (Barry, 2010). Social reasons were the primary reasons for women to start offender while personal or practical reasons were stated for males.

There are several factors that explain desistance and most include the risk of being reincarcerated, losing social relationships and overall independence. In addition, females expressed a deeper concern for being incarcerated owing to the risk of their children being in the care of others (e.g. social work department) and losing established social networks (e.g. partners, family and friends). The disenchantment from criminal activities in the desistance phase was attributed to the increased desire for conventional aspirations and goals (e.g. owing a house, car and a family of their own).

The increase attention to social relationships and crime has raised attention to the importance of marriage and desistance. Barr and Simmons (2015), proposed cohabitation (which is “marriage like”) is associated with reduced crime, especially among African Americans. This association further fueled a study by the authors who examined the impact of desistance, cohabitating and dating relationships. Barr and Simmons (2015) examined a longitudinal dataset of African American youth and their families living in Iowa and Georgia. Results of the study indicated coresidential relationships, quality of relationships were associated with a reduction in crime. Similar to Barr and Simmons, Wyse, Harding, and Morenoff, (2014) in their study they investigated the impact of romantic relationship on desistance. Result of the study supported the idea that romantic relationships (particularly marriage) adds to desistance to offending. Negative influences are also observed as a result of romantic relationships. Women are more likely to become romantically involved with partners similar to themselves (e.g. addiction, criminal history, etc.), which may negatively affect the desistance process. The marital and financial supports obtained from relationships may help to prevent homelessness and income generating crime. Although positive relationships have indicated to be an

important variable to desistance, lack of employment within the relationship may cause men (head of households) to engage in criminal activities to meet gender expectations (Wyse et al., 2014). This stresses the importance of a multidimensional approach to desistance as no one factor can adequately explain this process.

Engaging in healthy social relationships and prosocial institutions has shown to reduce the risk of engaging in criminal behaviors (Durrant, 2017; Hirschi, 1969; LeBel, Burnett, Maruna, & Bushway, 2008; Terry, 2012; Unruh, Povenmire-Kirk, & Yamamoto, 2009; Warr, 1998). The social bonding model predicts that individuals who have more social capital and bonds to society are more likely to desist from crime (Devers, 2011). Sampson and Laub (1993) refer to the points of life where transition from criminal activities occurs as 'turning points'. The occurrence of turning points (e.g., marriage, employment and enrolling into the military) allows for the desistance from crime. However, developmental and structural factors (e.g., parent's divorce, socioeconomic status, family dysfunction and being foreign born) play an important role in how individuals develop social ties in their environment and impacts whether a person becomes involved in crime or not.

Predictors of Desistance: Social Factors

Understanding predictors of desistance is important to promote and encourage those factors that yield successful outcomes. However, some desistance research such as that conducted by Bast-Pereira et al., (2015) highlight results that are contrary to other desistance researchers. It is important to discuss because it shows how conceptualization and methodology in studying desistance may yield varying results. In their research, Bast-Pereira et al. (2015) postulate that knowledge about the predictors of desistance is

key in establishing interventions for youths with delinquent behavior. However, many of the variables stated to be predictors in the literature proved to be non-significant. They carried out a systematic review of the long-term predictors of desistance from crime in juvenile delinquents. The study comprised of a total of 15 longitudinal studies published in academic journals between 1994 and 2013.

Results of the studies indicated non-significant predictors for males were parental supervision, anti-social behavior, sociability, delinquent friends, relationship with parents, race and socioeconomic status. In females, non-significant predictors of desistance included physical abuse and low income. No long-term factors during adolescence or adulthood consistently predicted desistance. Bast-Pereira and colleagues (2015) highlighted that these results are dissimilar to individuals and posed the question, why some studies yield different results than others even after controlling for certain variables (e.g., age and gender). One proposed suggestion is that criminal paths are not independent of social influences (e.g., employment, housing, mental health state and family/community relationships) and different levels of social integration may affect one's criminal path. They stated to test predictors of long term crime desistance without simultaneously testing for social variables in the present will yield different results (Bast-Pereira et al., 2015). Also, it is hypothesized that predictive ability of some of the variables will decrease over time. Variables may have had an effect on childhood but not in adulthood. Importantly, mirroring the debate about desistance and how it is measured shows that differences in methodology on studying the variables can yield different results between studies. Bast-Pereira et al., (2015) stated a possible meaning for the carrying results could be the strict inclusion/exclusion criteria, which reduced the number

of studies they reviewed. As a result, the small sample size may have negatively affected the results obtained.

Employment and Desistance

Employment as a factor that promotes desistance and reduces or terminates criminal offending has been well discussed in criminological literature (Bushway & Apel, 2012; Doherty, 2006; Giordano et al., 2002; Laub & Sampson, 2003; Kruttschnitt, Uggen, & Shelton, 2000). Employment as an important domain in the process of desistance has proven to be controversial with some researchers stating its positive impact on desistance (Sampson & Laub, 2003) while others believe it has no impact on the desistance process (Tripodi, Kim, & Bender, 2010). The rational choice theory made popular by Cornish and Clarke (1986) asserts that access to economic opportunity is seen as a tradeoff to committing crimes. If legitimate wages outweigh the costs associated with criminal activity an offender will become less involved with crime. The economic independence obtained from employment is not the only benefit to employment, but the bond established with coworkers and the commitment to job stability reduces criminality (LeBel et al., 2008). Employment is a positive activity that provides social control where employers monitor the activities of employees, which helps to deter them from criminal activities. By engaging in constructive activities, take away from time that will otherwise be available to engage in destructive behaviors. Employment provides a sense of accomplishment, identity and belonging for individuals. Furthermore, earning legal income helps to negate the need for illegal means of obtaining an income. In addition to a legal source of income, employment serves as a source of peer interaction and networking. Wright and Cullen (2004) explain that employment produces social

interactions, which aid as a deterrence from criminal behavior. In their study using the National Youth Survey of over 1700 young adults Wright and Cullen explained the benefits of working included being a source of peers who may have extensive commitments to conventional values. Engagement with prosocial co-workers in turn takes time away from delinquent peers who may disrupt the desistance process.

Over the years criminologists and desistance researchers have acknowledged the unique pathways into crime for female and male offenders (Rodermond, Kruttschnitt & Slotboom, 2015; Uggen & Kruttschnitt, 1998; Opsal, 2012). Historically, male offenders have been the primary focus of men's desistance from crime and very few studies have explored women's experiences of factors that contribute to desistance such as work after being incarcerated. For women, reducing the marginalization experienced with work has shown to reduce the chances of offending and increases the likelihood of desistance. Additionally, parenthood, supportive relationships and human agency are found to be important for females in addition to work and economic independence (Rodermond et al., 2015; Uggen & Kruttschnitt, 1998). While on the other hand, some researchers have suggested that working plays a less significant role in desistance for women as women tend to be more resourceful than men they may be more likely to find external means of financial assistance (e.g., spousal support and governmental assistance). However, Giordano et al., (2002) explain that women use employment to help shape prosocial identities and in shaping self-concepts relates to desistance (Opsal, 2012). From a social control framework, employment serves as an avenue for women to build prosocial bonds that helps to develop a stake in conventionality, which decreases the likelihood of criminal offending.

Adolescents perceive being employed as a springboard to independence and to achieve their goals as this makes for a successful transition into adulthood and desistance (Unruh et al., 2009). Juvenile offenders explain that having independence help with the desistance process and stability especially after being released from a juvenile correction facility. However, juvenile offenders' pathways to employment may be impacted by the lack of work experience and having a criminal record. In addition, it is stated that the internal influences of an offender may prove to be a barrier to their successful employment. If an offender does not possess a committed cognitive mindset of "going straight" employment will unlikely facilitate desistance (Skardhamar & Savolainen, 2014). Additionally, with active criminal engagement, offenders do not perceive themselves as capable of taking on social roles associated with maturation such as employment. Therefore, under the life course theoretical model, life course transitions will only be short lived with no permanent changes to behavior without cognitive reform. On the other hand, Skardhamer and Savolainen, (2014) found that employment acts as a turning point for some offenders due to the substantial reductions in offending. However, they stated that desistance from crime was observed prior to employment and even after employment further reduction in crime was not observed. They further explained that it is important to observe time order in studying desistance.

For employment to be influential in the desistance process employment should have started prior to desistance and the opposite is also true. If desistance from crime preceded employment it should be treated as a causal factor of living a crime free life (Skardhamer & Savolainen, 2014). Despite their limited support for employment effect on desistance, it is thought that maintaining employment may have played a part in no

further offending for some participant offenders. Also, it was highlighted that the impact of employment was more beneficial for older rather than younger offenders. One crucial point that was made by the researchers was that differences in their observations compared to other research on desistance, indicated no way to distinguish between a “good job” and “bad job” as this may have been impactful.

There are some researchers that make the correlation that intensive work and crime negatively affecting the process of desistance. According to Staff et al. (2011), criminologists predict an inverse relationship between intensive employment (working 20 hours or more) while in school and crime. For teenagers, paid work experience during the school year is positively correlated with delinquency and substance use. In a longitudinal study, Staff and colleagues found significantly higher rates of crime and substance use among employed youth who preferred intensive versus moderate work. They further explained a primary reason for the negative consequences is working too many hours may be that work conflicts with school commitments and reducing social control. In addition, employment provides financial freedom from parental supervision and as a result may enable more unstructured socializing activities (e.g., parties which may lead to increased deviance opportunities). Controlling for certain factors such as prior deviance, school success, and school commitment, reduces this negative effect of work but does not eliminate the relationship. In addition, they found higher rates of crime and substance use among non-employed youths who preferred intensive versus moderate work (Staff et al., 2001).

Disability and Employment. Employment has been considered to not only provide economic benefits but also a social network, providing workers a sense of worth

as productive members of society. Despite positive emotions towards employment, young adults with disabilities are more likely to quit their last jobs than have left for other reasons (Newman et al., 2011). Jans, Kaye, and Jones (2012) postulate people with disabilities want to work but face employment barriers and as a result the employment rate among this population is dismal. About 40% of individuals age 21 to 64 with a disability were employed compared to 80% of individuals without disabilities (Brault, 2012). Individuals with mental illness experience particular barriers to employment (e.g. stigma, stereotype and inaccurate beliefs). Having a criminal record poses an additional barrier to employment (Poremski, Whitley & Latimer, 2014) and a double jeopardy with having a disability and criminal record (Tsai & Rosenheck, 2016). O'Hara (2004) found that women with disabilities are dually penalized in the job market. They experience discrimination based on both gender and disability status.

Education and Desistance

Similar to employment, education serves as a turning point for young adults as they seek knowledge and skills to pursue vocational success (Giordano et al., 2002; Kruttschnitt et al., 2000; Runell, 2107; Sampson & Laub, 2003, 1993; Warr, 1998). Education requires for individuals to dedicate a significant amount of time and effort to their academics, which signifies considerable investment. Crank (2014) explains that education may influence the manner in which an individual perceives themselves, thereby promoting more responsible behavior. Adapting a human capital approach, the relationship between education and crime reveal education or skills training socialize individuals such that they may not find criminal behaviors attractive. Also, there is a correlation to wages, education and criminal offending for young offenders. Education

increases future wage rates and as a result, more youths finish high school and college decreasing the likelihood of criminal activity. Following through with educational goals require patience and research, which shows that individuals who are more patient are less likely to engage in criminal activities (Lochner, 2007).

Education has been tied to desistance as a means to increase employability and decreases the need for criminal engagement (Runell, 2017). Post incarceration having an advanced level of education like that obtained in college or university is more desirable as it is more difficult to solely obtain employment with a GED or high school diploma. The investment of offenders to the educational achievement helps to foster bonds and attachment, which decreases the likelihood of reoffences. According to Runell, results of his study found that offenders perceived higher education as a motivation to act upon the inner will to desist from crime. Juvenile offenders highlighted the notion of personal will and desire. Education was an opportunity to act upon this motivation to follow through with desistance, which coincided with their transition into adulthood. In addition, pursuit of education was beneficial as it helped to form social bonds and introduced them to prosocial routine activities. Maruna (2011) perceive education as a turning point for positive change in an offender's life. Runell explained that offender' resonated with this concept as they believe education was their "hook for change" as it fueled a sense of confidence and purpose in their lives (Cleere, 2013) where they could see themselves abandoning a life of crime. One participant pointed out that post incarceration going to school was an activity they could look forward to on a daily basis similar to being incarcerated being in the same place for a long period of time. University was seen as an infrastructure leading a person to the right direction (Runell, 2017). According to Ford

and Schroeder (2010), higher education education during adulthood is more impactful for more serious juvenile offenders during adolescence.

Many juvenile offenders have a high rate of school failure, unemployment, poor home lives, living situations and criminal recidivism (McNeill, Farrall, & Lighthowler, 2012). Many of these obstacles are as a result from being incarcerated where disruption in the normal functioning of everyday life had occurred (e.g., being terminated from a job, missed classes and negative psychological effects). Some juvenile offenders may be forced to take on adult responsibilities beyond their years owing to poor socioeconomic situations (Terry & Abrams, 2017). For many offenders starting over or turning over a new leaf (referred to as knifing off) gives them an opportunity to put a past plagued with disadvantaged circumstances behind them (Elder, 1998). New beginnings and transitions allow offenders to establish potential turning points such as educational attainment. In this sense, all forms of educational attaining and skills training serve as prosocial activities as the extent to which education and other activities are needed to instill change is still unclear (Maruna & Roy, 2007).

Maternal Warmth

Research has long since acknowledged the role of parenting and juvenile delinquency (Gilliom, 2004; Haddad, Chen, & Greenberger, 2011; Lahlah et. al, 2014; Myron-Wilson, 1999; Pardini, Walker & Hawes, 2015). Examining bidirectional associations between parenting and child/adolescent outcomes seeks to identify aspects of the family environment to the early emergence of antisocial behavior leading to criminal activities during adolescence. Positive parenting practices such as parental monitoring,

warmth, and involvement have shown to reduce the risk of adolescent maladjustment (Harris, Vazsonyi, & Bolland, 2016).

Avinun and Knafo (2013), in their investigation on parenting dimensions such as positivity (maternal warmth, accepting of the child, and support) and genetics, results of the meta-analysis indicated that parental behavior was influenced by environmental influences as well as children's age. These findings are important as it speaks to the moderating effect on the parenting relationship on behaviors displayed by children/adolescents. They highlighted the importance of genetic effects on how children react to parenting practices to state that genetics play an important role in a child's behavior and not solely the family environment. It is difficult to definitively associate any one factor to desistance from crime as it relates to family dynamics and parenting qualities. However, parental warmth and parental practices have shown consistent associations with the development of antisocial behavior (Pardini et al., 2015).

According to Pardini and colleagues (2015), positive attachment serves to foster positive developmental characteristics in adolescence. Beyond the scope of bonds and attachment, children who were raised by nurturing mothers were less likely to be convicted of criminal offending in adulthood when compared to harsh mothers. In childhood, low levels of deviant behaviors were associated with high parental warmth and shared parental activities. When children do not experience healthy attachment to their parents/caregivers or when a nurturing relationship is not developed during infancy, early onset conduct issues develop. Adding to this point, Tanner-Smith, Wilson, and Lipsey (2013) indicated from their meta-analysis that when harsh parenting practices comprised of hostility, rejecting and unsupportive behavior towards children occur is a

primary predictor of youth delinquent behavior. An important consideration when examining parental practices is the measurement and data collection of this construct. Pardini et al., (2015) as studies often use child-report measures to assess parenting which tend to yield stronger associations to deviant behaviors than parent-report measures. In addition, studies frequently assess the primary caretaker in the home (mostly mothers) and take into account little consideration to other parental figures influential in the child rearing process.

Despite the growing attention towards positive parenting and trajectories to criminal offending, there are still areas to be explored regarding parenting practices. One such area is parenting style. Steinberg, Blatt-Eisengart, and Cauffman (2006) through their examination of parenting style and serious juvenile offenders found scores on measures of competence for parents were similar in both minority economically disadvantaged neighborhoods and White affluent suburban youths. What was significant is that parental control rather than parental warmth was found to be critical for deviant trajectories for youths in dangerous neighborhoods. This may be so as firm and protective parenting (authoritarian) may serve to be more beneficial to youths growing up in these environments (Furstenberg et al., 1999).

A more recent study by Yang and McLoyd (2015) highlighted the relationships with parents and child outcomes. Results of the study indicated that maternal warmth impacted the relationships among girls and antisocial behavior. Experiences of aggression in various environments (school, home and neighborhood) may influence later aggression and interpersonal rejection resulting in an increased probability for antisocial behaviors in later years. This logic weighs on the social-ecological model which states

individuals are influenced by their environment (Rosa & Tudge, 2013). According to Yang et al. (2015), maternal warmth (mother-child communication) influences how children react to peer victimization as well as children's antisocial behavior. They explained that maternal warmth increased the behaviors of a child by reducing anxiety and learning difficulties and acting out behaviors. When girls experienced increased maternal warmth and frequent communication with their mothers, antisocial behaviors decreased. For boys, when both positive and negative interactions occurred no significant changes were observed. It is suggested that boys may be less susceptible to family and maternal influences owing to boys spending less time away from home than girls. In addition, peer influence may play an important role as boys have a larger peer network and they are more likely to be more influential on their behaviors than family interactions. Boys may experience difficulties having quality conversation with their mothers than girls (Huizinga et al., 2005) and as a result the developmental of quality maternal bonds may not be present.

Similarly, in a more recent study of relationship quality and juvenile offending, Cavanagh and Cauffman (2017) found that high quality early mother son/son relationships reduced youth re-offending patterns. However, less maternal warmth was displayed to juveniles when mothers perceived that their sons were engaged in ongoing offending. This modest study made visible the impact reoffending or ongoing offending had on maternal warmth. Initial maternal warmth and parental support serves to deter antisocial behavior but as Cavanaugh highlighted, repeat offenders experience a decrease in this important positive parenting factor. Furthermore, this change in positive parenting is affected by age as younger adolescents experienced a sharper decrease in maternal

warmth than older youths. This is contrary to Wright and Cullen's (2001) assumption that states positive parenting is consistent across age groups in reducing antisocial behaviors. It is mentioned that the burden of dealing with juvenile reoffending causes additional strain and stigma (Lieberman, Kirk, & Kim, 2014) on the family, which as a result sever maternal relationships.

Parenting practices for children with intellectual disabilities (ID) suggest different parenting behaviors (Wieland, Green, Ellingsen, & Baker, 2014). Parents of individuals with ID tend to display more directiveness, which attributes to social competence for children with ID. Children with ID display higher levels of behavioral problems, conflict resolution, and emotional regulation, which may account for the increased directedness observed in parenting practices (Fenning et al., 2011, Guralnick, 1999; Wieland et al., 2014). For parents of children with ID, high level of behavioral problems was observed among those with parents that controlled their child's behavior and expressed low maternal warmth (Lancaster, Balling, Hastings, & Lloyd, 2014).

Predictors of Desistance: Individual Differences

To understand desistance, it is important to fully examine not only environmental factors but also considering the person as a whole. Internal mechanisms are just as important in trying to analyze why individuals desist from crime or become persistent offenders. Maruna (1999) explains individuals live their lives shaped by the environment and culture shaping their own life narratives. Healy (2010) adds that offenders thinking styles are an important predictor to desistance and highlights that individuals are not passive aggressive in their environments. Personality encompasses the past, present and an individuals' perception of their future, which later mediates future interaction.

According to narrative theory, human behaviors are influenced by internalized traits called personality. Personality traits (e.g. extraversion and aggressiveness) influence people's behaviors and have the propensity to change over time. Personality helps individuals to plan personal goals and accomplishments including the hope and decision to go straight. LeBel et al., (2008) assert that hope is fueled by confidence, optimism, and the active desire to accomplish one's goals than merely wishing it will work out. In addition changes in moral beliefs have a strong effect on desistance as offenders begin to reevaluate their past behaviors and regrets which helps them to reconsider their criminal behavior.

Impulse Control

Impulse control or self-control is an umbrella term used to connect the concepts of self-regulation, willpower, hyperactivity, and conscientiousness (Moffitt et al., 2011). Self-control is a behavioral trait that is fostered and encouraged during childhood. It is one of the most impactful predictors of persistent offending beyond mental illness and demographic variables (DeLisi & Vaughn, 2008). Effective socialization by parents in a child's younger years (approximately 8 years old) is associated with elevated levels of social control (Doherty, 2006). While Monahan et al., (2013) cautioned that harsh parental practices and low socioeconomic status and poor neighborhood environment may contribute to poor self-control from ages 9-12 years old. Poor self-control is not only associated with crime, it is important for health and adult socioeconomic status (Moffitt et al., 2011). However, when self-control is maintained it remains relatively stable throughout the life course and an offender's propensity to commit crimes decreases. According to Doherty (2006) individuals who have a propensity to engage in criminal

activities tend to be insensitive in nature, impulsive, risk takers, lack forward thinking and nonverbal skills. In her study of desistance and a test of Sampson and Laub's (1993) 'life course desistance theory' Doherty found that self-control is significant and negatively related to desistance from crime. Those individuals who have low social integration and low control of impulse are more like to belong in the offending group. The opposite is also found to be true. Individuals who portray high self-control are future oriented (opposed to immediate gratification), plans towards their future, display concerns for other individuals rather than aggression, and practice self-restraint (Gottfredson & Hirschi, 1990). An important finding in the study emphasized that social bonds play a significant role in predicting desistance independent of an individual's level of self-control. This simply means that each person experiences trajectories to desistance in their own way as there are multiple pathways to desistance. Furthermore, social bonds and self-control do not work independently of each other but work interdependently for desistance from crime (Doherty, 2006).

Shulman, Harden, Chein, and Steinberg (2014) propose that there are differences observed in self or impulse control and gender. In their study, they found results consistent with desistance literature, which indicate that impulse control increases into the 20s for both males and females. However, they reported that females than males exhibit a higher level of impulse control. Differences in neurological development, maturity and sensation seeking are stated to contribute to this factor. Females' sensation seeking spurt peaks at an earlier age and declines earlier than that of males. Males tend to have a more gradual effect in sensation seeking and impulse control. Despite gender differences in impulse control, adolescents exhibit poor decision-making skills, reckless

behavior, unsafe sexual activities reckless driving and criminal activities (Shulman et al., 2014). Results of their study indicate that on average, females have higher impulse control than males with greater disparity between the sexes as age increased. Several theoretical reasons were proposed for these gender differences ranging from societal pressures placed on males to have a high social status. As a result, males may engage in higher risk taking and impulsive behaviors to obtain resources and provide protection to females. On the other hand, females are motivated by the need to become independent from their families, which fosters impulsive behaviors (Daly & Wilson, 2001; Shulman et al., 2014).

From a religious perspective, the beliefs of prison chaplains were considered to determine the causes of criminal offending. According to Denney (2017), results of the study indicated that low impulse control among other factors such as poor social supports and lack of moral thinking were correlated to criminal offending. Prison chaplains believed that individuals commit crimes due their inability to control their impulses and exercising low self-control about the opportunities that emerge in their lives. Offenders do not perform long-term thinking and demands immediate gratification driven by greed and selfishness. Denney postulate that for an offender to proceed on a pathway to desistance from crime, they will need to change their outlook on life and criminal thinking. With strong support enforcing morality (accepting right from wrong), offenders can become successful desisters (Denney, 2017).

Intellectual Impairment and Impulse Control. The role of low IQ is researched to be a prominent factor in placing adolescents at risk for a life of criminal offending (Farrington & Loeber, 2000; Hampton, Drabick & Steinberg, 2014; Meldrum, et al.,

2017). Research on brain activity has indicated that neurological factors have an indirect association with antisocial behavior and low self-control (Meldrum et al., 2017). They go on to state that influences in early childhood such as harsh parenting and neighborhood disadvantage may negatively affect neural development leading to delinquent behavior and hinder the development of self-control. In addition, the susceptibility theory asserts that individuals with cognitive and personality disabilities possess characteristics of impulsivity, irritability, suggestibility and an inability to interpret consequences which predisposes them to criminal/delinquent behavior (Quinn et al., 2005). Therefore, tackling and preventing childhood deficits from an early age will help to prevent self-control issues and deviance in the future.

For adolescents, the role of impulsivity continues to play a vital part in criminal offending due to their malleability. This notion perceives juvenile offenders as more susceptible to bad influences and having poor judgment in consequences as a result of their actions (Scott & Grisso, 1997). An alternative explanation provided by Hirschi (1969) relates to a lack of social bonds. He believed that impulsivity, aggressiveness and isolation may be observed when there are no moral restraints and attachments have been weakened (Hirschi, 1969). Some researchers have asserted that social impairment experienced by these individuals may be because of symptoms of hyperactivity and impulsiveness (Friedman et al., 2003). Moffitt and colleagues (2011) added that despite of social class and IQ, poor self-control would more likely result in conviction of crimes into adulthood. In contrast, Silver and Nedelec (2018) in their study indicated that low IQ does have moderating effects for antisocial behavior, but this effect diminishes as participants age. Nevertheless, it is not completely clear as to the reason for impaired

social competence among individuals with intellectual impairment. Meldrum et al., state that answering these questions will require an integration of neurological models into theoretical frameworks within criminology research.

Motivation to Succeed

Healy (2010) postulate that offenders' thinking style is an important predictor to desistance and highlights that individuals are not passive aggressive in their environment. Terry and Abrams (2015) explains that young people who possess high levels of motivation and good coping skills, tend to be more successful as it relates to desistance. Paternoster and Bushway (2009) posit offenders make a conscious change in their identity or subjective self to do away with an identity of a criminal to a law-abiding identity. This gradual change to a more positive future is further supported by the individuals' environment and social supports. In essence, juveniles who come into contact with the juvenile justice system and have a strong motivation to succeed will experience a decrease in offending overtime than those who do not. Offenders have the capability of choosing their own pathways based on their internal beliefs, identity and destiny.

Personality plays an important role in an individual motivation to succeed as personality encompasses the past, present and an individuals' perception of their future, which later mediates future interactions (Healy, 2010). This positive way of thinking helps individuals to plan personal goals and accomplishments including the motivation and decision to go straight. LeBel et al. (2008) assert that hope to go straight is fueled by confidence, optimism, and the active desire to accomplish one's goals than merely wishing it will work out. Paternoster and Bushway (2009) on 'Desistance and the Feared

Self' have explicitly targeted identity and desistance. They maintain that the self is a key element in the desistance process, which can be classified into the working self (oriented towards the present), future self or possible self (oriented towards the future). Offenders make an intentional shift in self-change and commit to this motivation to succeed in this new self to ensure sustained desistance. Hence, those who continue to actively follow a life without crime and become desisters saw meaning and purpose in their lives that motivate this positive trajectory from crime (Maruna, 2001).

Moving away from crime is a complex process that varies across offenders. Shifts in perceptions and interpretations of an offender's current situation may add to their motives for desistance. According to Haigh (2009), offenders' ability to choose to live a life without crime is influenced by insecurities of being able to maintain a crime free lifestyle. Going crime free is perceived as a life free from excitement and their criminal backgrounds are scrutinized and judged by others in the environment. In her qualitative study, juvenile offenders explained that engaging in criminal activities was a necessity due to economic circumstances or as a form of bonding with others. They explained that the decision-making process to go straight was primarily based on the personal choice to truly change their lives for the better. By embarking on a pathway from crime that is self-directed as opposed to the direction of others was expressed to be the motivating factor for going straight. However, younger offenders (14-17 years) articulated that pressures from family, participating in support programs and changing schools were the motivating factors for change from a life of criminal offending. Participants in the study reinforced the understanding that change from criminal offending was necessary but the pathways to change are difficult (Haigh, 2009).

Similar to findings by Haigh, Barry (2010) states that offenders' motivation to go straight are guided their own narratives, transitional experiences, industrial society (employment and education) and other structural factors. Therefore, both structure and agency are influential in the motivation to succeed. Nonetheless, the individual is primary in the decision-making process, which is additionally impacted by age, class and gender. Barry indicated that offenders expressed a fear of being reincarcerated and losing bonds and relationships with family and friends as their motivation to succeed. Therefore, an overall desire to successfully integrate with family, friends and the wider society were found to be key motivators to succeed in living a crime free lifestyle. Barry explained that these reasons to discontinue offending may not be the only motivators for offenders because contrary to extant literature on desistance, some offenders were actively living a desistant lifestyle but were not in any relationships or had any type of employment. One of the main reasons provided that motivated success in going straight was merely the fear of adverse effects experienced when participating in criminal activities.

It is clear that motivation is derived from both an internal process as well as reinforced through social support networks for desistance from crime to be successful (Panuccio, Christian, Martinez, & Sullivan, 2012). According to Pittaro (2008), change is unlikely to occur without the offender adapting to society's values, norms and laws. However, the demands of society pose legal challenges, medical and emotional difficulties paired with uncertainty for ex-offenders. Without adequate preparation and a willingness to change desistance is less likely. Overcoming social barriers is insufficient on its own to promote sustained desistance. A combination of needed supports and resources as well as a change in narrative is key for sustained desistance. When offenders

envision a new identity free from crime and have the willpower to live crime free, social barriers such as unemployment are irrelevant (LeBel et al., 2008).

To compound matters even further, minority status negatively impacts motivation and the perception of having opportunities to succeed. For minorities, motivation is lower than non-minority juvenile offenders and may negatively impact reoffending trajectories (Molly, 2012). In her study, Sullivan (2013) found that Black and dual heritage participants had less social support, lower community engagement and economic resources due to marginalization. As a result, these individuals have less commitment to desistance and motivation to become desisters. Maguire and Raynor (2006) recommend providing empathetic support to offenders, which will increase their motivation to be successful in the desistance process. This is especially the case when offenders encounter setbacks and adversities on their pathway to desistance. Also, helping offenders to see the value of living a crime free life and increasing their cognitive skills set will equip them to make better life choices in challenging situations.

Moral Disengagement

The social cognitive theory conceptualizes moral disengagement as acts of wrongdoing which may warrant external sanctions and as a result, individuals construct justifications for violations against the moral standards (Moore, 2015; Shulman, Cauffman, Fagan, & Piquero, 2011). When immoral behavior is justified through cognitive processes of the individual, they see the behavior less as a wrongdoing and more acceptable to themselves. In other words, moral disengagement is the cognitive processes that allow a person to commit negative actions against others (van Noorden, Haselager, Cillessen, & Bukowski, 2014). Moral disengagement is a term coined by

Bandura and according to Bandura (2017, 1993,1991) frequent moral disengagement may result in a habitual rationalization of immoral behaviors and this may lead to stable morally disengaged attitudes. Immoral attitudes developed in children and adolescents are more likely to lead to antisocial behaviors and aggression due to a rejection of society's views of acceptable behavior (Shulman et al., 2011). Walter (2018) found that moral disengagement is a predictor of future offending. Furthermore, a decline in moral disengagement will result in a decline in antisocial behaviors. This can be explained by Bandura's (1999) classification as the 'dual aspect of moral agency'. He believes morals serve an inhibitive (power to refrain from negative behaviors) and proactive purpose (the power to behave humanely).

Moral disengagement has been the center of criminology research including childhood aggression, workplace deviance (Moore, 2015), and sexual aggression (Scarpati & Pina, 2017). Shulman et al. (2011) discussed the results of their research to indicate that effect of moral disengagement on offending has a greater influence on offending than offending impacting moral disengagement. Meaning, as moral disengagement increases an increased level of offending is observed. Also, lower levels of offending reflect lower levels of moral disengagement. Notably, they postulated that moral disengagement showed a decrease over time in their sample. It was suggested that this decrease may be attributed to developmental changes. Moore (2015) corroborates the notion that moral disengagement is malleable and decreases over time. Paciello et al., (2008) concluded moral disengagement decreases between the ages of 14 and 16. More recently, interventions to reduce moral disengagement have emerged. For example,

Bustamante and Chaux (2014) have introduced increasing critical thinking skills in ninth grade students will help to reduce the levels of moral disengagement.

Moral disengagement and its relation to empathy and aggression among juvenile offenders was examined by Wang, Lei, Yang, Gao, and Zhao (2016). These researchers expressed the need for more understanding about moral disengagement as aggression among youths may result in behavioral and psychological problems. The expression of more empathy for others aids in the development of increased moral concepts. Therefore, individuals who exercise low moral disengagement and high empathy would lead to less aggressive behaviors. Results of their study indicated that moral disengagement was positively correlated to aggression. High moral disengagement was indicated to be a risk factor of aggression among male juvenile delinquents. More (2015) highlighted that studying moral disengagement as a moderator or mediator has been cause for concern. However, research indicated that moral disengagement as a moderator or mediator has proven to yield similar results to research carried out studying this factor. When faced with dangerous situations moral disengagement serve as an accelerant for deviant behavior.

Kiriakidi (2007) explains that moral disengagement should be perceived as an independent variable influencing juvenile antisocial behavior more so than social and environmental characteristics (e.g., family, school and employment). Examining the relations of moral disengagement among social factors, Kiriakidi found that differences in moral disengagement existed between institutionalized offenders than those who were not. No difference in moral disengagement was found in regard to frequency of offending. In addition, education, employment history, age and family dysfunction were

not found to be significant as it relates to moral disengagement. Instead, substance use and the social worker support services and disruptive living accommodations were related to moral disengagement. Therefore, a within individual perception of moral disengagement provides a better understanding on how antisocial behavior is influenced. Interventions that target cognitive transformation will prove beneficial for juvenile offenders with high moral disengagement as this type of intervention will allow challenge juveniles to make better judgments about how they react to situations in their environment (Kiriakidi, 2008; McAlister, Alfred, Perry & Guy, 2008).

CHAPTER 3

Methodology

Rehabilitation professionals work closely with individuals with disabilities and having knowledge of factors that impact serious juvenile offenders can help to better serve this population with reintegration and pathways to desistance. The aim of the current study was to investigate the individual differences and social factors that are important in the desistance process for serious juvenile offenders. Thus, this study aimed help to address gaps in criminological and rehabilitation research by providing important insight into both sets of factors, with a concentrated focus on the implications for rehabilitation counselors and human services professionals working with serious juvenile offenders. Provided that this focus on desistance is sparsely studied, it is important to concentrate and build upon the varied lists of factors leading to desistance from crime. Using a cross sectional design guided by the life course theoretical framework, this study addressed the following research questions:

1. Which social factors (i.e. education, employment, parental warmth) are most effective for increasing desistance for serious juvenile offenders?
2. Which individual factors (i.e. moral disengagement, motivation to succeed, impulse control) are most effective for increasing desistance for serious juvenile offenders?
3. Does type of offending (aggressive or income) have an effect on the social factors for desistance for serious juvenile offenders?
4. Does type of offending (aggressive or income) have an effect on individual factors for desistance for serious juvenile offenders?

5. Which interaction of social and individual factors predicts the best model for desistance for serious juvenile offenders?
6. Which interaction of social and individual factors predicts the best model for desistance for serious juvenile offenders with intellectual impairment?

The Pathways to Desistance Study

The Pathways to Desistance longitudinal dataset used for this current study, has been used previously in research with a focus on desistance from crime. Very few longitudinal studies exist with a focus on serious juvenile offenders (Mulvey & Schubert, 2012) and especially with an extensive list of individual and social factors. This dataset was appropriate for the current research focus because the social and individual factors being examined (e.g., moral disengagement, motivation to succeed, impulse control, education, employment, maternal warmth) were available and included in this dataset. For example, in much of the desistance literature findings may have over exaggerated the role and importance of social factors, and as such, other key factors (e.g., individual differences) may have been overlooked and excluded (Crank, 2014). Also, Lebel et al. (2008) report that subjective factors or individual differences precede social factors, which results in desistance from offending. Therefore, desistance is perceived as the main function of social and individual factors and addressing one factor without the other will contribute little to the process of living a life without crime. Thus, both factors are imperative in the desistance process.

Data collected through interviews with participants and self-reports of criminal engagement can uncover a diverse range of offending activities that may otherwise not be uncovered in official criminal records alone. The use of official reports is predominantly

used in quantitative studies (Crank, 2014) and with the Pathways data relying on self-reports, provides a richer pool of information that can be analyzed from the data obtained. Despite obtaining self-reported information on criminal activity directly from participants, it should be reiterated that one cannot be absolutely sure that an individual has desisted from crime (Mulvey & Schubert, 2012). Furthermore, with the large sample size of the Pathways data (1,354) the possibility of making generalization of the findings increased compared to smaller sample sizes in other research on desistance.

Pathways to Desistance Data

The Pathways to Desistance study is a longitudinal self-reported survey research focusing on serious adolescent offenders and their transition from adolescence to early adulthood over a period of seven years. The Pathways study was funded by several agencies and data from the Pathways to Desistance study is publicly available through the Inter-University Consortium of Political and Social Research (ICPSR). A total of 1,354 serious adolescent offenders are followed over a seven-year period and participants ages ranged from 14 to 19 years at the time of enrollment. Participants were recruited from two metropolitan site locations (1) Maricopa County, Arizona and (2) Philadelphia County, Pennsylvania. These two locations were strategically selected as both had (a) diverse racial/ethnic mix of potential participants, (b) high rates of serious crime committed by juvenile, (c) a large enough number of female offenders, (d) contrast in the criminal justice systems' operations and (e) the presence of experienced researchers to oversee data collection. Data were collected via computer-assisted interviews (CAPI). Due to its large sample size the Pathways study yielded high rates of statistical power for

analysis (Schubert et al., 2010). For the current study the large sample size of 1354 yielded a posthoc result of 0.99 indicating a very strong statistical power.

Data Collection. Enrollment in the study started in November 2000 and concluded in January 2003. Data collection concluded in April 2010. Youths were selected for the study if they met the the age requirements (14-18 years) and if they had been adjudicated delinquents in juvenile court or found guilty in the adult court for serious offenses. Offenses for juvenile offenders were felony levels with the exception of some misdemeanor property offenses, sexual assaults, and weapons offenses. There was a cap placed on male offenders to 15% for drug offenses owing to the elevated level of drug offenses at each site location but no cap was placed for females (Mulvey et al., 2004).

Upon enrollment in the study, participants involved in the juvenile justice system completed a baseline interview within 75 days of their adjudication, and those involved in the court system completed their interview within 90 days. Follow up interviews were conducted every six months for the first three years and then every year for the remaining four years. Therefore, a total of 11 waves of data were collected across the duration of the study (seven years). The response rate for follow up interviews averaged 90%. Interviews with participants were conducted and recorded on laptop computers (computer-assisted interviewing) and error prompts were used to alert the interviewer of any discrepancies that may arise (Mulvey et al., 2004).

Sample

Participants included in the current study included those serious juvenile offenders from the Pathways baseline dataset. A total of 1,354 participants were included,

and the sample demographics are demonstrated in Table 1. Participants' ages ranged from 14 to 19 years with an average age of 16.5 years. Participants were both male and female juvenile offenders of diverse ethnicities.

Table 1

Demographic Characteristics of Identified Sample of Serious Juvenile Offenders (N=1354)

	Ethnicity				
<u>Gender</u>	<u>White</u>	<u>Black</u>	<u>Hispanic</u>	<u>Other</u>	<u>Total</u>
Male	225	493	398	54	1170
Percentages	19.25%	42.1%	32%	4.6%	100%
Female	49	68	56	11	184
Percentages	26.6%	37%	30.4%	6%	100%
Total	274	561	454	65	1354

Measures

The Pathways dataset used over 50 different scales and a total of 37 constructs. Constructs included in the study range from demographic information (e.g., age and gender), social constructs (e.g., employment and education), individual constructs (e.g., perception of chances of success), and offense history. Measures relating to the current study are discussed further in this section and information on validity and reliability are presented.

Dependent Variable: Desistance

Self-Reported Offending. Desistance from crime is measured using an adaptation of the Self-Reported Offending (SRO) instrument (Huizinga, Esbensen, & Weiher, 1991). The SRO allows the participant to indicate whether he or she has been involved in any illegal activities ‘ever’ or over the last six months. The SRO is a 24-item instrument, which measures adolescent’s account of involvement in antisocial and illegal activities. Two sub-categories of ‘offending varieties’ are measured (Aggressive and Income Offending Variety). Examples of questions used in the Aggressive Offending Variety include “Have you ever killed someone?” “Have you ever forced someone to have sex?” and items in the Income Offending Variety include “sold marijuana?” and “been paid by someone for sex” (Mulvey et al., 2011). For the current study, desistance is dichotomous where no illegal activity during the recall period is coded as 1 (indicating desistance) while participating in illegal activities are coded as 0. The scale SRO provided good reliability with a Cronbach’s alpha of 0.80.

Independent Variables: Individual Factors

Intellectual Impairment (ID). Due to varied causes and effects of ID on an individual, it may be perceived as an individual factor unique to the person (Boat, 2015). The Wechsler Abbreviated Scale of Intelligence (WASI) was used to measure IQ in the Pathways study. The WASI is a test used to assess intelligence quotient (IQ) and produces an estimate of general intellectual disability based on two subsets (a 42-item vocabulary and 35- item Matrix reasoning tests). The test is administered in 15 minutes and higher scores indicating greater intellectual ability. The WASI is administered on paper and only calculated scores are entered into the database. The scores are generated

by the interviewer administering the test. Intellectual impairment is defined as having a significant cognitive deficit, which manifests as having an IQ below 70 (Boat, 2015). As a result, ID was measured as having an IQ below 70 and a total of 198 juvenile offenders fulfilled this criterion. The WASI scale indicated good reliability and internal consistency with a Cronbach's alpha of 0.86.

Moral Thinking. This measure is used to assess the adolescents' attitudes toward treatment of others. The self-report measure contains 32 items to which participants respond on a Likert scale ranging from "Disagree to Agree" with higher scores indicating greater moral detachment. Items examine the following eight dimensions: moral justification (e.g., It is alright to beat someone who bad mouths your family.), euphemistic language (e.g., slapping and shoving someone is just a way of joking.), advantageous comparison (e.g., It is okay to insult a classmate because beating him/her is worse.), displacement of responsibility (e.g. Kids cannot be blamed for using bad words when adults do it.), diffusion of responsibility (e.g., A kid in a gang should not be blamed for the trouble the gang causes.), distorting consequences (e.g., Teasing someone does not really hurt them.), attribution of blame (e.g., If kids fight and misbehave in school it is their teacher's fault), and dehumanization (e.g., Some people deserve to be treated like animals). The overall score for the was found to have good reliability and internal consistency at the baseline ($\alpha=.88$ and CFI= 0.865) (Mulvey et al., 2004).

Motivation to Succeed. The items on motivation to succeed are constructed from the Eccles, Wigfield and Schiefele (1998) measure. Items examine participants' assessment of the opportunities available in their neighborhood regarding school and work and their perceptions of how far they would like to go and think they will go in

school. A higher score indicates more optimism regarding future success. Reliability results showed good reliability where CFI=0.971 and RMSEA= 0.049 (Mulvey et al., 2004).

Impulse Control. The Weinberger Adjustment Inventory (WAI) is an inventory used in the assessment an individual's social-emotional adjustment within the context of their environment (Mulvey, 2011). A total of eight items from the WAI were used to assess impulse control and questions within this subscale included "I say the first thing from my mind without thinking enough about it". Participants were asked to rank the extent their behavior in the past six months matched the included statements (1=false to 5= true). The higher indicated more positive behavior (i.e. more impulse control). For the current study, this variable was recoded to a dichotomous variable where the lower score indicated high impulse control (coded as 1) and the higher score indicated low impulse control (coded as 0). Confirmatory factor analysis indicates good internal reliability (CFI= 0.95 and alpha=0.78). The WAI scale indicated good reliability and internal consistency with a Cronbach's alpha of 0.76 for impulse control.

Independent Variables: Social Factors

Employment. Employment measure in the Pathways study included descriptive items regarding youth's prior employment experience and items related to financial responsibility. Items measured for include: currently employed, if ever worked in the past, durations of employment and/or reason for leaving, ever made money illegally and responsibility of repaying others (e.g. "tell someone you would pay them back but fail to do so") (Mulvey, 2011). For the current study, if participants were employed it was coded as 1 and if not currently employed as 0.

Education. The School Bonding Attendance Activities and Orientation measure is used to assess several themes to the information from subjects about school: School attachment, information about the school experience (e.g. attendance, involvement, achievement and behavior problems). School attachment was used using a 5-point Likert scale ranging from “Strongly Agree to Strongly Disagree” with higher scores indicating greater degree of academic commitment. Information on enrollment status were also collected. For the current study, if participants were enrolled in school they were coded as 1 and unenrolled were coded as 0. The Chronbach’s Alphas for the school orientation indicated good reliability with a score of 0.83 (Mulvey et al., 2004).

Maternal Warmth. Mothers’ warmth is assessed using the Quality of Parental Relationships Inventory by Conger, Ge, Elder, Lorenz, & Simons, 1994. The mean of nine items was assessed to determine the level of nurturing supports provided by a participants’ mother with higher scores indicating greater maternal nurturing and support (Mulvey, 2013). Items from the measure assesses maternal warmth by asking questions such as “How often does your mother let you know she really cares about you?” rated on a Likert scale ranging from never (0) to always (4). Confirmatory factor analysis performed at baseline suggested internal consistency and good reliability with alpha= 0.92 and CFI=0.95.

Data Analysis

For the current study, the statistical package for the social sciences (SPSS) version 22 was used for the analyses. Descriptive statistics is provided to highlight demographic information among the sample population. In addition, binary logistic regression models were created to answer all research questions. This analytical method

was used to determine the relationship between each of the social and individual indicators. According to Kleinbaum, Kupper, Nizam and Rosenberg (2013) regression analysis is a statistical method used for its predictive purposes and understanding the relationship between two or more quantitative variables. Specifically, binary logistic regression is a statistical technique used when the response variable is binary (expressed as either 0 or 1). Predictor variables can be added or deleted from the regression model to meet some specific criteria deemed as stepwise logistic regression. This is a common technique used when the study is exploratory in nature. A binary logistic regression analysis is an appropriate model for the current study as multiple independent variables may determine the outcome of the dichotomous dependent variable (desistance). Given that desistance is a dichotomous variable, there are only two possible outcomes (desister or offender) coded as 1 or 0 respectively. A p-value < 0.05 was used to predict desistance (outcome variable).

CHAPTER 4

Results

Factors of Desistance from Crime

The aim of the current research was to identify the social and individual factors associated with desistance for serious juvenile offenders. Results of the analyses is discussed in this section. In addition, desistance and offending results by ethnicity and gender are indicated in Table 2 to 2.2 below. Results indicated that majority of the participants of the study found to be desisters were mostly minority populations with the exception of the group “Other”. The group Other had ranked the lowest in all categories and across all offending variety, which may be as a result of having the smallest group size of participants. Black and Hispanic juveniles were found to have the highest percentages of both desisters and offenders in both total and aggressive offender variety type. In the income offending variety, Black and Hispanics male and female offenders had the highest level of desisters. Black male and female juveniles were observed to have the highest percentage of offending with the exception of White female juveniles ranked slightly higher in income offending than Hispanic females at 31% and 30.2% respectively (Table 2.2). Overall, males rather than females represented the largest population of desisters in the study. This can be attributed to males making up the majority of the study participants (N=1170).

Table 2

Demographic Information of Desistance from Total Offending (N=1354)

Variable	Desister	Offender
<i>Ethnicity-male</i>		
Black	41 (41.8%)	452 (42.2%)

Table 2 (continued)

White	17 (17.3%)	208 (19.4%)
Hispanic	35 (35.7%)	363 (33.9%)
Other	5 (5.1%)	49 (4.6%)
<i>Ethnicity-female</i>		
Black	58 (36.5%)	10 (40%)
White	44 (27.7%)	5 (20%)
Hispanic	48 (30.2%)	8 (32%)
Other	9 (5.7%)	2 (8%)

Note: Males= 1170 and Female= 184

Table 2.1

Demographic Information of Desistance from Aggressive Offending (N=1354)

Variable	Desister	Offender
<i>Ethnicity-male</i>		
Black	89 (41.8%)	404 (42.2%)
White	41 (19.2%)	184 (19.2%)
Hispanic	75 (35.2%)	323 (33.8%)
Other	8 (3.8%)	46 (4.8%)
<i>Ethnicity-female</i>		
Black	21 (38.2%)	47 (36.4%)
White	13 (23.6%)	36 (27.9%)
Hispanic	17 (30.9%)	39 (30.2%)
Other	4 (7.3%)	7 (5.4%)

Note: Males= 1170 and Female= 184

Table 2.2

Demographic Information of Desistance from Income Offending (N=1354)

Variable	Desister	Offender
<i>Ethnicity-male</i>		
Black	110 (43%)	383 (41.9%)
White	52 (20.3%)	173 (18.9%)
Hispanic	80 (31.3%)	318 (34.8%)
Other	14 (5.5%)	40 (4.4%)
<i>Ethnicity-female</i>		
Black	27 (46.6%)	41 (32.5%)
White	10 (17.2%)	39 (31%)
Hispanic	18 (31%)	38 (30.2%)
Other	3 (5.2%)	8 (6.3%)

Note: Males= 1170 and Female= 184

Table 2.3

Summary of Intercorrelations of Social and Individual Factors

Variables	1	2	3	4	5	6
1. Education	—	-.027	-.071**	.156**	.018	.076**
2. Employment	-.027	—	-.017	.077**	.004	-.024
3. Moral Disengagement	-.071**	-.017	—	-.276**	-.172**	-.357**
4. Motivation to Succeed	.156**	.077**	-.276**	—	.102**	.078**
5. Maternal Warmth	.018	.004	-.172**	.102**	—	.193**
6. Impulse Control	.076**	-.024	-.357**	.230**	.163**	—

Note: ** indicates significance at the 0.01 level ($p < .01$).

Results of the Spearman's rho correlation output indicated significant relationships among several independent variables (see Table 2.3). More specifically, a positive correlation was observed between education and motivation to succeed (small

strength) and education and impulse control (moderate to large strength). Additionally, a negative correlation was observed between education and moral disengagement (moderate to large strength). A moderate to large positive correlation was observed between employment and motivation to succeed (.077). Also, a small negative correlation was observed between moral disengagement, motivation to succeed, maternal warmth and impulse control. Lastly, small positive correlation was observed between maternal warmth motivation to succeed and impulse control. While a small negative correlation was observed among maternal warmth and moral disengagement (-.172).

The first research question, “*which social factors are the most effective for juvenile offenders for desistance from crime?*” is answered using the data provided in Table 3. Predictors of desistance are stated to include employment, education and maternal warmth based on findings in the desistance literature (LeBel, et al., 2008; Maruna, 2001; Mendelson, Turner & Tandon, 2012). Table 3-14 show the influence of social factors and individual factors examined (employment, education and maternal warmth, motivation to succeed, impulse control and moral disengagement) on the process of desistance. Results of the binary logistic regression analyses are displayed indicating the beta value, significance, odds ratio and confidence intervals. Each table will be further discussed below.

For the total offending variety, all social predictors of desistance have proven to be significant in predicting desistance from crime when analyzed individually (Table 3). These findings reject the null hypothesis and accept the alternate hypothesis, which states that social factors will increase desistance in serious juvenile offenders. The most effective and impactful social factors are education (1.898), employment (1.695), and

maternal warmth (1.521). Of the three social factors, for juveniles who are enrolled in school the odds of desistance are multiplied by 1.898 compared to juveniles who are not. This means that juvenile offenders who are within an education institution (e.g., high school) are more likely to become desisters living a life without crime as opposed to those who are not in school.

To results of the research question two, *which individual factors are the most effective for desistance from crime*, are reported in Table 3. Similarly, to the social factors examined, all individual factors were found to be significant predictors of total desistance from crime. More specifically, moral disengagement, motivation to succeed and impulse control were shown to predict desistance from criminal offending. Of the three individual factors, impulse control is found to be the most impactful for desistance from total offending. The odds of desistance from crime are multiplied 3.372 times as impulse control increases. Following impulse control is motivation to succeed, and thirdly moral disengagement as predictors of desistance. When juveniles experience increased moral disengagement the odds of desistance decreases by 0.397 times (Table 3). These findings are in the expected direction and level of significance, which are consistent with desistance research (Monahan, Steinberg, Cauffman & Mulvey, 2009; Shulman et. al, 2011). These findings allow for the rejection of the null hypothesis stating no differences will be observed among individual variables in predicting desistance.

Table 3

Binary Logistic Regression Analyses Showing Social and Individual Factors for Total Offending

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	0.528 (0.244)	1.695	[1.051; 2.734]	0.030
Education	0.641 (0.243)	1.898	[1.177; 3.058]	0.009
Maternal Warmth	0.419 (0.155)	1.521	[1.122; 2.061]	0.007
<i>Individual Factor</i>				
Moral Disengagement	-0.923 (0.295)	0.397	[0.223; 0.708]	0.002
Motivation to Succeed	0.437 (0.150)	1.547	[1.154; 2.075]	0.004
Impulse Control	1.215 (0.341)	3.372	[1.728; 6.577]	0.000

Note: $p < .05$

Results for research question three, *does type of offending (income and aggressive) have an effect on social factors of desistance* is as follows. Results of the binary logistic regression analyses reveal that all social factors except one were significant predictors of desistance from aggressive offending. Education and maternal warmth were shown to be significant predictors and employment was found to be non-significant (Table 4). With more than one variable shown to be predictors the null hypothesis is rejected to accept that type of offending has an effect on social factors of desistance. As it relates to aggressive offending, the most impactful social factors related to aggressive offending are maternal warmth (1.285) followed by education (0.702) (see Table 4). With increased maternal warmth, the odds of desistance from aggressive offending among serious juvenile offenders increased 1.285 times. Interestingly,

education was found to be significant with the odds of desistance decreasing with increased changes in education.

The results of social factors and income offending indicated varying effects on desistance. As a result, the alternate hypothesis holds true. All social factors were found to be significant predictors of desistance from income offending (see Table 5). Results indicated the odds of desistance increased with employment as well as maternal warmth. However, the odds of desistance decreased with education. The odds ratio for employment showed this factor to be the most impactful (1.548), followed by maternal warmth (1.352). Lastly, with increased education showed a decrease in odds of desistance of 0.610 times for income offending.

Table 4

Binary Logistic Regression Analyses Showing Predictors of Total Aggressive Offending

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	0.226 (0.161)	1.254	[0.915; 1.719]	0.160
Education	-0.353 (0.160)	0.702	[0.513; 0.961]	0.027
Maternal Warmth	0.251 (0.105)	1.285	[1.046; 1.578]	0.017
<i>Individual Factor</i>				
Moral Disengagement	-0.668 (0.205)	0.513	[0.343; 0.765]	0.001
Motivation to Succeed	0.281 (0.281)	1.325	[1.075; 1.633]	0.008
Impulse Control	0.602 (0.227)	0.183	[1.170; 2.849]	0.008

Note: p < .05

The results of question four “*does type of offending (aggressive or income) have an effect on the individual factors for desistance*”, are reported in Tables 4 and 5. For aggressive and income offending, all individual factors were found significant in predicting desistance from crime. For aggressive offending, changes in impulse control are positively related to changes in desistance. In essence, when a juvenile offender experiences an increase in impulse control or control of self and behavior, the odds of desistance are multiplied by 0.183 compared to those who do not. As it relates to moral disengagement, a decrease in the odds of desistance (0.513) was found as this factor increases. Therefore, as adolescents experience increased moral detachment and increased negative attitudes towards the treatment of others, the probability of desistance is reduced.

For individual factors in relation to income offending the results are discussed in this section. The odds of desistance increased and are multiplied by 4.297 as juvenile offenders experience increased impulse control. This is similar to results found in the desistance literature (Morizot & Le Blanc, 2007; Laub et al., 1998). Similarly, when a juvenile offender experiences increased moral disengagement characterized by moral detachment and the treatment of others, the odds of desistance decreases by 0.313 times. Lastly, for this model the odds of desistance increased 1.600 times (Table 5) with increased motivation to succeed. Therefore, with a more positive and optimistic outlook on opportunities to succeed juvenile offenders increases their chances of desistance from crime for income offending. As a result, the null hypothesis is refuted stating no differences would be observed.

Table 5

Binary Logistic Regression Model Showing Predictors of Total Income Offending

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	0.437 (0.157)	1.548	[1.138; 2.105]	0.005
Education	-0.495 (0.154)	0.610	[0.451; 0.825]	0.001
Maternal Warmth	0.301 (0.100)	1.352	[1.112; 1.643]	0.002
<i>Individual Factor</i>				
Moral Disengagement	-1.161 (0.202)	0.313	[0.211; 0.466]	0.000
Motivation to Succeed	0.470 (0.103)	1.600	[1.308; 1.958]	0.000
Impulse Control	1.458 (0.222)	4.297	[2.778; 6.645]	0.000

Note: $p < .05$

The importance of both individual and social factors is evident in desistance research (Kazemian, 2007; Maruna, 2001). Research question five examined “*which interaction of social and individual factors predicts the best model for desistance serious juvenile offenders*”. When examining the relative impact of both sets of factors on desistance for total offending the impulse control is the only significant predictor. The odds of desistance are multiplied 2.547 as impulse control increases. All other social and individual factors were found not to be significant when combined in the same regression model (see Table 6).

Table 6

Total Offending and Predictors of Desistance Binary Logistic Regression Model

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	0.234 (0.398)	1.264	[0.580; 2.755]	0.556
Education	-0.373 (0.398)	0.689	[0.316; 1.502]	0.348
Maternal Warmth	0.327 (0.267)	1.386	[0.821; 2.341]	0.222
<i>Individual Factor</i>				
Moral Disengagement	-0.487 (0.545)	0.615	[0.211; 1.787]	0.372
Motivation to Succeed	0.012 (0.291)	1.012	[0.573; 1.788]	0.967
Impulse Control	0.935 (0.406)	2.547	[1.149; 5.643]	0.021

Note: $p < .05$

When examining the relative impact of both social and individual differences on desistance for total aggressive offending none of the social and individual factors were found to be significant predictors of aggressive offending when combined in the same regression model (see Table 7).

Table 7

Total Aggressive Offending Binary Logistic Regression Model

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	-0.074 (0.265)	0.928	[0.552; 1.560]	0.779
Education	-0.299 (0.269)	0.741	[0.438; 1.257]	0.266
Maternal Warmth	0.206 (0.176)	1.228	[0.869; 1.735]	0.244

Table 7 (continued)

Individual Factor

Moral Disengagement	-0.607 (0.369)	0.545	[0.265; 1.123]	0.100
Motivation to Succeed	0.021 (0.196)	1.022	[0.695; 1.501]	0.914
Impulse Control	0.277 (0.270)	1.319	[0.776; 2.241]	0.306

Note: $p < .05$

The regression model of total income offending yielded more significant social and individual predictors (Table 8). When examining the relative impact of both social and individual differences on desistance for total income offending (Table 8) impulse control indicated to be the only significant predictor of income offending with the odds of desistance increasing by 3.116 times as impulse control increases.

Table 8

Total Income Offending Binary Logistic Regression Model

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	0.444 (0.271)	1.559	[0.917; 2.651]	0.101
Education	-0.098 (0.253)	0.907	[0.552; 1.490]	0.700
Maternal Warmth	0.053 (0.165)	1.054	[0.763; 1.457]	0.750
<i>Individual Factor</i>				
Moral Disengagement	-0.604 (0.363)	0.547	[0.268; 1.114]	0.096
Motivation to Succeed	0.269 (0.165)	1.054	[0.896; 1.911]	0.164
Impulse Control	1.136 (0.262)	3.116	[1.866; 5.203]	0.000

Note: $p < .05$

In summary, the interaction of both social and individual factors in the models (see Tables 6-8) indicated several predictors to be effective for desistance from crime. Interestingly, there was no one predictor that was found to be significant in all three models. However, impulse control was found to be impactful on desistance from crime in two out of three models. In all two instances impulse control was found to be significant, with the odds of desistance indicated an increase with increase impulse control. Owing to no one model that was proved to be most effective in desistance from crime the alternate hypothesis was partially supported.

Population Without Intellectual Disability: Exploratory Analyses

To analyze the impact of having an intellectual disability on the population of study, individuals with ID were removed from the total population and logistic regression analyses carried out. The results of the analyses are reported below in Tables 9-11. For the total offending variety, impulse control was the only significant predictor for desistance when individuals with ID are removed from the total population. Fascinatingly, no social factors were found to be significant predictors of desistance in the *without ID model*.

Table 9

Binary Logistic Regression Model of Total Offending Population Without ID

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	0.373 (0.445)	1.451	[1.081; 3.151]	0.403
Education	-0.557 (0.473)	0.573	[0.227; 1.449]	0.239
Maternal Warmth	0.274 (0.297)	1.316	[0.735; 1.853]	0.356

Table 9 (continued)

Individual Factor

Moral Disengagement	-0.392 (0.634)	0.676	[0.207; 1.602]	0.536
Motivation to Succeed	-0.084 (0.322)	0.919	[0.489; 1.727]	0.793
Impulse Control	0.936 (0.442)	2.551	[1.073; 4.310]	0.034

Note: ID = Intellectual Disability
p < .05

For total aggressive offending, when individuals with ID are removed from the total population no social or individual factors were found to be significant (see Table 10).

Table 10

Binary Logistic Regression Model of Total Aggressive Offending Population Without ID

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	-0.165 (0.282)	0.848	[0.487; 1.474]	0.559
Education	-0.371 (0.306)	0.680	[0.379; 1.257]	0.226
Maternal Warmth	0.130 (0.194)	1.139	[0.778; 1.666]	0.503
<i>Individual Factor</i>				
Moral Disengagement	-0.664 (0.431)	0.515	[0.221; 1.199]	0.124
Motivation to Succeed	0.013 (0.215)	1.013	[0.665; 1.543]	0.953
Impulse Control	0.243 (0.294)	1.276	[0.333; 1.319]	0.407

Note: ID = Intellectual Disability
p < .05

When individuals with ID were removed from the total population, employment and impulse control were found to be the only significant factors. Impulse control indicated to be the most impactful of the two with the odds of desistance from income offending increasing 2.521 times as impulse control increases.

Table 11

Binary Logistic Regression Model of Total Income Offending Population Without ID

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	0.640 (0.295)	1.897	[1.308; 2.674]	0.030
Education	-0.383 (0.289)	2.521	[0.391; 0.821]	0.185
Maternal Warmth	0.076 (0.184)	1.079	[0.753; 1.548]	0.173
<i>Individual Factor</i>				
Moral Disengagement	-0.664 (0.417)	0.515	[0.227; 1.166]	0.112
Motivation to Succeed	0.223 (0.209)	1.250	[0.830; 1.882]	0.285
Impulse Control	0.925 (0.277)	2.521	[1.111; 1.548]	0.001

Note: ID = Intellectual Disability
 $p < .05$

ID Only Population

To the final question “*which interaction of social and individual factors predicts the best model for desistance for serious juvenile offenders with ID*” was examined using regression models (see Table 12-14). Most notably, none of the social and individual factors proved to be significant predictors of desistance for the ID only population as it relates to total offending and total aggressive offending (Table 11 and 12 respectively).

Table 12

Binary Logistic Regression Model of Total Offending with ID Only

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	0.431 (0.985)	1.540	[0.455; 5.499]	0.661
Education	-0.011 (0.804)	0.989	[0.495; 4.450]	0.989
Maternal Warmth	-0.415 (0.662)	0.660	[0.317; 1.581]	0.531
<i>Individual Factor</i>				
Moral Disengagement	0.833 (1.229)	2.300	[0.311; 5.824]	0.459
Motivation to Succeed	-0.786 (0.493)	0.863	[0.087; 2.393]	0.353
Impulse Control	-0.793 (0.316)	1.150	[0.342; 1.180]	0.490

Note: ID = Intellectual Disability
 $p < .05$

Table 13

Binary Logistic Regression Model of Total Aggressive Offending with ID Only

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	0.511 (0.896)	1.667	[0.288; 2.703]	0.568
Education	-0.158 (0.588)	0.854	[0.248; 1.093]	0.085
Maternal Warmth	0.135 (0.243)	1.145	[0.711; 1.843]	0.578
<i>Individual Factor</i>				
Moral Disengagement	-.615 (0.786)	0.541	[0.116; 2.526]	0.434
Motivation to Succeed	0.319 (0.555)	1.376	[0.515; 1.772]	0.566
Impulse Control	0.372 (0.751)	1.450	[0.822; 1.817]	0.621

Table 13 (continued)

Note: ID = Intellectual Disability
 $p < .05$

Research question six investigated “*which interaction of social and individual factors predicts the best model for desistance for serious juvenile offenders with intellectual impairment*”, the only variable shown to be significant predictors of desistance for the ID only group as it relates to total income offending are individual factors (Table 14). More specifically, moral disengagement and impulse control were found to increase the odds of desistance from crime. Thus, when individuals with ID experience increased impulse control, the odds of desistance are multiplied by 2.591 times and is the most impactful of the two individual factors. Results indicated that the total income offending regression model indicated the most predictors of desistance and hence is deemed the best model for desistance. This rejects the null hypothesis stating no significance in social and individual interaction will be observed.

Table 14

Binary Logistic Regression Model of Total Income Offending with ID Only

Predictors	b (SE)	Odds Ratio	95% CI	P-val
<i>Social Factors</i>				
Employment	-1.320 (0.868)	0.267	[0.049; 1.465]	0.128
Education	0.425 (0.375)	1.529	[0.733; 3.189]	0.257
Maternal Warmth	-0.332 (0.464)	0.718	[0.289; 1.781]	0.474
<i>Individual Factor</i>				
Moral Disengagement	0.488 (0.825)	1.628	[0.309; 2.219]	0.001
Motivation to Succeed	0.950 (0.709)	2.586	[0.622; 2.461]	0.180

Table 14 (continued)

Impulse Control	0.952 (0.229)	2.591	[1.654; 4.059]	0.001
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Note: ID = Intellectual Disability
 $p < .05$

CHAPTER 5

Discussion

Desistance from crime has become largely acknowledged despite not being thoroughly understood in criminology and rehabilitation research (Farrall & Calverley, 2005; Kazemian & Maruna, 2009; Steinberg, Cauffman, & Monahan, 2015). Also, it is widely accepted that not all juvenile offenders continue on into adult offending and can lead successful lives post criminal justice involvement (Farrall & Calverley, 2005). However, what is not clear is the process by which individuals decrease criminal behavior to eventually cease criminal offending. This research intended to address the social and individual factors that affect desistance from crime for serious juvenile offenders. In addition, this study sought to understand the factors associated with desistance for juvenile offenders with intellectual disability (ID). As intellectual disability is commonly observed among juvenile offenders (Falligant, Alexander, & Burkhart, 2017), it is important to know how these factors affect this population of offenders to better assist them in their rehabilitation efforts of a life without crime. In this chapter, I will discuss in further detail the findings of the study, key implications and limitations related to the study.

Social Predictors and Desistance from Crime

The importance of social factors impacting the desistance process has been the focus of research and factors such as employment, education (Laub & Sampson, 2003)

and parental warmth have been proven to contribute to desistance from crime (Basto-Pereira et al., 2015). The life course perspective explains the effects of these factors as effective to desistance due to the social bonds developed over time (Laub et al., 1998). The findings of the current study are consistent with those of Laub and Sampson in which employment, maternal warmth and education were found to be significant predictors when analyzed individually (see Table 3). One of the reasons stated in the literature for the predictive nature of education and employment, is that they both serve as prosocial behaviors that allow juveniles to invest their time into more meaningful and socially acceptable outlets. Also, employment acts as a turning point in juveniles' lives where a commitment to leading a life without criminal activities is embraced (Hoeve & van der Laan, 2016; Loughran et al., 2016). The risk of losing their investment into education and employment after positive social bonds are forged may prove to be disadvantageous.

Results from the study identified maternal warmth as a predictor of desistance from crime. Maternal warmth as a predictor of desistance is not surprising provided that parents continue to play a vital role in adolescent's lives and especially through transitional periods (Harris-McKoy & Cui, 2012). Parental warmth and ties have been validated to have protective factors against deviance behaviors and as a result was expected to be a positive predictor of desistance from crime as observed in the current study (Table 3). These findings are similar to those found in other studies examining parental warmth and family processes (Chen, Liu, & Li, 2000; Umlauf, Bolland, & Lian, 2011). Furthermore, maternal warmth is found to be even more of a protective factor and predictor of a crime free life for youths living in distressed inner-city neighborhoods (see Bolland et al., 2007; Umlauf et al., 2011), and for ethnically marginalized youths (Harris,

2016). Ethnically marginalized juveniles made up the majority of the participants in the current study.

Single parent households are frequently observed among ethnically marginalized populations with justice involved youths (Fader, Kurlychek, & Morgan, 2014). In the current study, single parent households with the mother as the parental figure were the most common household structure (over 50%), followed by both biological parents and any adult figure other than biological parents (guardians) for participants in this study. Research has clearly documented the positive effects of non-biological adults/mentors on adolescent lives (Eitle, Gunkel, & Gundy, 2004). Despite not being a biological mother, female adult caretakers of adolescents have been found to provide high levels of warmth and acceptance, which decreases the likelihood of problem behaviors among adolescents (Haddad et al., 2011). Therefore, maternal warmth may have been expressed towards those juvenile offenders living with biological and non-biological adults in their household. However, it can be assumed that parental warmth and attachment experienced during childhood may have aided in the reduction of the high levels of offending and have fostered an empathetic concern for others, feelings of remorse and guilt as observed in good parent-child attachment (Pardini et al., 2015). In essence, maternal warmth may lead to healthy development of individual factors related to desistance and serves as a protective factor against youths who exhibit negative unemotional traits.

In contrast, the opposite is stated to hold true for hostile parenting whether biological or otherwise. Those juveniles who are exposed to high levels of rejection and criticism from parents are more likely to exhibit delinquent behaviors. Low parental warmth may have adverse effects on and lead to the development of conduct problems.

This is strongly associated with African American youths as opposed to Caucasian youths (Harris-McKoy & Cui, 2012; Pardini et al., 2015). Therefore, results of the current study indicated maternal warmth is a positive predictor of desistance, which may decrease long term criminal behaviors of juveniles and especially those of ethnically marginalized backgrounds.

Social Predictors in Aggressive and Income Offending

Aggressive Offending Predictors. Serious violent and aggressive offending has been an ongoing concern for researchers, policy makers and professionals (Hein et al., 2017). Individuals differ greatly in their reactions to social life events and stimuli (e.g., education, employment and maternal warmth). In addition, gender, ethnicity, personality and socioeconomic background may play an adverse effect (Averdijk et al., 2012; Maruna, 1999). Similarly, parental practices have adverse effects on desistance and violent offending. Research has indicated that African Americans and European Americans adolescents experience a decrease in criminality with increased parental warmth and support. However, the opposite is found to be true for Hispanic Americans (Bradley et al, 2001). Some researchers such as Vazsonyi, Trejos-Castillo, and Huang, (2006) believe that parental warmth is not influenced by ethnicity. The literature appears divided on the impact of ethnicity on maternal warmth as it relates to violent offending. However, one important finding highlighted that culture is influential on parent-child relationships as culture is impacted by norms and values (Lahlah, Van de Knaap, Bogaerts, & Lens, 2014). Juvenile offenders are from a diverse background and these findings reiterate the individualized effects of social factors on desistance from crime.

From a life course perspective, employment acts as a turning point that can redirect an individual's life from a path of crime. Research have corroborated that desistance is correlated to employment (Sampson & Laub, 1993; Wensveen, Palmen, Blokland, & Meeus, 2012). However, findings have also posed different results stating employment does not affect the rate of criminality or the differences are small or in the incorrect direction (Hirschi, 1990; Maruna 1999). This is similar to the results obtained when examining the impact of aggressive offending and employment in the current study. No significance was found for employment and the opposite direction for education despite being significant. Furthermore, Nordhaus, (2016) found similar findings in their study of serious juvenile offenders where being employed was not statistically significant. Work may not be a viable pathway for a substantial portion of the population provided that many of the population in the current study are ethnically marginalized youths. According to Maruna (1999) and Averdijk et al., (2012), minorities are more likely to experience poor work histories and have less overall work experience. They may be perceived as having a lack of soft skills and other social deficits that are important for obtaining and maintaining employment. As a precursor, ethnically marginalized individuals may perceive more opportunities through illegal means, which may result in them accumulating extensive criminal records. Furthermore, women experience less detachment from employment and are more likely to commit crimes than abstain from it (Tanner, Davis & O'Grady, 1999). Females are more likely to form attachments to other roles that and instrumental in decreasing criminality such as motherhood, forming intimate relationships and leaving home for more independence (Broidy & Cauffman, 2006; Rungay, 2004). Despite gender differences observed in the literature, it should be

noted that commitment to social factors do not always protect against criminal involvement. According to Terry (2012), some offenders do struggle to maintain their new life roles and commitments and ended up reoffending despite having had these opportunities. Adding to this point, justice involved youths with disabilities (e.g., intellectual and mental health) may experience additional barriers to employment such as workplace discrimination and underpayment (McKnight, Stewart, Himmelweit & Palillo; 2016; Schur, Colella, & Adya, 2016).

Additional influencing factors may play a role in the effects of employment on desistance. Researchers have argued the role of race and neighborhood strongly influences unemployment rates (Abeling-Judge, 2016; Chung & Steinberg, 2006; Wang, Mears & Beals, 2010). Disadvantaged neighborhoods may provide limited economic resources for individuals, which in return, limit job opportunities and promotion. Furthermore, discrimination and lack of credentials may limit disadvantaged individuals from employment opportunities which adds to the fact that employment as a stand-alone predictor of desistance may be insignificant (Haynie, Weiss, & Piquero, 2008). In addition to external factors (e.g., disadvantaged neighborhoods) and social barriers (e.g., discrimination), desistance from aggressive crimes may stem from individual factors where a shift in cognitions may strongly encourage desistance from offending (Serin & Lloyd, 2009).

Social Predictors of Income Offending. Adopting a life course perspective to explain the results obtained regarding income offending will indicate that social factors function as a hook for desistance. In fact, if this perspective holds true, then maternal warmth, employment and education should affect desistance from crime. Accordingly,

the analyses from the current study indicated that with the increase in social factors such as maternal warmth and employment, desistance is more likely to occur which are similar to results obtained in extant studies (Steinberg, 2006; Williams & Steinberg, 2011).

However, as previously mentioned external environmental factors may impact the way social factors influence adolescents' pathway to desistance. For example, research has long indicated the association of income related crimes and its connection to poverty (Reuter, MacCoun, Murphy, Abrahamse, & Simon, 1990; Short, 2018; Sociales, 2001).

With poverty comes a host of issues related to low socioeconomic environments such as more single parent household (female headed), lack of social supports, high unemployment rates and increased crime rates (Kramer, 2000; Brody & Floor, 1998).

Contrary to previous findings, education was found to decrease the chances of a serious juvenile offender living a life without crime. Previous studies have put forward that obtaining a GED or high school diploma and pursuing higher education have shown to positively impact desistance from crime (Stouthamer-Loeber et al., 2004). However, in the current study education status was measured as opposed to academic achievement and level of education. Due to the age of participants in the current study, a majority responded as being enrolled in school and as a result education may not have yielded a positive impact on desistance from crime. The results of this study by no means refute that education does not act as turning points in the life course of adolescents. However, education status may not be sufficient to influence the odds of desistance in a positive way. According to some desistance literature and theories on social control, and the life course perspective, education serves to develop social bonds and a positive outlet for activities, which prevents the involvement in criminal activities. For adolescents,

education may not necessarily serve this purpose for all. For example, the school system is not without its own flaws where the ease of antisocial peer influence and antisocial bonds are often formed (Akers, 2017). Also, with many adolescents in the school system with disabilities and other factors affecting educational achievement, school performance may not be satisfactory. As a result, with poor school performance adolescents may not feel as invested in their education.

Individual Predictors of Total, Aggressive and Income Offending

Individual factors of desistance pertain to the internal thought process and cognitive transformation of an individual, which promotes the process of desistance (Healy, 2010). Research explains that having social structures established (e.g., commitment to employment and education) was not enough to affect and maintain desistance. In addition to established social factors, adolescents would need to have a conscious mindset of living the life of a desister to have success in their related roles (Terry, 2012). Through their own internal motivations and beliefs adolescents have the power to shape their future. With individual factors gaining increased attention in the extant literature. The importance of examining these factors is undoubtedly relevant to the desistance and rehabilitation process.

Similar to the findings obtained from the social factors of desistance, individual factors (moral disengagement, motivation to succeed and impulse control) are all significant predictors of desistance. Similar to research findings on desistance, moral disengagement and impulse control had negative effects on the process of desistance. More specifically, moral disengagement reflects a lack of attachment and social bond to aspects of society. Individuals may have a rejecting attitude to the standards and values of

society manifested through aggression and delinquency (Hodgdon, 2009; Shulman et al., 2011). As a result, this experienced disengagement prevents bonds and attachment to be formed to aspects of society, which threatens the process of desistance. Furthermore, moral disengagement can be impacted by demographic variables whereby females and Whites are more likely to exhibit low moral disengagement compared to Hispanics where levels are higher (Cardwell et al., 2015). With all things considered, having strong external and internal control can improve the likelihood of offending and those more accepting of an attitude of moral disengagement are less likely to become desisters.

Change from a life of crime cannot occur without a change in mindset reflecting that of a non-offender (Giordano et al., 2002). This process of self- transformation of unlearning criminal ways and thinking helps to foster the motivation to succeed in society, which contributes to the desistance process. When offenders experience changes from within, they accept that success is a true possibility and they can achieve it (Pittaro, 2008). The current study found motivation to succeed one of the most impactful predictors on desistance from income offending. It can be perceived that off all internal or individual factors possessing the motivation to be successful in desistance is a powerful drive. For example, Pittaro (2008) explains that given the challenges ex-offenders face to reintegrate back into society (e.g., family issues, lack of supports, low educational, stigma, discrimination and substance abuse issues) the deficiencies experienced are primary contributors of relapsing into a life of crime. Therefore, from an individual perspective, having the willpower and mindset to overcome these challenges may be considered utmost important for adolescents looking towards a future without criminal activities (LeBel, 2008). Panuccio, Christian, Martinez, and Sullivan (2012) add

that motivation should be both stemming from within the individual and also reinforced from social support for success to be achieved in the desistance process. This may provide an explanation for motivation to succeed indicated to be not significant in several regression models. Juvenile offender may lack the social support (e.g., maternal support, positive peer relationships, and knowledge) necessary to encourage positive thoughts and to motivate youths to embrace a life of non-offending.

Impulse control has shown to be another impactful predictor of desistance in this study, similar to that found in desistance literature (Monahan et al., 2009; Mulvey et al., 2010). Impulse control has a negative impact on the desistance process as the likelihood of desistance decreases when adolescents do not possess the ability to refrain from antisocial behavior and act upon impulses. The idea is that when adolescents have poor impulse control they exhibit a lack of sensitivity and remorse for the needs and feelings of others (Rocque, 2015). Life course theorists argue that adolescents who continue on offending and do not become desisters have relatively lower levels of psychosocial maturity. These individuals exhibit more antisocial behavior possible owing to different brain systems especially areas responsible for the suppression of aggression. When offenders continue to exhibit antisocial behaviors and lack of self-control, they have less connection to the ethical rules and regulations that binds society together (Monahan et al., 2009). The opposite is also stated to be true about impulse control. When increased control of impulses and behaviors are exhibited, decreased deviant behaviors manifests, which increases the likelihood of desistance.

This was the case for impulse control for both income and aggressive offending. Results of this study indicated that an increase in this variable causes the odds of

desistance to increase (Table 4). It can be interpreted that with increased self-control or control of impulses, individuals increase their chances of desistance. With better control of self and impulse, adolescents are better able to resist antisocial peer influences and associate with more prosocial peers (Monahan, Steinberg, Cauffman & Mulvey, 2013). According to Crank (2014), increased self-control may mediate positive changes in cognitions which helps to encourage more prosocial thoughts, and as a result the desistance process. This gives rise to the question of interaction effects among predictor variables of desistance. If social and individual predictors interact with each other, each could influence the results of the other and its impact on desistance. Therefore, additional research in this area is needed to explore those relationships.

Predictive Models of Desistance

When all factors were included in the same regression model the significance of each indicated varied results. In the total offending model, the only predictor found significant was impulse control for individual factors and no social factors found significant. These results do not imply that the other predictors are unimportant. Rather, when examined individually they have proven to be significant. As it relates to impulse control, as previously mentioned, control of ones' impulses and behavior lead to refraining from criminal activity while inability to control such impulses does not encourage desistance. Impulse control may serve as a mediating variable which affects other variables in the process of desistance. Furthermore, for the other factors found not significant such as employment, could be explained by the barriers to employment adolescents may face in society (e.g., lack of supports and disadvantaged neighborhoods). Adolescents tend to have spotty employment histories with low wages, which may act as

deterrence from desistance. Furthermore, for employment to serve as a positive predictor, individuals need to actively invest in ties to this prosocial activity. Also, employment is needed to be permanent and full time, which is not often the case with adolescents. Research has suggested that employment does not necessarily serve as a predictor of desistance but as a consequence (Skardhamar & Savolainen, 2014).

Surprisingly, none of the factors were found to be significant in the aggressive offending regression model. Aggressive offending consists of the most violent of offending (e.g. murder, violent sex offenses etc.) and the development of such criminal behaviors may be affected by the lack of morals, cultural norms and expectations (Lai, Zeng & Chu, 2016). Individual or internal cognitions serve as the primary factor, which may imply that internal change is needed to deter adolescents from the most serious or heinous of offenses. In conjunction, some juvenile offenders find that their commitment to violent offending may not worth the risk of another charge or being reincarcerated. As a result, they may develop the courage to curb their impulses and as a result commit to living a crime free life. One other possibility for the lack of significance could very well be that most of the participants included in this study were income offenders as opposed to being involved in aggressive offending.

One outstanding observation from the analyses of all three regression models of offending variety is that maternal warmth was not found to be significant. According to research, the experience of maternal warmth should decrease the likelihood for any behavioral issues to develop (Bachman & Paternoster, 2017). Despite being shown to be significant individually, when combined in with all other predictors the desired level of significance was not obtained. Some studies that have deemed maternal warmth as

significant were qualitative in nature and as a result this variable may not have held up as well in quantitative analyses. This does not mean that this variable is not impactful on desistance but may not have had enough power when compared to other predictors of desistance. Furthermore, research has indicated other environmental factors being important which may be correlated to the impact of maternal warmth on desistance. For example, Sapouna and Wolke (2013) explained that along with maternal warmth, sibling warmth and a positive home environment were associated with decreasing deviant behaviors. Possibly, if these conditions were satisfied in the current study maternal warmth may have proven to be a significant and impactful in the related regression models. However, the exploration of home life and environment were not one of the goals of the current research, but it does provide an avenue for extended research in the area.

With many juvenile offenders stated to have a disability of some kind ranging from intellectual, physical and emotional disabilities. This factor is important to take into consideration because in addition to family structure and environment, emotional disabilities such as depression have been associated with aggressive behaviors (Sijtsema, Oldehinkel, Veenstra, Verhulst, & Ormel, 2013). There appears to be a moderating relationship among disability (e.g., depression), and family dynamics which may also be comorbid in nature. Sijtsema et al. (2013) explain that increased problem development and deviant behaviors is greatly due to the relationships between parental rejection or expressed warmth for adolescents. Similarly, personal relationships with romantic partners may also add an additional factor to the impact of maternal warmth and desistance from crime. Despite experienced maternal warmth, having an antisocial

partner may add to increased criminal offending and reporting (Cauffman, Farruggia, & Goldweber, 2008).

Predictors of Desistance and Intellectual Impairment

One area that is under researched in desistance research is the impact of disability such as intellectual disability on the process of desistance. More so, the impact of social and individual predictors of desistance as well as its impact on offending variety types to investigate any differences that may exist. There were no significant predictors found for social and individual factors as it relates to total offending and total aggressive. With similar results obtained by Asscher et al., (2012) when examining risk factors for criminal offending for juvenile offenders with ID, it may be the case when examining predictive factors for desistance. Looking at this aspect of desistance research with the current sample of serious juvenile offenders, proved the need for more research in the area with larger sample sizes. Despite these unpredictable results, moral disengagement and impulse control were shown to be predictors of desistance for the income offending regression model (see Table 14). With impulse control being a predictor in most of the result analyses, this is deemed a very powerful finding indicating the important effect that self-control have on individuals with disabilities and juvenile offenders overall.

Juvenile offenders with ID do exhibit differences than their counterparts without ID. For example, these individuals encounter more difficulties with controlling aggression and attitudes and minute differences observed with respect to school, family life and leisurely issues (Asscher et al., 2012). According to Van Nieuwenhuijzen et al. (2009), for children with ID, a combination of poor social skills leads to low impulse control and high aggressive social problem-solving strategies. With frequent aggression,

comes a higher probability of deviance and criminal behaviors. As a result, these individuals are less likely to engage in desistance promoting behaviors. In contrast, when adolescents with ID practice socially acceptable problem-solving behaviors this may lead to less social aggression and a decrease in deviant behavior.

Aggression is, without a doubt, a contributing factor to disadvantages for individuals with ID, which may result in negative consequences. Consequences may include exclusion from social networks, loss of employment and negative effects on the family (Cooper et al., 2009). Furthermore, a lack of self-control and aggression may lead to various types of offending including income offending. In fact, many juvenile offenders have co-occurring disabilities such as mental illness and substance abuse (Baillargeon et al., 2010), which further influence their ability to control impulses and depict prosocial behaviors. Since impulse control correlates with many social functions and behaviors it is clear to see the need for adolescents with ID to practice good self-control to prevent negative consequences in society. For example, the impact of stigma on disability is widely researched and perpetuates social inequalities in the lives of individuals with disabilities in all aspects of society. Particularly, individuals with ID continue to be victims of crimes, bullying and harassment (Ditchman, Kosyluk, Lee & Jones, 2016). Battling these barriers in society is never easy however, maintaining composure and prosocial responses are essential for adolescents with ID to prevent becoming justice involved and to maintain desistance.

To further explore the impact of having an intellectual disability on the factors of desistance, individuals deemed to have an intellectual disability were removed from the

total sample population. However, when regression analyses were conducted results obtained varied slightly to the total population with ID included (see Tables 9-11).

Education was not found to be significant in models with and without ID across offending variety. Education may not be such a strong turning point for juveniles with or without disabilities and hence no significance was found when combined in the same regression model. Most significant findings on education can be observed in the literature centered around adult offenders who participate in educational activities by choice. This may have been perceived as a means to an end with criminal activity and display more commitment to this mean. This can be observed in research on adult offenders' participation in correctional education programs (Szifris, Fox & Bradbury, 2018), on offenders in higher education (Runell, 2018) and offenders in substance use educational programs (Best, Hall & Musgrove, 2018). On the other hand, adolescents are required to attend school, which may not depict the same level of dedication as adults who actively chose to engage in education. Given these results, findings should be interpreted with caution. Results obtained may have indicated otherwise if more in depth measures on education were employed such as the quality of education being received, information on school accommodations and level of education.

Implications

The current study examined the impact of individual and social factors on desistance. Results indicated that both sets of factors are important for serious juvenile offenders if they are to become desistant from crime. This information is valuable for rehabilitation and human services professional as it directs the triangulation of services required to help justice involved adolescents successfully reintegrate in society. Having

knowledge of these factors will lead these professionals to incorporate the individual and the family more in-service planning to address the needs of the juvenile. Also, having knowledge of the power of individual motivations and pushes for the appreciation of differences in desistance characteristics across juvenile offenders. It allows professionals to examine the environmental context of juvenile offenders and to identify social factors that encourages the desistance process. Information obtained from this study can help professional to acknowledge the need for variability in service delivery and individual involvement to promote desistance for juveniles transitioning into adulthood.

Implications for Vocational Rehabilitation and Other Counseling Professionals

Rehabilitation and other counseling professionals (e.g., substance abuse counselors, correctional counselors, social workers and transition specialists) are from diverse educational backgrounds and training with a goal of assisting with the successful reintegration of offenders into society. They possess competency in providing care, therapeutic counseling services and a commitment to the overall helping process for offenders to successfully live a life post incarceration. They work in diverse settings such as community-based programs, in-patient treatment services, correctional agencies and other human services settings (Van Voorhis & Salisbury, 2013). Similarly, vocational rehabilitation (VR) counselors work individuals to provide services to people with disabilities to reach their personal social and vocational goals (Maiden, 2014). These individuals also include justice involved youths with disabilities. For these professionals, the need for both direct social services and specialized training as well as the need for individual counseling to work with adolescents on developing healthy individual factors (finding the motivation to succeed in the community) is one implication brought up by

the current study. Some studies have suggested the need for specialized (justice involved/offender only) caseloads to help professionals develop better working alliance with this population (Bates-Maves, 2017). This is helpful as offenders have unique needs and face additional barriers in society that are different than non-justice involved clients.

Despite maternal warmth not indicating significance in the overall regression models, individually this factor has proven to be significant. Taking this into account, vocational rehabilitation and other counseling service professionals can work with families to help develop healthy ways of displaying warmth, affection and encouragement to their justice involved youths. This of course, is dependent upon the unique roles and working environment of the professional as not all will work with families. Some professionals only work directly with the justice involved youths. For justice involved youths to be successful family and environmental factors play a role in encouraging desistance (Sapouna & Wolke, 2013). This is also true for those professionals working with younger children who exhibit delinquent behaviors and are on a trajectory to criminal offending. Children acquire problem-solving skills and learn how to interact with their environment through experimenting with approaches to conflict. Increase warmth and support from parents or caregivers may help in promoting social values and norms in children and adolescents which will encourage desistance from delinquent behaviors. In addition, this can also impact feelings of moral disengagement and the forming of prosocial bonds to society.

Education and employment have yielded mixed results for serious juvenile offenders across desistance literature and especially offending variety type. The same can be observed from the current study. Uggen and Staff (2001) explain that the effects of

education and employment vary for individuals at different stages of the life course. The current study yielded similar results and highlighted possible correlations between other factors associated with desistance. With many internal variables and social factors that encourage and discourage the desistance process, rehabilitation professionals should help juvenile offenders to develop the skills needed to combat their individual barriers.

Adolescents may face barriers stemming from stigma, disadvantaged economic backgrounds and disability- related difficulties. Professionals especially VR counselors may assist adolescents with education completion options, accommodations necessary for work or school, and problem-solving skills needed to navigate their intricate environment.

Offenders exit the juvenile justice system with the hopes of becoming desisters but lack the guidance and information needed to be successful through the desistance process. To complicate the process even further, the pathway to desistance is stated to be an individualized process and adolescents may vary in their stages of the distance process (Bushway et al., 2009; Serin & Lloyd, 2009). As a result, rehabilitation professionals will need to provide individualized services that integrate the individual (juvenile offender) and their environment. Some adolescents may need more intensive treatment or services than others or may need such services at varied periods over the duration process when motivation to succeed are fading. Services may include individual, group and or family intervention services. It should also be noted that substance abuse, medical and other health services are needed to assist individuals who are in need of such services. Given this information, VR counselors can employ a range of services needed in a more specified way when considering the offending background of juvenile offenders. VR

counselors work with a network of community agencies and services which at times may be fragmented as no one agency provide a comprehensive enough list of services that may be needed for the juvenile offender. They have the skills necessary to help connect the offender to the services need albeit from multiple sources to change the mindset of justice involved youths and to encourage their motivation in working community-based programs to aid with living a life without crime. Furthermore, VR counselors provide rehabilitation services for individuals across the lifespan and services provided may support juvenile offenders successfully transition into adulthood which will encourage sustained desistance.

Implications for Policy

Building effective policies to ensure the safety of the community and justice involved adolescents is a primary focus of the criminal justice system and policy makers in society. Importantly, research is used to inform policy implications and one important finding suggest that mass incarceration and harsher punishment for offenders fails to reduce crime. A shift in the ideology of criminal rehabilitation especially for young adults should implement services in the community that promote the factors of desistance which may prove to be more successful in helping juvenile offenders go straight (Andrew & Bonta, 2010). Results of the study suggest that for serious juvenile offenders, ties to social institutions and maternal attachment contribute to desistance. As a result, incarceration may prove to be counterproductive to desistance as families are torn apart and ties that hold families and offenders to communities are severed, which are important social ingredients for desistance. Refraining from over incarceration will result in a decrease in the number of offenders being in custody of the juvenile justice system each

year and the cost of correctional expenditure will decrease. Furthermore, due to the importance of social bonds and healthy attachments, a juvenile detention reform is necessary. Policy leading to the re-examination of juvenile detention confinement to reduce the continued reliance on placing juveniles behind bars unwarranted for the safety of the public is more harmful for juveniles (Marrett, 2017). Alternative to community-based supervision and a lean towards a more community like age appropriate rehabilitation will prove more efficient for public safety and promote community ties thus encouraging desistance. This perspective to reform, reinvest and replace in the juvenile justice system in accordance with the perspectives of the National Conference of State Legislators (NCSL, 2017). They conclude by emphasizing the use of risk assessments to guide detention decision making to help support alternate options for juvenile detention. This is not to refute that some states are not capitalizing on these measures however very few states such as Kentucky have been helping juvenile offenders recognize a more promising pathway to a life without crime.

Analyses of individual differences suggest that juvenile offenders' thoughts and cognitions are very influential in their behavior whether this is to desist or persist in criminal offending. A policy implication in light of this is to incorporate more juvenile offenders in the decision process of rehabilitation efforts which is primarily dictated by the juvenile courts. By doing so allows juveniles to become invested in the pathways they wish to take thereafter and form commitments, boost self esteem and accountability which will aid in their motivation to succeed. Furthermore, this allows for juvenile offenders who were previously morally disengaged to repair ties and work to uphold the values, ethics and norms that govern society. To further support juveniles, including

increased parent involvement may prove to be beneficial to long term success in desistance as juveniles learn to build healthy partnerships with a caring adult. The historic view of 'parent as the problem' for justice involved youths has resulted in missed parenting practices and meaningful family engagement. Traditionally, there are no guarantees of reliable visitation schedules and parental visits have been incorrectly perceived as rewards for good behavior and privileges that are earned (Schmitz, 2017). Changes in policy should embrace the view that rewards for being a 'good inmate' to influence parental visitations is harmful to the developing juvenile offenders and should be deemed a necessity for health growth and development of the juvenile. According to Rocque, Welsh, and Raine (2012) "...biology does not operate in a vacuum. Rather human development (and behavior) involves the body and the environment" (p. 13) so should policy implemented to support juvenile offenders process of desistance from crime.

The importance of supporting and implementing more effective policy and practice for offender reintegration has been the focus of justice system for several years. Adopting a more individual level focus has gained much attention with reentry programs to achieve desistance and are still deemed as 'promising' interventions (Visher, 2017). One important implication for policy is the inclusion of individual level programs and focus for offenders that are currently in detention facilities to better prepare them for a life without crime. In addition, this will allow juveniles to receive a continuation of services especially those with intellectual disabilities receiving accommodation supports in the classroom. Currently, micro-individual re-entry programs focus on the community interventions and strategies (Visher, 2017). The Office of the Surgeon General (2001) proposes the use of meta-analysis and the use of rigorous statistical methods to obtain

reliable information on the demonstrated effects of rehabilitation programs in society. Similarly, the use of meta-analysis and evaluations to formulate evidenced based programs (Greenwood, 2008), the same can be implanted for individual programs for juveniles in detention facilities. Program models can then be developed and tailored to offending variety types (income or aggressive offending), gender, marginally ethnic youths, and should be disability inclusive. An important component of supporting effective evidenced based programs is to have clear established standards and proven cost benefits analysis. The benefits of investing in effective programs may potentially prove to be more cost effective in getting a head start on the desistance process by preparing juvenile offenders to maintain a crime free life post incarceration.

It is important to acknowledge the connection between crime and poverty as made clear by McLaughlin (2011). Poverty stricken areas and many minority populations have a high percentage of unemployment, poor education, and scarce resources, which reduces opportunities for desistance success (Jardine, 2017). Policy focusing on changes in employment opportunities, improved educational opportunities, and treatment services for individuals with disabilities is still a dire need for justice involved youths. Despite improvements of educational and employment opportunities, justice involved youths and especially those with disabilities are stigmatized, experienced underemployment (despite being part time if in school) and lack of accommodations in the workplace and educational settings (Sinclair, Unruh, Griller Clark & Waintrup, 2017; Sveinsdottir & Bond, 2017). With the scarcity of resources juvenile offenders may lose internal motivations to live a crime free life. Employment and education have been indicated to improve criminal offending despite conflicting research findings. As a result, it is

worthwhile improving low wages and work conditions for adolescents, which may improve investment and commitment to employment. It should be monitored to ensure adolescents are not overworked and sufficient time is left for educational commitments to avoid any conflicts. These policy considerations will help to discontinue the cycle of low income, poor education, decrease the crime involvement cycle, improve quality care and economic development. (Haynie, Weiss & Piquero, 2008).

Strengths and Limitations

The current study offers several strengths. First is the large sample size of the Pathways study. Advantages of this large sample size include but are not limited to the opportunity of studying the full diversity of the population of juvenile offenders and the opportunity of capturing the characteristics more representative of the population of serious juvenile offenders. The second strength is the numerous amounts of measures utilized in the study. Owing to this, social and individual factors were able to be captured and information investigated in such a sparsely researched population. The third strength is that the Pathways study is a longitudinal dataset which makes it possible to observe developmental trends despite only the baseline wave of the data that was used in the current study.

In contrast, findings of the current study should be interpreted against several limitations. First, the study was intended to highlight the social and individual factors for desistance from crime of serious juvenile offenders. That is the study can only make inferences from those factors identified and studied. Other social and individual factors cannot be generalized from the current study (e.g., peer relationships). Secondly, many of the measure used (e.g., criminal offending, maternal warmth and employment) were

based on self-reports and may have been a product of bias and lends itself to overreporting. Research indicate that self-reported data are highly subjective by nature and are prone to exaggeration (Kormos & Gifford, 2014). However, for these variables self-reported information serves to collect rich data that may not otherwise not be observed or have yielded different results. One particular variable, maternal warmth, which yielded surprising results as expressed previously, could have been better analyzed provided that earlier childhood data were available. Like maternal warmth, for many of the variables collected by the primary researchers and did not allow for further analyses to be carried out because more detailed information on the variables were not included in the dataset. However, some variables such as employment had additional factors explored which could provide more in-depth information, however this information was available in other waves of the data beyond that used in the current study.

Another limitation was that majority of the sample comprised of male serious juvenile offenders. Caution should be exercised when generalizing findings to serious female juvenile offenders. The same measure of caution should be taken for ethnicity as majority of the sample were of ethnically marginalized populations, thus not allowing generalization to non-ethnically marginalized serious juvenile offenders. Additionally, the data did not readily lend itself to look at co-occurring disorders. When smaller sample sizes were used (e.g., ID only population and offending variety) finding any significance among factors decreased with the addition of variables in the regression model. The population sample size would have been too small and may not yield significant effects to compare multiple groups. Purposeful research on disability types may help to combat this gap in the research where larger sample sizes may be collected.

An additional limitation for the current is the length of time observed to predict desistance from crime. Many research have hinted towards how long is best to study desistance from crime with ranges progressing into years of non-offending before desistance can be effectively observed. Taking this notion into consideration, a cross sectional study on desistance may not be a long enough time to observe desistance among serious juvenile offenders. However, this method does add a starting point or reference where longitudinal studies are not able to be carried out. Not all researchers are able to conduct longitudinal studies therefore the use of cross sectional designs are useful to make predictive inferences on desistance. Despite the type of design implemented, true desistance is difficult to impossible to be determined.

Future Research

This cross-sectional analysis is only one step in the right direction in rehabilitation and desistance research. Desistance research is capturing the interest of many criminology researchers and may be considered fairly new when compared to recidivism. Future research should include longitudinal analyses to continue unraveling the relations and predictive nature of factors of desistance and offending. This is especially important for research examining offending variety such as income and aggressive offending. Too frequent research has dwelled on the overall grouping of crimes and offenses committed. It will prove beneficial to take a closer look at each type of offending variety to investigate their individual characteristics and how it impacts desistance from crime. It may prove interesting to see how juvenile offenders fair over time as they enter adulthood, especially as it relates to offending variety (income or aggressive). This information may inform services to prevent persistent offending into adulthood.

A need for more desistance research examining the interaction or interplay of social and individual factors within the same models may increase understanding on how these factors impact adolescents' desistance process. Failure to include the two components may prove misleading, as both sets of factors do not exist exclusively from the offender. More extensive instruments focusing on developmental factors and capturing more aspects of the individual's environment (e.g., home life, school, and work) should be incorporated to obtain more comprehensive data on factors associated with desistance. Better predictions, which may lead to generalizations, can be obtained with more in-depth reviews of factors. More associations and interactions as well as explanations for results can produce more useful information to policy makers and researchers alike.

Further, future research should examine the impact of having a disability on these factors as well as the process of desistance. The prevalence of substance abuse, mental illness and other disability types are impactful on not only the daily lives of offenders but also on the process of desistance. Extensive examination of co-morbidity of disabilities on the distance process is lacking in the literature. There is a need for this area as more individuals, especially juvenile offenders, are being diagnosed with multiple disabilities and medical conditions (Quinn, Rutherford, Leone, Osher & Poirier, 2005). With more research into these areas a wealth of information can be obtained to assist vocational rehabilitation counselors and the justice system on how best to encourage desistance among this unique population.

Gender and ethnicity play an important role when examining desistance from crime (Bersani, Laub & Nieuwebeerta, 2009). Purposeful sampling to examine these

important factors will help in the development of rehabilitation programs and policy. Also, the importance of economic impact and socio-cultural contexts may influence criminal behavior and response to such behaviors. Research should be more inclusive of the diversity of cultures in today's society to better provide identify and develop appropriate services for individuals of these various societal backgrounds. After all, the goal is to aid in them becoming successful in the process of desistance when they are reintegrated into their communities and society.

The current study utilized the baseline date of the Pathways study which had a completion date of 2003 for baseline data. Juvenile offenders in today may have different experiences as it relates to employment and education as well as a shift in individual differences. With increased opportunities over the years for education and employment, today's youth may have more opportunities at a better education and have more work experiences to encourage desistance from crime. Matter of fact, the types of offenses being committed may be different or similar to those juveniles included in the Pathways study. Also, there is the question of is the rate of desistance higher then than now or vice versa given the implantation of new rehabilitation or justice reform efforts? With longitudinal studies this question may be answered and new insight into the characteristics of today's juvenile offenders. There is the possibility of increased desistance in today's society due to an observed reduction in juvenile incarceration over the past 12 years (Gass, 2015).

Conclusion

The current study made several important contributions to the literature upon examining the social and individual factors associated to desistance. Firstly, the study

highlighted that both sets of factors are important to the process of desistance and should not be examined without taking the other into consideration. Secondly, the importance of social and individual factors on aggressive and income offending indicated vast differences in the factors important to desistance. Lastly, factors such as impulse control are pertinent to the successful outcome of desistance for juvenile offenders with desistance. The findings of the study raised awareness for the need for future research in this area of desistance to explore areas that are vastly under developed (e.g., disability and desistance).

Implications for VR and other human services professionals were presented and how best to assist serious juvenile offenders to become successful desisters. In addition, policy implications were discussed which highlighted the need for a shift from punitive reactions to crime to a more community rehabilitative focus for juvenile offenders. The ultimate choice to become desistant is one the individual will have to make on his or her own, however, an understanding of factors that promote desistance is a necessary step in desistance awareness.

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Upper Second-Class Honors
University of the West Indies, Mona, Kingston, Jamaica

PUBLICATIONS AND BOOK CHAPTERS

Dunkley, L., Alfulayyih, M., Tiro, L., Kim, B., & Harley, D.A. (2017). Adolescents and Transition Students with Disabilities in Rural Areas. In D.A. Harley, N. Ysasi, M. Bishop & A. Fleming (Eds.). *Disability and vocational rehabilitation in rural, frontier, and territory communities: Challenges and solutions to service delivery*. Switzerland: Springer International Publishing.

Harley, D. A. & **Dunkley, L.** (2017). Offender populations with disabilities in rural settings. In D.A. Harley, N. Ysasi, M. Bishop & A. Fleming (Eds.). *Disability and vocational rehabilitation in rural, frontier, and territory communities: Challenges and solutions to service delivery*. Switzerland: Springer International Publishing.

Ysasi, N. A., Marini, I., McDaniels, B., **Dunkley, L.**, Chen, R. (2016). Physiatrists' professional opinions of secondary complications after spinal cord injury. *Journal of Life Care Planning*.

Harley, D.A., Gassaway, L., & **Dunkley, L.** (2015). Socialization, recreation, and inclusion of LGBT elders. In D.A. Harley & P.B. Teaster (Eds.), *Handbook of LGBT elders: An interdisciplinary approach to principles, practices, and policies*. New York, NY: Springer.

Fleming, A., Bishop, M., Crystal, R., Kinyanjui, B, **Dunkley, L.**, Tiro, L., & Dornbusch, A. (2015). *Kentucky Comprehensive Statewide Needs Assessment*.

PROFESSIONAL EXPERIENCE- Research

2016 – 2017	Research Assistant <i>College and Career Readiness Project</i>
2014 - 2015	Research Assistant <i>Comprehensive Needs Assessment for the Kentucky Office of Vocational Rehabilitation</i>
2008	Research Assistant <i>Inner City Youths in Jamaica and the Education System</i>

PRACTICAL PROFESSIONAL EXPERIENCE

2017	Disability Resources Associate , Disability Resource Center
2017	Social Services Clinician , The Ridge Behavioral Health System
2016	Student Correctional Associate , Fayette Regional Juvenile Detention Center
2014 – 2016	Graduate Resident Director , University of Kentucky
2013 – 2014	Rehabilitation Counselor , Massachusetts Rehabilitation Commission
2012	Clinician , Henry Lee Willis Center, Outpatient Department
2012	Transition Counselor , Center for Living and Working (CLW),
2011 – 2013	Graduate Resident Assistant , Assumption College

UNIVERSITY TEACHING

University of Kentucky

Spring 2015-2018	<ul style="list-style-type: none">• Masters level teaching experience
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SCHOLASTIC & PROFESSIONAL AWARDS

- 2018
- Omicron Delta Kappa (ODK) Award of Outstanding Leadership and Service
 - Chi Sigma Iota Outstanding Doctoral Student Award
 - Third Place CSI & CACREP Leadership Essay Competition
- 2017
- Paul Kevin Burberry Award- (for exemplary leadership, advocacy and commitment to persons with disabilities and their families)
 - Graduate Student of Color Professional Development Fund Awardee
 - Society for Research in Child Development 2017 Frances Degen Horowitz Millennium Scholar
 - Second Place CSI & CACREP Leadership Essay Competition
 - 2017-2018 Chi Sigma Iota Leadership Intern
- 2015-2016
- HDI Travel Scholarship
 - AUCD Trainee Scholarship
 - Lyman T. Johnson Fellowship
 - John Edwin Partington and Gwendolyn Gray Partington Scholarship
- 2014
- Massachusetts Rehabilitation Commission**
Commissioner's Award for Outstanding performance