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# The Impact of a Religious/Spiritual Turning Point on Desistance:

A Lifecourse Assessment of Racial/Ethnic Differences

by

Rhissa Briones Robinson

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy Department of Criminology College of Behavioral and Community Sciences University of South Florida

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Date of Approval: April 2, 2018

Keywords: age-graded theory of informal social control, secular deviance, ascetic deviance, religion, multilevel mixed effects modeling

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#### **ACKNOWLEDGMENTS**

Completion of this doctoral dissertation would not have been possible without the support and encouragement from a great team of individuals. First, I extend a heartfelt thank you to my Major Professor, Dr. Michael J. Leiber, for your guidance and insightful suggestions for improving this work. I have appreciated your mentorship, patience, and belief in me throughout this process. I also wish to express my gratitude to my committee members, Drs. Ojmarrh Mitchell, John K. Cochran, and Thomas A. Loughran, for taking the time to read the several drafts of my dissertation chapters, for your excellent statistical advice, and for periodically checking in with me during my ongoing progress. Although it was not required of you, these small but numerous acts of kindness rekindled my motivation when I believed I had none. A special thank you also goes to Dr. Cochran whose expertise in religiosity and delinquency contributed considerably to this work, and for his willingness to join this committee halfway through.

Finally, I thank Shawn for all of his support and understanding during this long journey.

Completion of this project would not have been possible without you.



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#### **ABSTRACT**

Criminology's most recent theoretical tradition involves examination of the developmental onset, continuity, and desistance from offending behavior across the life course. A prominent life course perspective organized around social bonding was proffered by Robert J. Sampson and John H. Laub in dual volumes that include *Crime in the Making: Pathways and Turning Points Through Life* (1993), and *Shared Beginnings, Divergent Lives* (2003). Because Sampson and Laub's age-graded theory is based on a sample of White males born in the 1920s and 1930s, and matured during a historical period of vast economic growth, the universal theoretical processes emphasized in their theory may be overstated. Such assumptions may not generalize to more heterogeneous samples that includes minorities and individuals that vary in their levels of offending.

The present research evaluates the generalizability of the age-graded theory through examination of data collected from a representative and contemporary sample of adolescents followed into adulthood. In addition, this study seeks to examine an alternate turning point from deviant conduct, specifically religiosity/spirituality. Building on prior studies that explore the role of religiosity on change processes across race and ethnicity (Chu & Sung, 2009; Stansfield, 2017), the current investigation addresses open questions relating to the nature of the religion-desistance relationship.

Multilevel mixed effects models are utilized to estimate over time the separate impact of religious behavior and religious beliefs on deviant conduct, to further assess a religious turning point effect across subgroups disaggregated by race/ethnicity, and to evaluate the influence of



religiosity on change from deviant outcomes characterized as violations of secular and ascetic standards. Analyses of religiosity/spirituality on these differing forms of deviance across race/ethnicity are also conducted.

In contrast to the hypothesized relationships, study findings reveal very little evidence of a religious/spiritual turning point effect in enacting change from deviant behaviors in the main models. Similar results indicate that religiosity indicates minimal differences in change from deviant conduct when the sample is disaggregated across race and ethnicity. Findings point to the nuances of the religion-desistance relationship, and depends upon processes that may involve attendance to church services or spiritual beliefs, and may be conditional on the type of deviance outcome examined—whether in violation of a secular or ascetic standard. Along with a discussion of these findings, limitations of the study, directions for future research, and implications for policy are provided.



#### **CHAPTER ONE:**

#### INTRODUCTION

An important criminological paradox indicates that offending across the life course is stable and changing given that virtually all adult offenders were juvenile delinquents. Yet, most individuals involved in delinquent behaviors during their youth do not become offenders into adulthood (Robins, 1978:611; Sampson & Laub, 1993). This notion underscores the importance of studying criminal behavior as a developmental process over the life course whereby early childhood deviance is predictive of criminal conduct later in life, but such propensities are not immutable. Eventual desistance or movement away from crime is also a likely possibility.

The application of a life course perspective to the study of crime provides a framework from which to examine the dynamic processes of the pathways into and the transitions away from antisocial behavior that transpire over various stages of life (Elder, 1985; Sampson & Laub, 1993). Discerning the social mechanisms that influence the emergence of deviant behavior, its duration, and its cessation then become critical concerns for the study of crime (Blumstein, Cohen, Roth, & Visher, 1986; Piquero, Farrington, & Blumstein, 2003; 2007; see also Blumstein, 2016). The suggested factors that characterize these processes, however, is dependent upon the theoretical approach.

Some of the more dominant explanations of the development into and out of crime can be classified into one of four categories, namely, theories of continuity, theories of continuity *or* change, theories of continuity *and* change, and theories that focus primarily on the change process (Cullen & Agnew, 2006 Lilly, Cullen, & Ball, 2011). For example, continuity theorists



contend that it is an enduring, latent criminal propensity to offend, or degree of self-control, that explains stability in offending for the duration of life (Gottfredson & Hirschi, 1990).

Alternatively, other theorists argue that individuals' offending trajectories are distinguished as either continuity *or* change. Moffitt's (1993) dual taxonomy places individuals into a smaller class of persistent offenders that exhibit stability in offending behaviors beyond adolescence (i.e., life course persistent offenders), or into a larger class of offenders whose temporary engagement in criminal activity is limited to adolescence and remits with the approach of adulthood (i.e., adolescent-limited offenders). For some theorists, greater emphasis is placed on the underlying mechanisms of change and the process of criminal desistance. The theory of cognitive transformation (Giordano, Cernkovich, & Rudolph, 2002), a symbolic interactionist perspective, emphasizes that desistance occurs when shifts in both individual agency and in the willingness to accept structural "hooks for change" converge.

Consistent with Giordano's viewpoint on the role of human agency on the desistance process, Sampson and Laub's age-graded theory of informal social control (1993; Laub & Sampson, 2003) maintains that offenders are active participants in shaping their life trajectories. Characterized by both continuity *and* change, Sampson and Laub's (1993:8) theoretical model proposes that the formation of bonds through structural "turning points" induces transformation, regardless of stable patterns of offending across prior stages of life. The proposed research is guided by the theoretical implications of this final perspective. In spite of its predominance as a life course explanation of crime, Sampson and Laub's age-graded theory is not without critique, particularly with respect to its silence in accounting for important differences in patterns of criminal behavior among minority offenders (Giordano et al., 2002).



According to Laub and Sampson (2003), social control exerts causal influences in persistent offending and desistance, and with an explanation for both processes comprised within a single framework, they assert the generality of their life course approach (Paternoster, Dean, Piquero, Mazerolle, & Brame, 1997). Theoretical specificity by race, ethnicity, gender, or other type of sociodemographic classification is therefore minimized in the age-graded theory. Instead, the root causes of continuity and change in offending are explained by general social processes.

In maintaining this general position, however, key theoretical propositions may be overstated. Although conventional bonds involving marriage, employment, and military enlistment are emphasized in recent tests of the age-graded theory, the universal effect of these particular institutions may not be equivalent across demographic subgroups (see e.g., Bersani & DiPietro, 2014, Craig, 2015; Craig & Connell, 2013; Nielsen, 1999; Schoenberger, 2016). In turn, alternate sources of social capital may hold greater salience for minorities (Giordano et al., 2002).

Building upon these shortcomings, the task of the dissertation is to assess the general implications of the age-graded theory in two primary ways. First, propositions will be tested using a more recent and representative sample of adolescents. Secondly, religion<sup>1</sup> will be assessed as a potential socializing institution in the transition away from deviant behavior. These research objectives are explained further following a brief introduction of the broader topics that frame the discussion overall. These topics include the age-crime curve, Sampson and Laub's age-graded theory, race/ethnicity in life course studies, and religion as a turning point.

<sup>&</sup>lt;sup>1</sup> The terms "religion" and "religiosity/spirituality" are used throughout the manuscript and are intended to reflect distinct conceptualizations. Usage of *religion* specifically references the larger social institution based on the doctrine related to the church or worship of God, whereas *religiosity/spirituality* is a multidimensional concept that involves a system of behaviors and beliefs that demonstrate the extent of religious involvement (see Fetzer Institute, 2003).

# The Age-Crime Curve

First and foremost, it should be noted that the theoretical foundation for developmental and life course explanations of crime arose from an intellectual context that was marked by various and controversial perspectives brought to bear upon the study of age and crime.

Influential elements included the methodology of pioneering longitudinal research projects, the distinction of chronic offenders and criminal careers, and a heated debate emerging from differing theoretical and empirical interpretations of the age-crime curve. This familiar depiction of the age-crime relationship reflects the rise and peak of criminal involvement during adolescence, the steep decline in early adulthood, and steady decrease with age.

Several works have connected the origins of the developmental and life course approach to classic investigations that examined the onset, root causes, and progression of delinquency such as Wolfgang, Figlio, and Sellin's (1972) Philadelphia birth cohort studies and the Glueck and Glueck's (1950) project that compared delinquent and non-delinquent Boston youth followed to age 32 (e.g., Benson, 2013; Blokland & Nieuwbeerta, 2010; Piquero et al., 2003). The longitudinal methodology employed in these studies drew greater attention to age as an important correlate of crime, as well as renewed the concept of the criminal career and proposed the phenomena of chronic offending (Laub, 2004; Sampson & Laub, 2016).

In drawing upon findings from these previous studies, the Panel of Research on Criminal Careers, established by the National Academy of Sciences, presented a policy-relevant framework that emphasized the longitudinal examination of criminal activity in order to examine separately the dimensions of individual criminal careers (Blumstein et al., 1986). In so doing, a rancorous, academic dispute ensued which entailed conflicting explanations of the age-crime curve, questions regarding the rationale of longitudinal methods, and challenges to the value of



the criminal career paradigm (Blumstein, Cohen, & Farrington, 1988a; 1988b; Gottfredson & Hirschi, 1986; 1987; 1988). Such contentious exchanges among prominent scholars led to the emergence of developmental and life course research in criminology.

It was also within this time frame that Sampson and Laub (1993; Laub & Sampson, 2003) were reviving the Glueck's original data from the *Unraveling Juvenile Delinquency* study (Glueck & Glueck, 1950), which served as the basis for development of their age-graded theory. In contrast to the work produced by the criminal careers panel, their life course approach provided a theoretically comprehensive explanation to the study of antisocial behavior over time. Unlike the assertions made by Gottfredson and Hirschi (1988), Sampson and Laub (1993) proposed that a complete understanding of the development of antisocial behavior required longitudinal observations. In sum, the culmination of these circumstances facilitated an intellectual movement within the criminological discipline that drew attention to other stages of life. Such considerations were necessary to progress beyond static perspectives that focused solely on the crime-prone years in adolescence.

As part of his vision for the future of criminology, Cullen (2011) challenged the field to recognize its current limitations. In borrowing a conceptualization from Moffitt (1993), he urged scholars to address the dominance of "adolescence-limited criminology" (p. 290) and to broaden the scope of traditional theories by applying an age-graded frame. In order to progress, Cullen (2011:310) maintained that criminologists must concede that "life-course criminology now is criminology." As its label implies, the narrow paradigm of adolescence-limited criminology denies the significance of circumstances occurring in childhood and adulthood. In contrast, a life course perspective accounts for factors at the root of crime to explain misconduct in childhood, delinquency during adolescence, and change in criminal offending during adulthood. Application



of this framework to examine various periods of the life span enriches our understanding of stable patterns of offending and a redirection of criminal pathways. As mentioned, a prominent example of this theoretical perspective is Sampson and Laub's age-graded theory of informal social control. As a life course reformulation of Hirschi's social control theory (1969) and with a "sociogenic" approach to crime, Sampson and Laub's (1993:7) theoretical model reflects the inverse relationship between antisocial behavior and an individual's bond to society across various stages of life.

### Sampson and Laub's Age-Graded Theory of Informal Social Control

Sampson and Laub present their age-graded theory in two editions. Their first book, *Crime in the Making: Pathways and Turning Points Through Life* (Sampson & Laub, 1993), highlights three main features of their life course perspective. The first theme maintains that structural factors, such as poverty, residential mobility, and household crowding influence social control processes within the family and school, which in turn, explains childhood and adolescent participation in delinquency. In other words, it is hypothesized that poor social structural conditions indirectly affect delinquency through processes characterized by harsh and rejecting parenting (Sampson & Laub, 1993).

The second theme proposes that antisocial behavior is likely to continue from childhood to adulthood in a variety of life circumstances. In this regard, offenders' opportunities to establish meaningful bonds grow increasingly unlikely as their antisocial behavior elicits negative reactions from others in various situations. These cycles of maladaptive social interactions result in a pattern of behaviors that places offenders on a trajectory of continued offending (Caspi, Elder, & Bem, 1987; Moffitt, 1993).



The final theme asserts that informal social controls established in adulthood, such as stable employment, a rewarding marriage, or military service can explain discontinuity in offending, in spite of prior differences in childhood propensities (see also Elder, 1985:32-33). These exogenous predictors of the desistance process can alter prior offending trajectories toward a more conventional pathway. As these bonds strengthen, the value of the relationship increases. With growing mutual investments and connectedness, there is much to lose should the former offender return to a life of crime. Taken together, Sampson and Laub (1993) posit a dynamic social bonding perspective that incorporates the concepts of continuity and change in offending. More specifically, continuity in antisocial behavior is stable from childhood into adolescence; however, key turning points in adulthood facilitate the movement away from crime.

In their second book, *Shared Beginnings, Divergent Lives: Delinquent Boys to Age 70*, Laub and Sampson (2003) provide an expansion to their first work based on quantitative and qualitative follow-up data collected from the original Glueck research subjects several decades later. Their use of social bonding to explain persistence in and desistance from offending through the life course remained an integral component of their thesis. Taking into account their new findings, the scholars advanced aspects of the desistance process into a modification of their perspective. More specifically, Laub and Sampson (2003) argue that social controls, routine activities, in addition to the subjective factor of human agency, coalesce to explain processes of either persistent offending or desistance from offending in adulthood. Weak informal bonds that are lacking in control, with limited routine activities, and human agency predict persistent patterns of offending. Alternately, strong informal bonds that invoke control, with prosocial routine activities, and human agency predict desistance in spite of an antisocial history. The addition of human agency into their expanded theory is a particularly noteworthy but complex



element. This concept signifies that offenders exercise individualized choice in the face of compromising situations. While in the transformative process of desistance, offenders take an active role in deciding whether to participate in crime or resist it.

With the enduring interest in life course criminology, Sampson and Laub's highly regarded theoretical contributions have served as the basis for emergent and sophisticated scholarship. Examination of turning points in adulthood have demonstrated support for the impact of informal social controls such as marriage (e.g., Horney, Osgood, & Marshall, 1995; Laub, Nagin, & Sampson, 1998), military service (e.g., Bouffard & Laub, 2004), and employment (e.g., Uggen, 2000; Uggen & Staff, 2001) on inhibiting continued involvement in crime among high-risk offenders.

However, Sampson and Laub's age-graded perspective has been criticized on its potentially limited reach in explaining continuity and change in offending among more contemporary and diverse samples (Gabbidon, 2015; Giordano et al., 2002; Giordano, Longmore, Schroeder, & Seffrin, 2008; Tracy & Kempf-Leonard, 1996). Because their findings were based solely on the experiences of high-risk, White males born in the 1920s and early 1930s, a number of concerns regarding the external validity of the age-graded theory have been raised (see Tracy & Kempf-Leonard, 1996:61-63). It is unclear if the theory can be generalized to a representative sample that includes minorities, individuals born in more recent contexts, and individuals with broad differences in their levels of offending. Additionally, given the current social and economic conditions, the structural turning points identified by Sampson and Laub may hold less salience for current samples. Alternate means of informal social control such as the institution of religion may play a far more important role in the change process for minorities (see Chu & Sung, 2009; Giordano et al., 2002; 2008; Stansfield, 2017).



### **Race and Ethnicity in Life Course Frameworks**

Although dynamic theoretical approaches provide more promising explanations for the movement into and away from crime, an important oversight that warrants greater empirical examination concerns the study of racial and ethnic differences in offending over time (Piquero, 2015; Piquero, MacDonald, & Parker, 2002). Accumulating evidence consistently finds that race is an important correlate of crime as Blacks continue to number disproportionately in offending, victimization, and at various levels of the criminal justice process (e.g., Greene & Gabbidon, 2012; Leiber & Peck, 2015; Mann, 1993; Walker, Spohn, & DeLone, 2012). Likewise, Hispanics and Latinos represent the largest ethnic minority in the U.S. (U.S. Census Bureau, 2014), and their increased rates of incarceration over White offenders (e.g., Mauer & King, 2007) necessitates continued examination of the factors that attribute to their disproportionate involvement with the criminal justice system (e.g., Engel & Swartz, 2014; Spohn, 2014). However, our understanding of the role of race and ethnicity in offending are limited both theoretically and empirically (Mack & Leiber, 2005; Leiber & Peck, 2015; Piquero, 2015). In light of variations in offending, it is also likely that the influential structural bonds and the underlying processes of persistence and desistance into adulthood are race- and ethnic-specific. Yet, criminal career frameworks, save one (Moffitt, 1994), have failed to bring either race or ethnicity to the fore to account for these differences.

With theoretical generality, Sampson and Laub (1993) take a race-neutral stance in their age-graded theory. From a "deracialized" viewpoint, Sampson and Laub (1993:255) articulate that the differences in criminal participation over the life span are not explained by individual characteristics. Rather, differential structural disadvantage and attenuated bonds among systems of social capital such as school, work, and the family explain variations in crime-related



outcomes. In their follow-up work, Laub and Sampson (2003) further argued against specificities denoted by race, ethnicity, gender, time, or place. Instead they maintained universality in their theoretical approach and argued that the same general processes account for persistence in and change from offending (see also Sampson & Laub, 2005).

Critical of the propositions advanced by Sampson and Laub, Tracy and Kempf-Leonard (1996:62-63) argued that the age-graded theory of informal social control presents "only a distorted perception of the reality of crime and the role of race" because the theoretical formulations were based on the experiences of an "all-white, all-male sample." In response, Laub and Sampson (2003:282-283) asserted the invariance of their theory and argued that the basic underlying causal processes of criminal desistance found among the Glueck men can be extended to the contemporary urban underclass (Sampson & Laub, 1997).

Arguably, the changing structural and cultural conditions that followed the Glueck men era have had a differential impact across racial/ethnic subgroups as is evident by the enduring concentration of disadvantage and criminality among minorities (Massey, 1990; Shanahan, 2000; Wilson, 1987; 1996). Because of these sustained inequalities, it would be reasonable to expect that transitions embedded in pathways into and away from crime differ by race and ethnicity.

Subsequent tests of Sampson and Laub's theory that include diverse samples have produced decidedly mixed results. Some conclude that certain prosocial bonds such as marriage and education explain modest changes in heavy alcohol use among Whites, less so for Hispanics, and not at all for Blacks (Nielsen, 1999). Another examination with similar results found that marriage was associated with changed levels of offending for Whites and Hispanics, but not for Blacks. Further examination of parenthood bonds indicated lower levels of offending among Whites, but not for Hispanics or Blacks (Craig, 2015). While not exhaustive, these preliminary



tests bring into question the universality of Sampson and Laub's age-graded theory. In addition, while Sampson and Laub (1993) argue that race is an irrelevant factor in explaining offending over the life course, a burgeoning literature continues to document disparate patterns of criminal involvement and desistance between White and minority offenders (e.g., Bellair, McNulty, & Piquero, 2014; Bersani & DiPietro, 2014; Caudy, 2011; Elliott, 1994; Massoglia & Uggen, 2007; Piquero et al., 2002).

It is important to further note that what is currently known about the longitudinal patterns of delinquency and crime among minorities has been largely defined by the dominant Black-White racial dichotomy in criminological research. Insufficient attention has been paid to the role of ethnicity, especially among Hispanics/Latinos, across the life course (Jennings et al., 2010; Maldonaldo-Molina, Piquero, Jennings, Bird, Canino, 2009; Maldonado-Molina, Reingle, Tobler, Jennings, & Komro, 2010; Piquero, 2008). Currently, there is no ethnic-specific theory that accounts for disproportionate Hispanic/Latino offending patterns, and the factors that distinguish the developmental processes of ethnic criminal behavior over time are generally unknown.

As noted above, the relatively few examinations conducted on the generalizability of Sampson and Laub's life course perspective report the differential significance of turning points between racial and ethnic groups. In light of variation in offending patterns and given that the impact of informal social control varies across racial and ethnic groups, it may be important to consider structural *and* cultural influences in the organization of theoretical frameworks.

Although Sampson and Laub (1993) advocate a general life course theory, separate racial and ethnic-specific explanations may be warranted as criminal trajectories and transitions are unlikely to be the same for Whites, Blacks, and Hispanics/Latinos.



# Religiosity/Spirituality as a Turning Point

The shifting trends from the traditional "male-breadwinner" families of the 1950s are evident in the diversity of the current work force and in the changing composition of contemporary families (Cohen, 2015). These changes in the social landscape highlight a potential limitation of Sampson and Laub's age-graded theory (1993; Laub & Sampson, 2003). The informal social bonds emphasized in their life course perspective, such as marriage, military, and employment, are markedly different today when compared to the economically prosperous post-World War II era in which the Glueck men experienced young adulthood. Furthermore, differences in work and family trends observed across race and ethnicity may signify the lessening meaning and salience of these particular turning points for certain segments of the population. With an overall decline in marriage, falling birth rates, and fewer opportunities for employment, examination of other types of turning points may be justified (Giordano et al., 2002; see also Hill & Yeung, 1999; Shanahan, 2000). With limited access to sources of structural advantage, individuals may instead turn to social ties present within their community, such as those available through the church for example (see Giordano et al., 2002; 2008). In following this logic, the age-graded theory may require elaboration to include the institution of religion as an alternate turning point that may counteract stable patterns of offending.

The role of religiosity/spirituality has not been a central feature of life course criminology and its impact on processes of change are not well understood (Johnson & Jang, 2010). However, recent qualitative studies that focus on serious offenders underscore the significance of religious involvement in maintaining change in both self-conceptualization and behavior (e.g., Giordano et al., 2002; 2008; Hallett & McCoy, 2015; Maruna, 2001; Schroeder & Frana, 2009). Likewise, additional examinations indicate that religious activities may facilitate social bonding (Taylor &



Chatters, 1988) and may assist in moving individuals away from antisocial behavior and toward greater participation in structured, conventional activities (e.g., Chu, 2007; Giordano et al., 2002; Jang, 2013; Stansfield, Mowen, O'Connor, & Boman, 2017).

Findings from a limited number of life course studies yield mixed support for the influence of a religious/spiritual orientation on desistance from antisocial conduct. Some suggest that the thrust of religious participation is largely preventive and impedes initiation into deviant conduct (Chu, 2007), while others indicate that religious involvement does not promote lasting behavioral change (Giordano et al., 2008; Ulmer, Desmond, Jang, & Johnson, 2012). Still, others find that the effect of religiosity/spirituality serves as an important turning point in emerging adulthood (Jang, 2013), and in modifying deviant conduct among serious offenders (Bakken, DeCamp, & Visher, 2014; Stansfield, 2017; Stansfield et al., 2017). Importantly, because the extant life course studies that examine religiosity and desistance generally focus on outcomes related to violations of a religious ascetic code such as substance use (see Burkett & White, 1974; Middleton & Putney, 1962), it remains unclear whether these same effects also impact changes in secular forms of deviance (e.g., violent, property crime).

In addition, what is most notably lacking in this body of literature is examination of the role of religion using diverse samples. For example, differing patterns of religious observation are noted along racial and ethnic lines, but very little is understood about the religion-desistance nexus across adolescents that differ in their delinquency involvement. Moreover, because life course scholars have largely focused on change among serious offenders (e.g., Blumstein et al., 1986; Giordano et al., 2002; Laub & Sampson, 2003; Sampson & Laub, 1993), much less is known regarding various offending pathways and the potential import of a religious transition among those less involved in deviance and who represent the majority of adolescent offenders.



Rates of religiosity within the United States indicate greater participation in religious services among Blacks and Hispanics as compared to Whites (47%, 39%, and 34%, respectively), and greater percentages of belief in God among Blacks as compared to Hispanics and Whites [83%, 59%, and 61%, respectively (Pew Research Center, 2015)]. Historically, religion and the church have been important sources of strength and support for the African-American community in particular, and it is possible that greater religious practice and commitment will differentially influence the change process across racial/ethnic subgroups.

Two preliminary studies have explored religiosity/spirituality on desistance from problematic antisocial behavior across race/ethnicity. These include an examination of religious behavior on substance use recovery among White and Black participants (Chu & Sung, 2009), and a more recent study that assesses the role of religious beliefs on desistance from criminal offending and substance use across White, Black, and Hispanic subgroups of serious juvenile offenders (Stansfield, 2017).

As is the case with many life course assessments, Chu and Sung (2009) and Stansfield (2017) evaluated developmental processes of change among individuals with serious involvement in problem behaviors. However, a more comprehensive understanding of a religious change in adulthood may require a population-based sample that reflects variation in levels of offending. Such observations likely capture a spectrum from low-level offending, which characterizes typical adolescent behavior, to atypical behavior particular to those who have problematic and serious involvement in delinquency. Therefore, evaluation of the age-graded theory with a general sample of youth may provide more informed results on the universality of this approach.



The investigations conducted by Chu and Sung (2009) and Stansfield (2017), while insightful, continue to generate important questions concerning the generalizability of the age-graded theoretical propositions and the nature of the association between religiosity on desistance from antisocial behavior. This study attempts to build upon these two works. Given the differing operationalizations of religiosity, the disregard in delineating violations of a secular versus an ascetic standard, and with an inattention to the broad variability in adolescent antisocial behavior, further exploration of a religious turning point is merited. Thus, the nature of the association between religion and desistance, the types of antisocial behaviors for which religiosity may exert a protective impact, and recognition for whom a religion transition may be most salient requires greater exploration.

# The Current Study, Objectives, and Research Questions

Although the scholarship for life course and developmental criminology continues to grow, the related explanations that frame the reasons offenders develop into and out of crime are few (Cullen & Agnew, 2006; Lilly et al., 2011). In particular, the universal assumptions proposed by Sampson and Laub's age-graded theory of informal social control (1993; Laub & Sampson, 2003) may be overstated. Because the findings from their study are derived from a homogeneous sample, it is unclear whether or not the life course theory adequately captures the experiences of minorities (Gabbidon, 2015; Giordano et al., 2002; 2008; Tracy & Kempf-Leonard, 1996). Furthermore, the social and cultural context within the U.S. has changed significantly since the Glueck men era, and with declining rates of marriage, parenthood, and employment overall (Hill & Yeung, 1999; Shanahan, 2000), the major life events specified by Sampson and Laub (1993) may not be as equally relevant for recent samples of adolescents



transitioning into adulthood. Consequently, the salience of other types of turning points should be examined more extensively in order to assess their influence on change from deviant conduct.

In drawing on three areas of criminological inquiry, specifically Sampson and Laub's age-graded perspective (1993; Laub & Sampson, 2003), race/ethnicity and desistance, and the religion-crime link, this study is directed by a central research question: Does religiosity in adulthood influence change in deviant behavior patterns among a more representative and contemporary sample of youth?

To address this question, the research first aims to empirically explore an alternative means to turn away from deviant behavior, specifically religiosity/spirituality, as a possible turning point in the change process. Furthermore, an examination of religiosity/spirituality among youth who exhibit differences in their levels of antisocial conduct, may provide a more rigorous test of the generalizability of the age-graded theory.

The second objective considers the nature of the religion-desistance relationship.

Clarification of the religious effect on desistance involves investigation of the differing aspects of religiosity/spirituality, whether as a combined measure of both religious behavior and beliefs, whether through religious behavior only, or through holding religious beliefs only, that prompts the change process.

The third objective aims to evaluate whether religiosity/spirituality applies equally across demographic groups, specifically among White, Black, and Hispanic/Latino youth. Rates of religious beliefs and participation in religious activities tend to vary across race and ethnicity. Thus, the protective impact of religion may play a far more important role in the desistance process for certain groups of individuals.



The fourth objective attempts to fill important gaps in the desistance literature through further elucidation of the nature of the religion-desistance relationship. This involves evaluation of whether religiosity in adulthood accounts for changes in ascetic as well as secular deviance over time, and how these relationships differ across racial/ethnic groups. Examination of these relationships across racial and ethnic groups may provide greater awareness of the extent to which religious bonding exerts change in various forms of deviant behaviors and who may benefit most from such a transition.

The final objective attempts to assess the impact of a religious/spiritual turning point through utilization of a comprehensive analytic method that accounts for between- and within-individual variation over time. While prior analyses have predominantly relied upon static approaches to assess religion as a turning point (e.g., Bakken et al., 2014; Chu, 2007; Giordano et al., 2002; 2008; Jang, 2013; Ulmer et al., 2012), these techniques have ignored the hierarchical nature of longitudinal data as well as the statistical dependencies that exist between observations. In light of these limitations, application of a strategy that considers the nested structure of repeated measures is favorable.

To meet the research objectives above, estimation of change from various forms of deviance will be compared using a longitudinal study of a nationally representative sample of adolescents (n = 8,901) [National Longitudinal Survey of Youth 1997 (NLSY97) Center for Human Resource Research, 2003; Moore et al., 2000]. Through a multilevel mixed-effects modeling framework (Rabe-Hesketh & Skrondal, 2012), changes in deviant behaviors over the life course will be assessed as individuals participate in religious/spiritual social bonding during adulthood.



More specifically, to achieve the goals of the study, assessment of a religious turning point involves running 3 sets of mixed effects analyses. The first set consists of modeling the influence of a combined measure of religious behaviors and beliefs on deviance in a main model. The second set of analyses employs religious behavior as the primary independent variable to assess its impact on change from deviance across racial/ethnic groups and to assess change across deviance type (secular and ascetic deviance). The impact of religious behavior is further examined through separate assessments of secular deviance across racial/ethnic groups and ascetic deviance across racial /ethnic groups. The third set of analyses then follows these same analyses but religious beliefs are used as the primary independent variable instead.

In accordance with the objectives discussed above, the study is guided by five primary research questions: 1) Does religiosity/spirituality operate as a turning point from deviant behaviors using a representative sample of adolescents transitioning into adulthood? 2) What aspects of religiosity/spirituality (both religious behavior and beliefs, behavior only, or beliefs only) prompt change in deviant behavior? 3) Does a religious turning point have a differential impact across race and ethnicity? 4) Does the impact of religiosity reflect desistance from secular deviance (e.g., property and violent crime)? 4a) How do these relationships differ across race and ethnicity? 5) Does the impact of religiosity reflect desistance from ascetic offenses (e.g., substance use)? 5a) How do these relationships differ across race and ethnicity?

#### **Overview of Dissertation Chapters**

Chapter 2 provides an overview of the intellectual history that initiated the application of the life course approach to crime, and includes in-depth discussions of the criminal career paradigm (Blumstein et al., 1986) and the age-crime debate (Blumstein et al., 1988a; 1988b; Gottfredson & Hirschi, 1986; 1987; 1988). Chapter 3 presents a detailed review of Sampson and



Laub's (1993) age-graded theory of informal social control, its subsequent revision (Laub & Sampson, 2003), in addition to the critiques of this prominent perspective. In light of the declining significance of marriage, parenthood, and employment as conventional turning points in more recent decades, Chapter 4 reviews the relevant literature on the association between religion and crime and the salience of religiosity as a change agent in the desistance process (e.g., Giordano et al., 2002; 2008). To enhance the discussion on generalizability, an overview of racial and ethnic differences in offending and brief remarks on variation in offending that relates to the study of age and crime (Chapter 2), the age-graded theory (Chapter 3), and the religious influence on desistance (Chapter 4) is folded into each body of literature. Important considerations regarding the rationale and justifications for the proposed research serve as the basis for Chapter 5. Discussion of the data utilized, characteristics of the NLSY97 sample, and the analytic strategy undertaken to address the proposed questions above are comprised within Chapter 6. Chapter 7 presents the results from the multilevel mixed-effects modeling approach that estimates the impact of religious behavior and religious beliefs across various forms of deviance, as well as across racial/ethnic groups. A review and interpretation of the main findings and their relation to the research questions and hypotheses are provided in Chapter 8. This final chapter concludes with discussions of the study limitations, directions for future research, and implications for policy.



#### **CHAPTER TWO:**

# HISTORICAL ORIGINS OF THE LIFE COURSE APPROACH TO CRIME: THE CRIMINAL CAREER PARADIGM AND AGE-CRIME DEBATE

Conventional thinking holds that teenagers and young adults are disproportionately involved in criminal behavior. Among the oldest and well-established empirical realities is the association between age and crime (e.g., Hirschi & Gottfredson, 1983; Quetelet, 1831). This relationship specifies that the prevalence of offending increases dramatically from late childhood to reach a maximum in the teenage years, decreases precipitously as individuals enter adulthood, and then steadily declines in the years that follow (Blumstein & Cohen, 1987; Caspi & Moffitt, 1995; Farrington, 1986). Evidence of the recurring asymmetrical bell-shaped properties of the age-crime curve are found in samples across countries and history (Hirschi & Gottfredson, 1983; Moffitt, 1993), but may manifest slight variations in its shape depending on the type of crime examined (Laub & Sampson, 2003; Piquero, Hawkins, & Kazemian, 2012). On balance, the repeated findings of the age-crime relationship indicate that antisocial behavior is most prevalent during adolescence, and as a result, criminologists in past decades have concentrated much of their attention on this period of life. However, in order to surpass the narrow focus that encompasses the adolescent-limited paradigm (Cullen, 2011), theoretical and empirical vantage points must be broadened to include those social processes that shape criminal development in childhood, adolescence, and in adulthood.

For many years the prevailing scholarship had been fixed on juvenile offending, with criminological theorizing centered on explanations of wayward youth. This began with students



of the Chicago School, Shaw and McKay (1942), and their exploration of the social origins of crime. Their search led to the development of social disorganization theory that linked delinquency to the inner-city community context. In turn, this perspective gave rise to enduring traditions within mainstream criminology to explain youthful offending and delinquent subcultures such as strain theory [e.g., Cohen's (1955) *Delinquent Boys: The Culture of the Gang*; Cloward and Ohlin's (1960) *Delinquency and Opportunity*], subcultural deviance/differential association theory [e.g., Miller's (1958) *Lower Class Culture as a Generating Milieu of Gang Delinquency*], and control theory [Matza's (1964) *Delinquency and Drift*; Hirschi's (1969) *Causes of Delinquency*] (e.g., Cullen & Agnew, 2006; Lilly et al., 2011). Inherent to the theoretical emphasis on juvenile delinquency thus was a focus on etiology and peak age of offending, rather than on other portions of the age-crime curve, such as the decreasing slope that represents the process of desistance and movement away from crime (Laub & Sampson, 2001).

The noted prevalence of offending during the teenage years indicated that the investigation into the root causes of crime should begin in adolescence. Examination of the link between childhood precursors and outcomes in adulthood was subsequently overlooked (Sampson & Laub, 1993). It was not until the few longitudinal studies that followed delinquent youth attracted greater attention, for example with the publications of *Delinquency in a Birth Cohort* (Wolfgang et al., 1972), *Unraveling Juvenile Delinquency* (Glueck & Glueck, 1950), The National Academy of Sciences' report on criminal careers (Blumstein et al., 1986), and a controversial critique of this growing body of work (Gottfredson & Hirschi, 1986; 1987; 1988), that a shift toward expanding the knowledge base on the development of antisocial behavior was launched (Benson, 2013; Blokland & Nieuwbeerta, 2010; Piquero et al., 2003).



Although consensus will not likely materialize among theorists in their interpretations of criminal activity over time, notable frameworks that readily align with the age-crime curve and account for offending across various stages of life have gained significant prominence. Despite its atheoretical nature, a formative piece includes Blumstein and colleagues' (1986) criminal career paradigm, which featured the terminology and framework for mapping the course of offending. With vocal criticism against, and with those in defense of this approach (Blumstein et al., 1988a; 1988b; Gottfredson & Hirschi, 1986; 1987; 1988), greater awareness was directed toward the longitudinal study of offending which incited greater complexity in criminological theory and method (Sullivan & Piquero, 2016).

While the literature related to developmental and life course perspectives continues to grow, a noted limitation concerns the paucity of attention to racial and ethnic differences in offending over time. Although race and ethnicity emerge as central correlates of crime, existing dynamic explanatory models, aside from one (e.g., Moffitt, 1994), fail to account for the disproportionate representation of minorities in offending (e.g., Greene & Gabbidon, 2012; Leiber & Peck, 2015; Walker et al., 2012). The underlying assumption, thus, is that the factors associated with criminal development regarding onset, persistence, and desistance are equivalent for Whites and minorities. An alternate line of reasoning proposes that racial and ethnic minorities, specifically Blacks and Hispanics, may traverse the life course in pathways that are unlike those of their White counterparts (e.g., Gabbidon, 2015). Furthermore, because racial and ethnic disparities are evident at various points in the criminal justice process, it is critical that a detailed accounting of the differences in criminal careers across groups is formulated. Our current understanding of criminal career patterns, however, is largely based on the experiences of



White offenders (DeLisi & Piquero, 2011). In order to implement criminal justice strategies with greater consideration of these differences, we must strive to expand our scientific scope.

This chapter first presents an overview of the criminal career paradigm (Blumstein et al. 1986), and the academic dispute that arose in response (e.g., Blumstein et al., 1988a; 1988b Gottfredson & Hirschi, 1986; 1987). Although there are significant gaps in our current knowledge regarding differences across race/ethnicity within the criminal careers framework, some of the extant findings that speak to these differences are discussed below.

### **The Criminal Career Paradigm**

The criminal career paradigm was devised from efforts to examine further the future course of offending and to provide concrete recommendations in guiding policy makers to address criminal behavior. Prior investigations had already paved the way towards the longitudinal study of offenders (e.g., Glueck & Glueck, 1950; Wolfgang et al., 1972), but the criminal career paradigm was a policy-driven research endeavor that provided a systematic approach to the age-crime curve and the means to classify certain criminal types.

Following the rapidly growing and costly incarceration problem that began in the 1970s, criminologists serving on the Panel on Research on Criminal Careers were charged by the National Academy of Sciences to explore potential modifications to the ineffective strategies that were being used to combat crime. One area of research that garnered significant attention involved detection of persistent "career criminals," or the small number of offenders that are the most active and are responsible for the majority of crimes committed (Blumstein et al., 1986:*x*). Correctly discerning these problematic offenders from less serious ones could possibly redirect the attention of policy makers toward more informed, evidence-based decisions concerning incarceration. In addition to the implications for policy, the criminal career paradigm was



instructive for emerging formulations of developmental and life course explanations of antisocial behavior (Blumstein et al., 1986).

In their two-edition compendium, Blumstein and colleagues (1986) acknowledged that prior criminological research had focused predominantly on the identification of between-individual factors that differentiate offenders from non-offenders. However, criminal patterning at the aggregate level may not accurately mirror those of offenders at the individual level, and as a consequence, greater understanding of the various dimensions of individual criminality was required (Blumstein et al., 1986:*x*). For example, it was difficult to determine whether the age-crime curve was a reflection of a majority of offenders committing few offenses or a minority of offenders that commit a disproportionate number of crimes.

The first principal dimension, offender participation, distinguishes the subset of the population that offends from those who are non-offenders. From the subset of those involved in crime, the focus shifts to ancillary components of the criminal career that entails offending frequency, career duration, and seriousness of the crimes committed (Blumstein et al., 1986:12-13). Concepts related to career duration and are fundamental to dynamic explanatory frameworks include offending onset, continuation, and termination (Blumstein et al, 1986; Piquero et al., 2003; 2007).

Altogether these factors were deemed important for the study of criminal careers, and through separate examination of each of these dimensions, identification of their individual impact was informative in directing policy development (Blumstein et al., 1986). The four primary dimensions of the paradigm, specifically prevalence, frequency, duration, and seriousness/crime type are briefly summarized below. In addition to the early findings of



criminal career research, a discussion of the observations of racial/ethnic differences in offending within this framework follows.

Disaggregating overall crime rates into the key components of individual offending first distinguishes those participating in criminal activity from those who do not (Blumstein et al., 1986). Active offenders are typically identified through self-report or through official records that indicate criminal involvement within a specified time period (Piquero et al., 2003; 2007). Generally, studies of offending prevalence have found higher rates of participation in crime among males as compared to females (Blumstein et al., 1986; Elliot, Huizinga, & Morse, 1986), and among younger offenders (Farrington, 2003).

The second dimension, offending frequency, also referred to as lambda ( $\lambda$ ), indicates the individual rate of offending over a specified amount of time among those who are actively engaged in crime (Blumstein et al., 1986:55). Blumstein and colleagues (1986) reported that rates of offending do not vastly differ across gender, race, and age. However, predictors such as the age of onset for criminal careers, substance use, unemployment, and prior involvement in crime provide the basis for discerning offenders with higher rates of criminal behavior from those with lower rates. In other words, those who engaged in crime at younger ages, were habitually and/or heavily involved in substances, experienced long-term unemployment, and had extensive criminal histories were more likely to be high-rate offenders (Blumstein et al., 1986:76). Moreover, estimations of individual frequencies revealed some variation, but little diversity in offending rates. Highly skewed distributions of lambda indicated that the majority of offenders committed illegal acts at far lower rates relative to a small minority that committed offenses at much higher rates (Blumstein et al., 1986:62; Chaiken & Chaiken, 1982). This particular finding directed policy initiatives toward the identification of the small number of



seriously involved "chronic offenders" and to consider selective incapacitation as a formal solution toward controlling offenders responsible for committing a disproportionate number of crimes (Blumstein & Cohen, 1987; Piquero et al., 2003:379; Wolfgang et al., 1972).

The lapse of time between an offender's first offense and their last, or their career duration, characterizes the third aspect of the criminal career paradigm (Blumstein, Cohen, & Hsieh, 1982; Blumstein et al., 1986). As noted above, assumptions underlying career duration advance a developmental perspective to the age-crime curve by indicating a start to delinquent behaviors (onset), that involvement in delinquent and/or criminal behavior persists for some amount of time (continuation/persistence), and that there is an end point to criminal behavior (termination/desistance) (Blumstein et al., 1986; Piquero et al., 2007). Researchers have typically focused on the initiation of delinquency and its continuity from one stage of life to another, as findings indicate that earlier onset leads to a more active and longer career duration (Blumstein et al., 1986; Farrington, Lambert, & West, 1998; Wolfgang et al., 1972). According to Blumstein and colleagues (1982; 1986), the span of most offending careers are relatively short-lived and typically last 5 years for individuals active in index offenses during their young adulthood.

In comparison to the other properties of the criminal career model, research on the termination of offending has progressed far slower (Laub & Sampson, 2001; Piquero et al., 2003). This may be due to reasons relating to the limited number of longitudinal examinations that cover the entirety of the life course (Laub & Sampson, 2001), the difficulties in locating exactly when an individual terminates their offending career, and the apparent lack of agreement on the conceptualization and operationalization of career termination (Piquero et al., 2003; 2007). Moreover, researchers have used the term desistance interchangeably with the career paradigm's designation of offending termination. According to Laub and Sampson (2001:11),



these constructs are not synonymous. Termination of offending, signifies the specific point when criminal behavior has altogether ceased, and should be viewed distinctly from desistance, which is the causal process that underlies and maintains termination of offending behavior (Laub & Sampson, 2003).

With reference to measurement, however, most researchers have assessed desistance as a discrete event, which erroneously assumes that offenders arrive at the end point of their criminal career in very much the same way. By employing this static viewpoint, desistance as a gradual and developmental process is discounted, and the differences that unfold between and within offenders as they desist from criminal behavior are disregarded (Bushway, Piquero, Broidy, Cauffman, & Mazerolle, 2001). Mechanisms and measures of desistance continue to vary across studies, and it is difficult to extract general conclusions from this growing body of work (Uggen & Massoglia, 2003).

Understanding the underlying processes of change have also been hampered by measurement issues, given differences in the conceptualization and operationalization of structural turning points. According to the age-graded theory, turning points or transitional life events, such as marriage and employment appear to be robust predictors of the desistance process for serious offenders (see also Horney et al., 1995; Laub et al., 1998; Uggen, 2000). Features related to these life events that require greater attention include the strength and/or quality of the social bonds, the nature of the bond/relationship (e.g., cohabitation versus marriage), and identification of causal factors underlying these processes (Laub & Sampson, 2001; Kazemian, 2015).

While some have characterized turning points as abrupt events that alter long term patterns of behavior (e.g., Abbott, 2001:245), others maintain that processes of change are more



gradual in nature (Laub et al., 1998; Nagin & Paternoster, 1994). Such an undertaking includes an accumulation of actions over time that deepen commitment and relational bonds that progressively develop into sources of personal capital (Nagin & Paternoster, 1994). Rather than conceptualize these processes as "out of the blue" or "dramatic" as prior studies have done (Pickles & Rutter, 1991:134), turning point experiences are interactional and "should be of a kind that carry the potential for persistence of effects over time" (Rutter, 1996:614). A recent investigation finds that turning points and desistance are not separate processes. Instead, they found that change involves a simultaneous operation, with processes conversely influencing and strengthening each other toward offending cessation (Loughran, Nagin, & Nguyen, 2016).

The fourth and final components of the criminal career paradigm are complementary elements. The first aspect, offending seriousness, reflects the degree of crime severity as escalating or de-escalating. As such, the relative seriousness of criminal involvement may vary depending on the types of crimes committed, from petty offenses to those which are more heinous in nature. The second aspect, crime type, specifies the scope of criminal involvement as specialized or versatile (Blumstein et al., 1986; Piquero et al., 2003; 2007). Specialization distinguishes individual offending patterns as limited to one form of criminal behavior, while versatility denotes a wide-range of crimes that an offender commits (Blumstein et al., 1986; Piquero et al., 2003; 2007). Prior evidence regarding offending seriousness suggests that chronic offenders are more apt to escalate in their levels of offending seriousness as they approach adulthood (Wolfgang et al., 1972). With regards to crime type, examination of official records reveals that few offenders specialize in their offending patterns (Chaiken & Chaiken, 1982), while most engage in diverse forms of criminal acts over the course of their criminal careers.



Versatility in offending is most apparent among young offenders, as adult offenders are more likely to specialize in the type of crimes they commit (Piquero, 2000; Wolfgang et al., 1972).

## Race and Ethnicity in the Criminal Career Paradigm

Since publication of the NAS reports, the knowledge base relating to criminal careers has grown extensively. However, our understanding of the longitudinal patterning of offending across racial and ethnic groups, specifically among Black and Hispanic individuals, remains underdeveloped (DeLisi & Piquero, 2011; Piquero et al., 2003). The chief impediment to investigations of racial/ethnic differences in criminal careers research is the predominance of longitudinal data comprised of White offenders only, and where key demographic information has been omitted (e.g., DeLisi & Piquero, 2011; Farrington, Piquero, & Jennings, 2013).

Nevertheless, if comparisons are drawn across demographic groups using more diverse samples, differences are primarily assessed between Black and White respondents (DeLisi & Piquero, 2011; Piquero, 2008). Findings incorporating ethnic comparisons have been limited by the failure to adequately capture data that distinguish cultural groups, and importantly, Hispanic from White offenders (Morenoff, 2005; Leiber & Peck, 2015).

With reference to the evidence on criminal career dimensions, examinations of the nature of racial/ethnic differences in crime and delinquency have generally yielded consistent findings regarding offending participation, frequency, duration, and crime seriousness. In differentiating individuals involved in criminal behavior, early examinations generally found greater participation in offending among Blacks as compared to Whites (Blumstein et al., 1986; Visher & Roth, 1986; Wolfgang et al., 1972). Elliott (1994:5) revealed in his analysis of eight waves of self-reported data from the National Youth Survey [NYS; (Elliott, Huizinga, & Menard, 1989)], that rates of involvement in serious violent offending was substantially higher for Black (36%) as



compared to White (25%) males. Another study echoed these prior findings using a probability sample from the National Longitudinal Survey of Youth 1997 and found higher rates of arrest among minorities (Moore et al., 2000). Results indicated that by age 18, the arrest rate was close to a third for Black males (29.6%), which was closely followed by Hispanic (26.2%), and White (21.5%) males. By age 23, the rate of arrest for Black males increased sharply to nearly half (49%), was similarly high for Hispanic males (44%), but was less so for White male offenders (38%) (Brame, Bushway, Paternoster, & Turner, 2014). Taken together, these estimates suggest that offending differences across race/ethnicity are largely attributed to differing degrees of participation in criminal behavior, rather than to differences in offending frequencies (Blumstein et al., 1986; Piquero & Brame, 2008; Piquero, 2015).

Prior examinations of the extent of offending behavior among those actively involved in crime indicate very little difference across demographic groups (Blumstein et al., 1986; Piquero & Brame, 2008). Early reports on arrest across race found a ratio of 1:1 for most offenses among Black and White offenders (Blumstein et al., 1986). Likewise, through analysis of multiple measures of self-reported offending and official arrest data using a diverse sample of serious offenders [*Pathways to Desistance* study; (Mulvey et al., 2004)], Piquero and Brame (2008) observed that offending frequency does not vastly differ across race and ethnicity. This particular finding has been continually reproduced within offender and general population samples and through examination of various data sources (Piquero et al., 2003).

The evidence on participation and frequency generally indicate that racial and ethnic disparities in offending are a result of greater numbers of participation in criminal activity among minorities than Whites. For those who are actively involved, the offending frequencies are essentially equivalent. These findings bear theoretical and policy import that justifies further



examination and resolution to the deficient structural conditions and other forms of social disruption that operate to disadvantage Black and Hispanic males. Because of these barriers, extricating from a criminal lifestyle becomes increasingly difficult for minority offenders who may become further involved in illegal behavior (e.g., Elliott, 1994).

Assessment of career duration, or the length of time that has transpired between the onset of criminal behavior to its termination, has been a difficult component of the career paradigm to evaluate. Measurement accuracy is often hampered by problematic concepts, definitions, which may lead to the inability to precisely determine the beginning and end point of a criminal career (Piquero et al., 2003; 2007). In spite of these limitations, the findings that reference career duration and continuity across racial groups are generally in accord and indicate longer criminal careers among Black as compared to White offenders (but see Piquero et al., 2004). Alternately, comparison of longitudinal examinations of criminal activity among Hispanics and Whites yield more similarities than differences.

Noted racial disparities of the span of criminal careers were detected from an early study among serious youthful offenders paroled from the California Youth Authority (CYA). Specific psychosocial risk factors were identified, including low cognitive abilities and disadvantaged home environments during childhood, as having a differential impact on career duration across race (Piquero, Brame, & Lynam, 2002). These risks were most apparent among non-White offenders whose criminal careers were the longest and extended nearly two decades. Similarly situated White offenders, however, did not exhibit such extensive progression. Duration of their criminal offending remained virtually the same, lasting sixteen to seventeen years, whether or not they experienced such risks. Evidence from an early report mirror those from more recent findings that indicate Black offenders have longer lasting criminal careers when compared with



Whites. Findings from these studies demonstrate that careers of Black offenders extend well beyond adolescence into the early 20s (Elliott, 1994), and when followed to middle adulthood, such offenders remain criminally involved into their 30s (Doherty & Ensminger, 2014).

With reference to ethnic differences, an examination of offending trajectories among random samples of Hispanic males followed between the ages of 18 and 50 found four groups characterized as either very low-rate (continuity of low levels of offending), high-rate late-onset escalator (arrest frequencies demonstrated in early adulthood that persisted), high-rate desister (peak of offending detected in late teens with desistance by the 40s), or high-rate chronic offenders (peak of offending detected in late teens with slow rate of desistance by the 30s) (Jennings, Zgoba, Piquero, & Reingle, 2013). These latent groupings are approximate to findings from trajectory analyses conducted on White samples of serious offenders that indicate desistance in their 30s and 40s (see e.g., Farrington et al., 2013; Laub & Sampson, 2003).

The final line of inquiry in drawing racial and ethnic comparisons over the course of the criminal career concerns trends in offending seriousness. Several studies reached similar conclusions that suggest serious (violent) offending generally remains stable over time across race and ethnicity. However, in an early examination of official records among Michigan arrestees, the seriousness of offenses committed by Black offenders was steady over successive arrests in comparison to White offenders that displayed a slow and steady trend of increasing violence over time (Blumstein, Cohen, Das, & Moitra, 1988). Contrasting results were found among the two Philadelphia birth cohorts that indicated offense seriousness increased from prior offenses, but differential patterns of escalating violence over time were not found between races (Tracy, Wolfgang, & Figlio, 1990). Findings from a more recent investigation of the Project on Human Development in Chicago Neighborhoods (PHDCN) data, which included examination of



young adult participants aged 18 to 25, indicated no significant differences in change in violent offending over time between Blacks and Whites or between Hispanics and Whites. Data further indicated an overall reduction in violent offending which suggests most offenders, regardless of race or ethnicity, desist from involvement in serious crimes with increasing age (Sampson, Morenoff, & Raudenbush, 2005).

# Attention to Offending Variation in the Criminal Career Paradigm

Because the criminal career panel's research agenda was presented during a conservative "get tough" on crime political period, strategies for reduced offending focused on selectively incapacitating those with chronic and long-term criminal behavior (Blumstein, 1996; Greenwood & Abrahamse, 1982; Visher, 2016). Rather than seek out options to interrupt or modify criminal careers, research and policy initiatives were subsequently geared towards identifying and sanctioning those most at-risk of having extensive involvement.

Although the panel's findings discussed variation in levels of offending, the needs of those involved in minimal criminal activity drew little regard. This career type encompassed a substantial portion of those participating in criminal activity, however, intensive crime control measures aimed at the smaller subset of high risk offenders captured greater interest and support. With the politicization of crime control in the 1980s and 1990s, and without careful consideration of the evidence gathered on criminal careers, severe penalties that were a counterproductive criminal justice response were nevertheless enacted (Visher, 2016).

The sanctioning alternatives suggested by the panel to address non-violent and low-level offenders were overlooked, and efforts toward delinquency prevention/intervention during this punitive political climate were delayed (Blumstein, 1996; Visher, 2016). It was not until the emergence of life course perspectives that integrated social institutions (e.g., family and school)



in their explanations of delinquency that alternatives beyond incarceration were again considered (Visher, 2016). Although the aim of the criminal career panel was to provide evidence-based recommendations to a wide range of young offenders, opponents of the criminal career paradigm questioned the utility of this approach (Gottfredson & Hirschi, 1986, 1987, 1988).

### **The Criminal Career Paradigm Summary**

To summarize, the criminal career paradigm promoted an organizing framework and invoked nomenclature to more appropriately evaluate the developmental regularities of criminal behavior. Prior examinations of aggregate trends included both offenders and non-offenders alike, which in turn, confounded the elements that contributed to individual offending (Blumstein & Cohen, 1987). In order to appropriately assess the progression of individual offending over time, the career paradigm decomposes the aggregate crime rate into four main dimensions: participation, frequency, duration, and seriousness/crime type. Separate assessment of each of these elements distinguishes their individual influence, which directed policy interests towards more efficient solutions in dealing with crime.

More specifically, in response to the fiscal and social consequences associated with the dramatic growth in incarceration in the 1970s, the intended goal of the career paradigm, as it was first introduced, was to better understand the dynamics and course of offending, to identify high-rate, long-term, and serious offenders, to selectively incapacitate the types of offenders responsible for the disproportionate frequencies in offending behavior, and to estimate the deterrent impact of their incapacitation (Blumstein et al., 1986; Piquero et al., 2003; 2007).

Although the assessment of racial and ethnic differences within the criminal career paradigm is limited, findings generally indicate that greater rates of participation are found among minority offenders. Individual offending frequencies, however, are comparable across



groups. With reference to career duration, the extant literature indicates that the number of years that span between onset and termination of offending appears to be similar for White and Hispanic offenders, but is longest for Black offenders. Regarding crime seriousness, evidence suggests that levels remain relatively stable across race/ethnicity. Collectively, these results find that patterns of offending over time differ across groups, which draws attention to the limitations of current theoretical perspectives in fully explaining criminal careers, especially those of minority offenders (Doherty & Ensminger, 2014). Further, in light of the conservative political climate in which the panel's findings were presented, careful thought and attention to individual differences in offending, and opportunities to implement alternatives to sanctioning that includes delinquency prevention and intervention were missed (Visher, 2016).

Blumstein and colleagues (1986; 1988a:4) left unspecified the causal mechanisms underlying the dimensions of the career model, arguing that it was not a theory of crime. It was, however, particularly influential with regard to the development of contemporary dynamic theories explicating dimensions such as continuity and change in offending (Paternoster et al., 1997), and innovative analytical approaches to assess change in individual offending over time (e.g., Nagin & Land, 1993; Raudenbush & Bryk, 2002). Despite the usefulness of the approach and the statistical advancements that came as a result, some scholars have been less inclined to embrace the criminal career paradigm and the implications for the policies that it proposed.

# **The Age-Crime Debate**

Prior to the introduction of the criminal career paradigm by Blumstein and colleagues (1986), Hirschi and Gottfredson (1983) presented their provocative interpretation of the age-crime distribution, to which they hypothesized its invariance across historical periods, societies, demographic characteristics, and crime types. Their thesis was supported by evidence from self-



reported survey data in the U.S. during the 1980s (Tittle, 1980) that was commensurate with repeated findings that spanned the previous 150 years (1835-1980). Because of these robust findings, they deemed other theoretical explanations that had previously attempted to account for the empirical age-crime relationship as faulty. They further argued that, independent of the existing sociological explanations of crime, the same general pattern of behavior is followed by all offenders. Regardless of whether an offender engages in criminal activity at a high or low rate overall, the degree of criminal involvement is greatest during adolescence and all offenders simply decrease their criminal behavior with advancing age.

Departing from the more dominant sociological traditions in criminology, Hirschi and Gottfredson (1983) presupposed that the roots of criminal behavior were not adequately explicated by social factors, but rather, in individual-level differences in the tendency to commit criminal acts. They later noted that it is an offender's criminal propensity developed early in childhood which remains stable throughout the life course that determines various elements of the criminal career. That is, as criminal propensity increases, features such as participation, frequency, duration, and seriousness increase accordingly, and vice versa. Because of the stability of this underlying trait, Gottfredson and Hirschi (1986; 1987) argued that criminologists need only draw comparisons about offenders from a single point in time, as is sufficiently and concisely done in cross-sectional research. They assumed that longitudinal data collection would prove to be too costly and unrewarding because these studies would not yield substantial findings beyond what was already concluded from cross-sectional studies. Their theoretical conceptualization of a latent and enduring criminal propensity formed the basis of their general theory of crime (Gottfredson & Hirschi, 1990).



In the same year that Blumstein and colleagues proposed the criminal career model, they faced strong academic opposition from Gottfredson and Hirschi. In a spate of reciprocal critiques (Blumstein et al., 1988a; 1988b; Gottfredson & Hirschi, 1986; 1987; 1988) and with additional commentaries (Hagan & Palloni, 1988; Tittle, 1988), criminology's "great debate" involving divergent interpretations of the age-crime phenomenon was underway (Bernard, Snipes, & Gerould, 2010:306). Gottfredson and Hirschi (1988) fiercely challenged the career paradigm on a number of issues that focused primarily on 1) the usefulness of the model for the field of criminology, 2) the application of theoretically insignificant terminology, 3) the concern that scientific objectivity was threatened (i.e., that Panel researchers set out to obtain conclusions that corresponded with pre-established findings), that 4) the criminal justice policies implicated by the model were without empirical support, and as mentioned, the 5) lack of merit and justification for longitudinal methodology (Hagan & Palloni, 1988; Tittle, 1988).

A central contention of the age-crime debate concerned certain career paradigm conceptualizations, namely the distinction between prevalence and frequency. Because Gottfredson and Hirschi (1988) espoused the criminal propensity stance and argued that criminality was stable over the life course, they claimed that decomposing the distribution of crime into various parameters was unwarranted. They did not disagree that some individuals offend more than others, but rather, the variations in rates of offending were explained by offenders' positions on the age-crime curve (Gottfredson & Hirschi, 1988; Bernard et al., 2010). Those with higher inclinations to commit crime would continue to proceed through life with greater involvement in criminal behavior, while those with lower inclinations would remain less criminally involved. Thus, the decrease in offending during young adulthood, according to



Gottfredson and Hirschi (1988), was a result in all offenders decreasing their frequency in committing criminal acts as they age.

In contrast, Blumstein and colleagues (1988a; 1988b) strongly disagreed with this explanation of the aggregate age-crime curve and indicated that Gottfredson and Hirschi misunderstood the career paradigm concepts. They further contended that the distinction between prevalence and frequency was key to understanding the offending decline with the approach of early adulthood, and maintained that causal processes may explain changes in criminal behavior at different stages of life. In upholding their career criminal position, they indicated that the overall decrease in crime may very well be due to the termination of offending careers while lambda remained constant for chronic offenders following the offending peak (Piquero et al., 2003; 2007). To be more specific, Gottfredson and Hirschi stipulated that criminal propensity was similarly associated with all of the criminal career features, while Blumstein and colleagues proposed that this was not a requirement. Correlates such as unemployment and/or drug use, for example, may have differential influence on criminal career properties including initiation, persistence, and termination of offending (Blumstein et al., 1988a), and separate examination of each of these factors may elucidate potential directions for policy development.

Another major critique of the career paradigm included Gottfredson and Hirschi's (1986) antagonism towards the suggested policy of selective incapacitation. Claiming that the Panel ignored their findings on the age and crime relationship (Hirschi & Gottfredson, 1983), they reasserted their invariance perspective and argued that, because all offenders eventually desist, the policy was incorrect. With insufficient capability to accurately identify career criminals, the implication of this particular criminal justice system response would be both illogical and ill-timed (Piquero et al., 2003; 2007). According to Gottfredson and Hirschi (1986), by the time an



offender would be prospectively distinguished as a high-rate and habitual offender, he would already have passed the peak in his offending and would not be as criminally involved to the extent that he once was. To this criticism, Blumstein et al. (1988b) responded that Gottfredson and Hirschi unnecessarily overcomplicated the matter, and in so doing, communicated their preference for certain sentencing policies. They argued that this was an issue better left for policymakers to decide and not for scholars whose primary objective was to provide explanation (see also Tittle, 1988).

Criminology's great debate animated the field and presented an anomaly from which novel vocabulary, analytical techniques, and theoretical perspectives have emerged. The impact of the debate was evident as criminologists sought to then determine which of the two viewpoints, criminal propensity or criminal career, was ultimately correct (e.g., Brame, Bushway, & Paternoster, 1999; Paternoster et al., 1997). In following this line of reasoning and with academic funding allocated, a number of well-designed longitudinal projects [e.g., Causes and Correlates of Delinquency Program (Browning, Huizinga, Loeber, & Thornberry, 1999)], various formulations of developmental and life course perspectives (e.g., Farrington, 2005; Gottfredson & Hirschi, 1990; Patterson, DeBaryshe, & Ramsey, 1989; Sampson & Laub, 1993; Thornberry, 1987), and the means to empirically evaluate relationships longitudinally (e.g., Acock & Li, 1999; Nagin & Land, 1993; Raudenbush & Bryk, 2002) have collectively led to criminology's most recent and innovative theoretical tradition. In addition, the terminology introduced by the career paradigm has been adopted, refined (e.g., Benson, 2013; LeBlanc & Loeber, 1998), and relied upon to guide research and to serve as an organizing principle for conceptual frameworks. One such example may be reflected in the categorization of developmental and life course theories according to the offending patterns marked by continuity,



change, and continuity and/or change. A notable advancement of the criminal career tradition that represents both continuity and change is Sampson and Laub's (1993) life course theory on age-graded informal social control. It is to this perspective where the discussion now turns.



#### **CHAPTER THREE:**

# THEORETICAL FRAMEWORK: SAMPSON AND LAUB'S AGE-GRADED THEORY OF INFORMAL SOCIAL CONTROL

With the integration of arguments from both sides of the age-crime debate (Blumstein et al., 1986; Gottfredson & Hirschi, 1990), the application of a life course framework (Elder, 1985), and with social control theory as its foundation (e.g., Hirschi, 1969), Sampson and Laub (1993) formulated their age-graded theory of informal social control. First, as theorized by Gottfredson and Hirschi (1990), Sampson and Laub upheld the significance of families in the development of antisocial behavior and stability of such behavior over time; and in line with Blumstein and colleagues (1986), they recognized the usefulness of a longitudinal evaluation to explain antisocial behavior in childhood, delinquency during adolescence, and criminality in adulthood.

Secondly, fundamental to this perspective is social control theory with greater emphasis placed on *informal* bonds, or the interpersonal relationships (e.g., family, school, marriage) that establish reciprocal connectedness between individuals (Sampson & Laub, 1993:18). Last, to further understand the nature of continuity and change in maladaptive behaviors, Sampson and Laub implemented components central to the life course perspective. This includes *trajectories*, or pathways that specify a continuous, long-term behavioral pattern that may become redirected given certain events, or *transitions*, that occur at various points in life (Elder, 1985: 31-32). With a change in course set in motion, these short-term transitional moments may emerge as *turning points*, which alter life trajectories in ways that cannot be predetermined by individual childhood propensities (Elder, 1985:32; Sampson & Laub, 1993). In combination, these elements specify a



theoretical age-graded model that proposes stable, antisocial propensities developed earlier in life may change over time due to the influence of informal social bonds established during adulthood.

Interpretation of the age-crime curve can be explained through the theoretical lens of Sampson and Laub, which considers that the bonds established over the life course are inversely related with antisocial behavior. That is, the increasing prevalence of offending in the aggregate curve may be attributed to the strained relationships with parents during the turbulent teen years that results in a weakening of parent-child bonds. Contrary to the claims of Gottfredson and Hirschi that the aggregate downslope in offending is simply due to age, Sampson and Laub argue that the steep decreases observed during early adulthood signifies the important prosocial investments that accompany life transitions. Whether through marriage, employment, or military service, Sampson and Laub maintain that the strengthening of these bonds in adulthood redirects prior offending trajectories, in spite of individual differences in criminal propensity (Ezell & Cohen, 2005:34).

This chapter begins with an overview of the development of Sampson and Laub's (1993) age-graded theory of informal social control and moves into detailed discussions of its central themes and subsequent revision (Laub & Sampson, 2003). Empirical tests that have examined the propositions of both the original and revised work are then assessed. The chapter concludes with a critique of the age-graded theory (see Giordano et al., 2002), with a focus on the potentially limited generalizability of Sampson and Laub's theoretical assumption to racial and ethnic minorities.



## Formulation of the Age-Graded Theory

Sampson and Laub (1993) devised their life course perspective through reanalysis of the prospective longitudinal data initially collected by Sheldon and Eleanor Glueck beginning in 1939. The sample was comprised of 500 persistent male delinquents and 500 male non-delinquents that were matched case-by-case on age, ethnic origin, general intelligence, and their residence in lower-income neighborhoods of central Boston. Three waves of the original data were collected when the sample was approximately 14 years of age, at age 25, and then at age 32 (see Glueck & Glueck, 1968). Comparisons between the two groups were drawn from multiple domains that assessed family, school, and work histories, criminal career histories, and criminal justice interventions. Collection of such information was utilized in order to locate factors that attribute most to the development and continuation of delinquent behavior, and to estimate differences that distinguish delinquents from non-delinquents. The results of their original, longitudinal study were presented in their well-known and controversial text, *Unraveling Juvenile Delinquency* (Glueck & Glueck, 1950).

Following the discovery of the Gluecks' original case files in 1985, Sampson and Laub spent 6 years reconstructing the data for empirical analysis of their life course approach. An account of their data revival and the development of their age-graded theory of informal social control was published in their first volume *Crime in the Making: Pathways and Turning Points Through Life* (Sampson & Laub, 1993). With newly acquired information that captured experiences of the Glueck men followed to age 70, Laub and Sampson (2003) presented a revision to their earlier work in a second volume, *Shared Beginnings, Divergent Lives:*Delinquent Boys to Age 70.



As a life course outgrowth of social control theory, Sampson and Laub's (1993) dynamic perspective described in *Crime in the Making* is premised on the notion that antisocial conduct is likely to occur when an individual's bond to society has become attenuated or broken (Hirschi, 1969). For example, Hirschi (1969) theorized that youth who are bonded to their parents, are committed to conforming and socializing institutions like school or church, attribute their time outside of school to conventional activities, and believe that societal rules should be obeyed are less likely to be delinquent. Taking a Hobbesian point of view, Hirschi surmised that individuals are naturally hedonistic, and in the absence of ties to conventional society, are permitted to engage in deviant behavior.

Moving beyond Hirschi's static viewpoint, Sampson and Laub's age-graded theory attempts to explain the influence of informal bonds salient at any stage of the life course in reducing antisocial behavior, as represented by the attachment to parents in childhood, the connection to school in adolescence, and the partnership established in marriage during adulthood. Similar to Toby's (1957:16) "stake in conformity," the social bond is conceptualized as the attachment formed within relationships that prompts the control necessary to avoid involvement in antisocial behavior. As such, individuals with strong attachments to others and to social institutions risk greater loss by engaging in criminal activity. In addition to these fundamental propositions, Sampson and Laub's (1993) framework centers on three main themes:

1) social control processes within the family and school mediate structural background factors to explain delinquency in childhood; 2) antisocial conduct persists from childhood to adulthood in various areas of life; and lastly, 3) informal social capital in adulthood explains change in antisocial behavior despite prior individual differences in childhood propensities.



Sampson and Laub (1993) were critical of criminological explanations that considered either macro-level (e.g., social disorganization theory) or micro-level processes (e.g., social control theory) separately in accounting for delinquent behavior (see also Sampson & Laub, 1994). They reasoned that the family unit operates within the larger societal milieu, and as such, background characteristics that include poverty or residential mobility become important factors in explaining variations in delinquency. Thus, their age-graded theory unifies the structural background (e.g., family disruption, poverty, residential mobility) with family/school control mechanisms (e.g., attachment, discipline, supervision) to render a more comprehensive sociological explanation of delinquent behavior. The first theme of their theory incorporates these dual components, with the familial process aspect emphasizing informal social control and reflecting parental socialization practices regarding discipline, monitoring, and bonding.

Sampson and Laub (1993:65) characterized a parenting style with 1) inconsistent and/or severe disciplinary actions, 2) low supervision, 3) parental contempt/indifference directed towards the child, and 4) an absence of emotional connection between parents and their child as increasing the likelihood of delinquency. The structural aspect of this theme accounts for the role of the social environment and its influence on family functioning such that economic disadvantage or being raised in a broken home may complicate the capacity to parent effectively. Taken together, Sampson and Laub hypothesized that distal factors have an indirect relationship on delinquency, which operates through more proximal control processes within the family.

Much like the role of family in socialization, Sampson and Laub (1993) also assumed that attachment to school and academic achievement provide another means to inhibit delinquent behavior. Comparable to family socialization, they assessed the influence of structural background factors in combination with school control processes on delinquency. For instance,



Sampson and Laub predicted that having a disadvantaged upbringing as a result of poverty and/or an overcrowded home will weaken attachment to school, which will in turn, increase the likelihood of delinquency. More specifically, their findings indicated that father's deviant behavior had a direct association with delinquency, as well as indirect association with delinquency through diminished school-based attachment. They also found that delinquent peer attachment exerted a large direct effect on delinquency, but the magnitude of this relationship was not as substantial as attachment to school. Altogether, examination of the Glueck data generated findings that were consistently supportive of the first theme of Sampson and Laub's age-graded theory. This proposition indicated that structural variables were indirectly related to delinquency, as informal social control processes found within family and in school contexts operated as mediators of these relationships.

The second theme of Sampson and Laub's age-graded theory of informal social control (1993) maintains that there is considerable continuity in antisocial conduct from adolescence into adulthood and such behavior is manifested in various settings. Explanations that account for continuity in offending implicate either population heterogeneity or state dependence (Nagin & Paternoster, 1991). As a concept in line with Gottfredson and Hirschi's general theory of crime (1990), population heterogeneity argues that individual differences in the propensity to commit deviant or criminal acts, as indicated by varying degrees of self-control, are established early in life and persist over time. The alternative argument of state dependence proposes that persistence of antisocial behavior in adulthood is likely due to diminished life chances following involvement in criminal behavior (Nagin & Paternoster, 1991). While Sampson and Laub (1993) do not disagree with the population heterogeneity viewpoint in their explanation of behavioral stability, they argue that the continuation of early and later offending involves more than stable



between-individual differences. Employing both population heterogeneity and state dependence explanations, Sampson and Laub (1993:125) indicate that behavioral antecedents evinced in a variety of settings in childhood are strongly related to both problematic conduct in adulthood and to dimensions of adult social ties such as educational attainment, attachment to the labor force, and the strength of the marital bond.

To be more specific, childhood maladaptive behavior persists due to the impact of systematic, interactive processes whereby social bonds are continually broken over time in response to antisocial behavior. Maintenance of such behavior is achieved through poor social interactive processes conceptualized as interactional continuity, or through negative life chances referred to as cumulative continuity (Caspi et al., 1987:308-309). Interactional continuity is displayed in inflammatory, reciprocal exchanges that operate to weaken bonds. For example, a child with a difficult temperament and unruly behavior may trigger overly frustrated reactions from parents, care takers, and/or teachers. In a cyclical pattern, the negative responses from adults elicit further antisocial behavior from the child.

Cumulative continuity is demonstrated when opportunities for attachments to school or future employment fail to materialize as a result of circumstances related to antisocial behavior (e.g., arrest, conviction, jail time). As the disadvantages accumulate, disentangling from criminal behavior becomes increasingly difficult, which then prompts a cycle of continued offending.

Sampson and Laub (1997:144) deem this interactive process as "cumulative disadvantage," and argue that such circumstances are particularly problematic among the urban poor. Once involved in criminal behavior and faced with an already limited opportunity structure, obstacles to the development of conventional bonds become insurmountable. Possibilities for change are further eroded among those living in disadvantaged, lower-class contexts.



The third theme, and most distinguishing facet of Sampson and Laub's age-graded perspective (1993), maintains that regardless of stable childhood propensities, the formation of informal social bonding and social capital in adulthood modifies trajectories such that deviant/criminal behavior are reduced. This theoretical component emphasizes a well-known criminological paradox claiming that while antisocial behavior in adulthood is generally preceded by delinquency in youth, most delinquents do not persist in offending behavior as they age (Robins, 1978). Rather than depict dynamic conceptualizations of continuity and change as incompatible elements, Sampson and Laub integrate both into their life course framework. In so doing, they account for the onset of delinquency in childhood given the impact of structural and socializing processes, the continuity of behavior that persists from childhood to adolescence, and finally, the movement away from criminal behavior in adulthood. Sampson and Laub propose that key life events/institutions, when combined with positive social influence, function as turning points to redirect offending trajectories (Elder, 1985:32; Sampson & Laub, 1993).

Such transitional events include marriage (attachment to spouse), employment (job stability), commitment (an indicator that represents a combination of work, education, and economic ambition), and military service (Sampson & Laub, 1993:143-144; see also Sampson & Laub, 1996), but the mere presence of these transitions do not fully facilitate the change process. Sampson and Laub observed that social bonds in addition to the social capital that is manifested in interdependent relationships evoke the change process.

Social capital is obtained through quality partnerships of mutual commitment and trust that would potentially result in the severance of such relationships should an offender reactivate prior propensities (e.g., Coleman, 1988). For example, the strength of informal social bonds as found in cohesive marriages and in stable, rewarding employment provide the appropriate



restraints against criminal actions that would serve to undermine the relationship. In contrast, individuals that lack the strong attachments developed within interconnected relationships are not constrained, but are free to deviate regardless of whether or not they were delinquent in adolescence (Sampson & Laub, 1993). In sum, as a developmental elaboration of social control theory, Sampson and Laub's age-graded perspective underscores the relevance of informal social controls at different stages of the life course and accounts for both continuity and change in offending.

#### **Revision of the Age-Graded Theory**

Although Sampson and Laub advanced a prominent explanation of antisocial behavior across the life course in the first articulation of their age-graded theory, critics drew attention to a number of questions that remained unanswered (e.g., Moffitt, 2006; Modell, 1994). Clarification of these particular issues in addition to a modification and extension of the original theory was the focus of their second book, *Shared Beginnings, Divergent Lives* (Laub & Sampson, 2003). Three primary issues that were addressed in the revision included a critique of taxonomic theoretical perspectives, an elucidation of the mechanisms underlying turning points, and an emphasis on the role of human agency in the desistance process (see also Sampson & Laub, 2003; 2005a).

A final follow up with the Glueck subjects, at roughly age 70, permitted continued examination of the course of offending over the full life span. Using a person-centered approach, quantitative and qualitative findings derived from criminal and death records (state and federal sources), and with life-history narratives from 52 of the men, Laub and Sampson (2003) concluded that an enriched understanding of the development into and out of crime requires observations that cover the entirety of the life course. Emergent insights from the updated



Gluecks' data, which comprise a fifty-year observation period, have led Sampson and Laub (2005a; Laub & Sampson, 2003) to reject theories based on offender typologies, and to recognize the confluence of various facets, such as human agency or personal choice, influences within the situational context, and routine activities in explaining why offenders persist in or desist from antisocial behavior (Laub & Sampson, 2003:9).

Unlike developmental models, the main objective of Laub and Sampson's (2003:37) revision was to reflect general underlying social processes that account for both continuity and change within the same theoretical framework. Through examination of the criminal activities and the lived experiences of the Glueck men followed into older adulthood, study findings cast doubt on the propositions put forward by the developmental criminology paradigm, with criticism most pointedly directed toward Moffitt's dual taxonomy (1993).

With theoretical categorizations of continuity *or* change, Moffitt distinguishes two offender typologies. With reference to continuity, life course persistent (LCP) offenders exhibit stable patterns of offending over the life span. In contrast, adolescent-limited (AL) offenders demonstrate eventual change in criminality, as their antisocial behavior is restricted to the adolescent years. Each group has a differing set of causal influences and follow separate pathways of offending over time. A short overview of the taxonomy is provided next, and based on the additional findings from the expanded Glueck data, details of the first major issue raised by Laub and Sampson (2003) regarding group-based trajectories and the prediction of persistent offenders are then discussed.

Moffit's group-based typological approach observes two qualitatively distinct offender groups that, when combined during the teenage years, characterize the peak in the age-crime curve. The first group includes a smaller subset of LCP offenders that display persistence in their



criminal behavior due to a high-risk home environment in combination with neuropsychological deficiencies prior to birth. Such vulnerabilities give rise to a stable and difficult disposition in children and adolescents that elicit negative interactions with others. These interactional difficulties lead to continued offending into adulthood.

On the other hand, the second and larger group is comprised of AL offenders who engage in normative antisocial behavior, but are vastly different from LCPs in their pattern and cause of offending. Participation in delinquent behavior begins and ends during the teen years. AL offenders mimic the antisocial styles of their LCP counterparts and seek to prematurely enjoy adult privileges (e.g., shoplifting, underage smoking/drinking, promiscuous sex), or what Moffitt (1993:687) has conceptualized as the "maturity gap." Behavioral change for most ALs comes with the approach of adulthood due to the shrinking strain of the maturity gap and the adaptive social skills that come with a conventional upbringing. Therefore, according to Moffitt, one set of causal factors account for early onset of antisocial behavior and continuity in offending, while another set of causal factors account for both onset and discontinuity of antisocial behavior during adolescence (see Moffitt, 1993).

Because the Glueck data extended nearly the full length of the life course, Laub and Sampson were motivated to investigate further within-individual change and to estimate the course of offending patterns from childhood into old age. Clarification of the invariance of the age-crime relationship and determination of when, if ever, desistance from crime occurs were among the main objectives of their subsequent study (Laub & Sampson, 2003:85). Their analyses included estimation of multiple trajectory analyses, examination of long-term offending patterns across age, and testing certain taxonomic theoretical assumptions, specifically the claim of a life-course persistent offender group. In addition, important findings presented by Laub and



Sampson (2003) addressed long-held arguments proposed by the age-crime invariance hypothesis (Hirschi & Gottfredson, 1983) and the criminal career paradigm (Blumstein et al., 1986).

Analysis of the total offenses of the Glueck men from ages 7 to 70 revealed the typical patterning of the aggregate age-crime curve as noted by an increase and peak during the adolescent years, a sharp decline in early adulthood, continued decreases throughout midadulthood, with rates falling toward zero by the fifties (Laub & Sampson, 2003:86). Although unexpected, the replication of this particular relationship among serious offenders upheld conclusions previously drawn concerning the aggregate age-crime curve (Hirschi & Gottfredson, 1983). However, through use of semi-parametric mixed Poisson modeling for total offending and for disaggregated offenses (violent, property, and drug/alcohol crimes), variation was found in age-crime trajectories with differences in the peak age of offending and rates of desistance depending on the offense type (Laub & Sampson, 2003:104). The data also revealed six groups of offending trajectories when total offenses were considered, and when offense types were examined separately, five groups of offending trajectories were evinced.

Such evidence is important on two fronts. First, these findings are supportive of the central claim held by the criminal career paradigm (Blumstein et al., 1986) indicating that criminal patterning at the aggregate level does not necessarily match those of offenders at the individual level. Second, findings from these various analyses are in direct contrast to arguments proposed by Moffitt's dual taxonomy. Laub and Sampson (2003:104) elucidated multiple groups of offender trajectories beyond the LCP and AL categories, and each group eventually desisted during mid- to later adulthood, including a small group of individuals characterized by late onset, high-rate, and chronic offending. Further analyses assessed the ability to prospectively predict



life course trajectories distinguished by childhood and adolescent risk factors as implied by Moffitt (e.g., low IQ, aggressive behavior, and early onset of misconduct), but identification of a life course persistent group based on problematic risk factors was not achieved (see Laub & Sampson, 2003 Chapter 5).

According to Laub and Sampson, the conclusions generated from trajectory analyses challenge Moffitt's views regarding the existence of a life course persistent offender group. Their findings indicated the inevitability of desistance by all offenders, even among those most seriously involved. Further, they were unable to prospectively identify a distinctive persistent offending trajectory based on childhood risks. In sum, Laub and Sampson (2003) concluded that desistance is not predetermined by a unique set of causal factors as advanced by Moffitt's developmental theory, but maintain instead, the certainty of desistance among all offenders and that general factors contribute to such processes.

Life-history narratives of the Glueck men in combination with official data enabled greater understanding of the mechanisms fundamental to the process of desistance, which prompted Laub and Sampson to modify their age-graded theory of informal social control. The second major issue undertaken in *Shared Beginnings* focused on further specification of turning points, and clarified the conditions in which change is likely to occur. While the primary conceptualization of structural turning points was maintained, of which marriage/spouses, military, reform school, employment, and residential change were identified, the revised theory implicated five general processes associated with desistance. Such processes involve: 1) a "knifing off" of the past from the present; 2) opportunities for the development of new relationships that offer social support, growth, and new social networks; 3) more direct and indirect supervision and monitoring of behavior; 4) structured routines that center more on



family life and less on unstructured time with peers; and 5) situations that provide an opportunity for identity transformation and allow for the emergence of a new self or script (Laub & Sampson, 2003:148-149; Sampson & Laub, 2005a:34).

In turning away from crime, Laub and Sampson contend that such opportunities are not attributed to self-selection (e.g., Gottfredson & Hirschi, 1990), but are due to chance circumstances involving general processes that includes personal choice, the influence of social controls, and prosocial routine activities. Over time, desistance occurs "by default" as investments in social bonds grow and as daily routines (e.g., going to work) limit the types of situations that facilitate antisocial behavior (Laub & Sampson, 2003:278-279). With such commitments established, the Glueck men eventually desisted, but without the conscious realization of having done so. Placement into such conventional roles also leads to an identity transformation whereby deviant former selves fall away and are replaced with a more responsible and family-oriented man.

The role of human agency in the change process is perhaps the most challenging aspect of the revised theory, and it may also be the most controversial (Laub & Sampson, 2003:280-282). The final major issue that Laub and Sampson addressed in the revision relates to the utility of agency in desistance from crime or the idea that individuals take an active part in writing their own stories. In this regard, offenders voluntarily refrain from continued participation in antisocial conduct. Likewise, agency and willful action are central to understanding the continuation of offending behavior. When criminal opportunities emerge, offenders do not simply follow deterministic social processes, but express agency in their decision to persist in criminal behavior. The collection of such situations, choices, and intentional actions throughout the life course ultimately shape trajectories that generally reflect either conformity or criminality.



Laub and Sampson further contend that a comprehensive explanation of continuity and discontinuity in offending should take into consideration the reciprocal forces of structure and agency. Following this logic, development becomes a series of interactions between humans and their environment (Sampson & Laub, 2005a). As opportunities for change (or criminal activity) randomly arise within our own social spheres, the choices we make are constrained by our circumstances (Hitlin & Elder, 2007). When life events emerge, our decisions serve to either maintain criminal involvement, or if control from social bonds are triggered, they may give individuals pause to consider the potential loss of significant relationships. For example, agency and choice may manifest inside of a good job if a person decides to take money out of the till, undermines his supervisor's authority by not following directions, disrespects his co-workers by failing to show up for work on time, or decides to quit his job without notice. Alternatively, the same person may decide to invest in his job which may involve valuing the opportunity for employment, attempting to do his best, and resisting the inclination to quit when the work becomes difficult. Over time, the mutual investments and trust established with his boss and coworkers may inspire him to continue working diligently, while the former times involved in selling drugs become even more and more a part of the distant past.

With an emphasis on human agency in the revised theory, Laub and Sampson point to its apparent omission in the study of crime across the life course. Its importance may be overshadowed amid powerful social structures such as economic stratification or racism in criminological theorizing. With the assumption that individuals behave in accord with their personal "will," Laub and Sampson assert that desistance from and persistence in offending are more than simply the end products of influential social structures. The offender and his motivation to act once again become the central features of criminological theory. This focus,



however, has raised some concerns and questions that require clarification. For example, with an emphasis on human agency and motivation, the revised theory conflicts with social control theory that assumes a Hobbesian perspective which takes for granted the motivation to offend. In response, Laub and colleagues (2006) argue that the age-graded revision applies a more flexible variant of control theory, as their evidence suggests that human nature can be reshaped over the life course. Moreover, Sampson and Laub (2005a) concede that the mechanism of human agency in the desistance process was not explicitly defined in *Shared Beginnings*. Because a clear conceptualization is lacking and due to the random nature of situation and choice, human agency may be a difficult, if not impossible, social phenomenon to measure (Bottoms, 2006; Laub, 2006).

### **Empirical Assessment of the Age-Graded Theory**

As a preeminent life course explanation that implicates both continuity and change in antisocial behavior, the general age-graded theory of informal social control offers a basis for continued research given the number of testable hypotheses (Laub, Sampson, & Sweeten, 2006). Empirical evaluation of the scientific merit of Sampson and Laub's theoretical propositions have been advanced, most notably, through their examination of the Glueck data. Subsequent tests have focused primarily on the three themes of the original theory, with particular interest on the role of turning points in the desistance process. On balance, evidence is in support of the original life course perspective and its revision (Laub et al., 2006; Laub, Rowan, & Sampson, in press). An overview of the empirical status of the age-graded theory is provided next and is organized around four sections that reflect the broader concepts of the perspective: 1) structural and familial processes, 2) population heterogeneity and state dependence, 3) continuity and change, and 4) routine activities and human agency. While the findings below are not exhaustive,



prominent tests of the arguments proposed by Sampson and Laub (1993; Laub and Sampson, 2003) are discussed.

#### **Structural and Familial Processes**

While a substantial literature places a great deal of importance on the proximal role of family factors in explaining delinquency (see Loeber & Stouthamer-Loeber, 1986), Sampson and Laub (1993) suggest that theoretical models fail to integrate the structural/background context in accounting for such behavior. In the first theme of their perspective, structural and familial processes are linked in a two-step hypothesis. Sampson and Laub (1993:65) proposed that the impact of social structural factors on delinquency operates indirectly through informal social controls within the family.

Support for this proposition was upheld through examination of the Glueck data, which revealed consistent findings of the indirect impact of household crowding (led to increases in delinquency) and large family size (led to decreases in delinquency), operating through family level variables that reflect parenting social controls (Sampson & Laub, 1993:93). This theoretical prediction is further substantiated with additional evidence that found, for example, an indirect effect of SES on delinquency among 7<sup>th</sup> grade males, which was entirely intervened by parental management skill variables (Larzelere & Patterson, 1990).

Similar findings were provided by Wadsworth (2000) who examined the National Survey of Families and Households (NSFH) data. Results indicated that parental employment status impacted delinquent behavior through familial and school controls (e.g., attachment to parents, parental supervision, and commitment to school). In short, empirical evidence is supportive of the first theme of Sampson and Laub's age-graded model that broadens the theoretical point of view with a unification of structural background with processes occurring "under the roof"



(Sampson, 1992:77) to explain antisocial conduct during childhood and adolescence (see also Conger et al., 1992; Sampson & Laub, 1994).

### **Population Heterogeneity and State Dependence**

Replication of stable patterns of offending over time underscores an empirical reality which specifies that the developmental course of deviance in childhood is predictive of problematic outcomes in adulthood. Early findings have documented the longitudinal consistency of behavior in classic studies (e.g., Robins, 1966; 1978) and comprehensive reviews (e.g., Loeber, 1982; Olweus, 1979) that trace manifestations of antisocial conduct at various stages of the life course. In the second theme of their age-graded framework, Sampson and Laub predict persistent patterns of antisocial conduct from childhood to adulthood. Through examination of restored data from the Glueck men, Sampson and Laub reiterate previous conclusions and find robust patterns of behavioral stability across age. Specifically, Sampson and Laub (1993:129) found that arrests across two timeframes during adulthood (between ages 17 and 25, and between ages 25 and 32) were 3 to 4 times more likely among delinquent youth in their sample as compared to non-delinquent youth.

Based on these repeated findings, scholars are in general agreement regarding the persistence of antisocial conduct, but viewpoints diverge with regards to the underlying forces to explain such stable patterns. Some maintain that differences in offending behavior are reflective of the population heterogeneity perspective (e.g., Gottfredson & Hirschi, 1990; Moffitt, 1993); however, Sampson and Laub account for both population heterogeneity and state dependence in their age-graded theory. Supportive evidence for both mechanisms can be found, for example, in the work of Wright, Caspi, Moffitt, and Silva (1999) in their examination of individuals from the Dunedin Multidisciplinary Health and Development Study (Silva & Stanton, 1996). Results



indicated support for the population heterogeneity argument given the significant relationship of low levels of self-control in childhood to weakened social bonds and later offending in adulthood. Support was also provided for the state dependence explanation due to the impact of social bonds and adolescent delinquency in significantly predicting subsequent criminal behavior. In accounting for the dual role of both processes over time, outcomes indicated that childhood self-control and its association to crime was partially mediated by social bonding. The effects of social bonds remained significant predictors of adult offending even after controlling for prior levels of self-control, although the effects attenuated to some degree.

While some frameworks encourage a parsimonious perspective with exclusive focus on population heterogeneity (e.g., Gottfredson & Hirschi, 1990), such explanations for criminal behavior may be limited. Rather, inclusion of both population heterogeneity and state dependence within the same theoretical model may provide a fuller accounting of sustained antisocial conduct over time (see also e.g., Evans, Cullen, Burton, Dunaway, & Benson, 1997; Simons, Stewart, Gordon, Conger, & Elder, 2002).

### **Continuity and Change**

Although persistence in offending may appear to be at odds, conceptually, with the process of desistance, or the movement away from criminal behavior, Sampson and Laub present continuity alongside change within their theoretical framework. Beyond the stability of criminal propensity across individuals, thus, is the significance of the dynamic processes that occur within an individual over time. In essence, the third theme of their age-graded theory stipulates that structural transitions, or the salient bonds developed during adulthood, such as marriage, employment, or military service, function as turning points that change the direction of prior offending trajectories (Elder, 1985). Formation of these institutional bonds engender the social



capital necessary to modify an individual's pathway from criminal to conforming (Coleman, 1988). Conversely, the dissolution of these social ties at various points throughout the life course, may alter the course of offending trajectories from law-abiding to law-breaking. Using various analytical techniques, Sampson and Laub examined the criminal careers of the delinquent and non-delinquent Glueck samples and their relationship to three key independent measures (job stability, commitment, and attachment to spouse), controlling for deviant childhood propensities. Their results indicated that in spite of patterns of continuity over time, variations in adult offending are explained by robust indicators of social bonds such as job stability and marital attachment.

Attention to turning points and their impact on criminal behavior has yielded abundant empirical evidence in support of this theoretical proposition, especially with respect to the role of marriage. For example, among the first rigorous examinations is Horney and colleagues' (1995) examination of the impact of informal bonds on short-term inter-individual variations in criminal behavior among incarcerated felons. Using hierarchical linear modeling techniques, findings demonstrated that living with a wife was negatively related to offending behavior (i.e., assault). Similarly, Laub and colleagues (1998:234) using trajectory analysis [semi-parametric Poisson mixture modeling (SPMM)] found evidence in support of the strength of social ties, specifically observing that cohesive marriages, when compared to marriages that were "not-good," lowered offending rates and continued to exert a powerful influence on offending over time.

However, in seeking to examine *how* marriage may impact the desistance process, Warr (1998) analyzed data from waves 5 and 6 of the NYS data and identified that the transition into marriage led to decreases in offending behavior due to a reduction in the amount of time spent with deviant peers. In conflict with Sampson and Laub's theoretical contention that attributes



marital bonds to desistance, Warr alternatively drew from social learning/differential association theories (e.g., Akers, 1985; Sutherland, 1947) in accounting for the role of marriage on the desistance process.

In another examination of life course transitions, Uggen (2000) evaluated the impact of employment on self-reported recidivism with data from a randomized controlled design, the National Supported Work Demonstration Project between 1975 and 1977. With groups randomly assigned to either treatment, which involved supportive employment in construction or service field, or control conditions, Uggen (2000) was able to control for issues related to self-selection bias. The results from event history analyses indicated that employment served as an important age-graded turning point for offenders, as employment opportunities reduced recidivism among older offenders (those over age 26), while such opportunities did not yield a similar outcome among younger offenders (individuals younger than age 26). Importantly, Uggen (2000) was able to establish the nature of the relationship between employment and crime. He found that employment, as a turning point, was not a spurious correlate of variations in offending, but instead exerted a causal influence toward reductions in recidivism for certain subgroups of offenders (see also Uggen & Staff, 2001).

In an alternate analysis, Sampson and Laub (1996) estimated the impact of military service as a turning point from a delinquent background using the *Unraveling Juvenile*Delinquency data (Glueck & Glueck, 1950) and supplementary military records from the State Adjutant General. Controlling for various background characteristics (e.g., prior deviance, family SES, problem behavior in the military), their results substantiated the impact of military service as a meaningful turning point in the transition to adulthood, most notably from duty overseas.



More recently, Bouffard and Laub (2004) investigated the effects of military service on offending through examination of four sets of longitudinal data<sup>2</sup> and hypothesized that adult outcomes related to active duty were twofold. First, delinquents serving in the military would be less likely to have an adult police record than those who did not serve. Secondly, serving in the military would hasten the desistance process, or in other words, those who were on active duty would be younger at the last noted police contact, as compared to delinquents who did not serve in the military. The pattern of results suggested that military service likely influenced the process of desistance, but may be most beneficial for individuals seriously involved in delinquent behavior.

#### **Routine Activities and Human Agency**

With the aim of refining the theoretical process of desistance, Laub and Sampson (2003) argued in *Shared Beginnings* that an emphasis solely on structural turning points, without consideration of subjective elements, was insufficient. Drawing from the life history narratives of the Glueck men, they further unraveled the nuances of the desistance process by connecting the means by which structural turning points operate with influential factors, namely routine activities and human agency. As such, the modification of the age-graded theory clarifies that heterogeneity in offending patterns are impacted by the presence or absence of social controls, changes in routine activities, and the exercise of personal choice. Whether married, employed, or serving in the military, Laub and Sampson recognized that the prosocial routine activities associated with these turning points restricts the types of circumstances that induce criminal

<sup>&</sup>lt;sup>2</sup> These data sets include the 1942 and 1949 birth cohorts from the *Juvenile Delinquency and Adult Crime* study [Racine, Wisconsin; (Shannon, 1994)], the 1945 birth cohort from the *Delinquency in a Birth Cohort* study [Philadelphia, Pennsylvania; (Wolfgang, Thornberry, & Figlio, 1987)], and a final cohort from the National Longitudinal Survey of Youth (NLSY) that includes a cross-sectional sample and a subsample of military service personnel on active duty (see Cohen, Warner, & Segal, 1995).



behavior. In comparison, individuals leading uncontrolled lives marked by unstructured routines have fewer stakes in conformity (Toby, 1957), and as a result, are more inclined to encounter opportunities for deviance. Support for this particular assumption is consistent with findings in the literature.

In their longitudinal examination of routine activities and their relationship to various forms of antisocial conduct, Osgood and colleagues (1996) utilized five waves of Monitoring the Future (MTF) data and found strong support for the argument that situational inducements to deviant behaviors are most likely to occur during unstructured socialization with peers, without the careful monitoring of responsible authority figures. Much like Hirschi's (1969:22) reference to the expression "idle hands are the devil's workshop," social circumstances with peers that are lacking in structure and supervision give rise to opportunities for criminal behavior and substance use (Osgood et al., 1996).

On the other hand, turning points reorganize routine activities in such a way that exposure to deviant peer attachments is reduced while habits related to a more conventional lifestyle are increased (Laub & Sampson, 2003). Such is the case with the evidence provided by Wright and Cullen (2004) in their examination of waves 5 and 6 of the NYS, which implicated stable employment as an important turning point that led to reductions in misconduct among young adult respondents. In line with the reordering of routine activities as hypothesized by Laub and Sampson, results suggested that employment alone does not enact the desistance process; rather, discontinuity in offending is facilitated by changes within the situational context. That is, for this particular study, modifications in peer relations account for the effect of employment on desistance.



Wright and Cullen found that employment and having contact with prosocial co-workers who were disapproving of illegal behavior strongly predicted the dissolution of preexisting deviant peer associations and a decrease in criminal activity and drug use. Similar conclusions were identified by Warr (1998) who identified significant negative relationships between marital status and deviant outcomes that included vandalism, marijuana use, and petty theft in his examination of the same data (NYS) and time frames (waves 5 and 6). According to Warr, the primary explanation for the role of marriage in offending reduction involves disruptions to peer associations, both deviant and conforming, which hinders the potential for criminal activity.

Given the above evidence indicates that turning points operate largely through their effect on friendship networks, they have been presented as a challenge to Sampson and Laub's assumptions based on the social control framework. Both Wright and Cullen (2004) and Warr (1998) argue that the nature of such underlying processes are more consistent with differential association/social learning mechanisms than with social control. While differential association/social learning are emphasized in these studies, the findings should not be viewed as incompatible with bonding processes. Modifications in peer associations may be directly related to the ties established with a marriage partner or with co-workers, or they may reflect the external control exerted by such significant others in curtailing opportunities for deviance (Skardhamar, Savolainen, Aase, & Lyngstad, 2015).

In addition to turning points and routine activities, another underlying social mechanism implicated by Laub and Sampson (2003) that impacts the desistance process includes human agency, a complex concept which has become a central feature of their age-graded theoretical claims. With counterpoints directed toward overly deterministic (e.g., Moffitt, 1993) and structuralist (e.g., Wilson, 1987) perspectives, Laub and Sampson (2003:280-282) adopted a



"situated choice" approach in their explanation of behavioral continuation and change. In so doing, their agency-oriented viewpoint recognizes the dynamic interaction between structural constraints and personal choice embedded in criminal pathways. Similarly agentic, but with greater attention placed on the termination of offending, the theory of cognitive transformation (Giordano et al., 2002) provides themes congruent with those advanced by the age-graded theory of informal social control.

The development of the theory of cognitive transformation involved examination of the life-history narratives drawn from a sample of formerly institutionalized female and male delinquents followed into their adulthood. Giordano and colleagues formulated a multifaceted interpretation of human agency reflective of the principles of symbolic interactionism. Their explanation of sustained behavioral change follows a series of distinct stages that entails 1) a receptivity towards desistance, 2) engagement in opportunities that facilitate desistance, 3) eventual formation and adoption of a more conventional identity, and 4) with patterned prosocial behavior, results in a culmination of cognitive shifts that frame continued misconduct as inconsistent with a transformed lifestyle.

Although the nature of the desistance process explicated by the theory of cognitive transformation differs from the age-graded theory, there is considerable conceptual overlap. As person-based perspectives, both emphasize the importance of social bonds, human agency, and the on-going dialectic process between the human agent and social structure in the movement away from crime. First, similar to structural turning points, "hooks for change" as revealed by Giordano and colleagues (2002:992) include the social institutions of marriage, parenthood, and employment. Much like social bonds, "hooks" function as catalysts in the movement towards desistance, but must involve prior cognitive work in order for the offender to fully appreciate



opportunities that may foster change. Secondly, an integral component of both perspectives is the role of personal agency, but interpretation of this construct differs between the two theories. For example, Giordano and colleagues suggest that an awareness of and desire for change is necessary in order to prompt the transformative process, whereas Laub and Sampson alternatively assert that a deliberate and conscious choice is not required to desist from crime.

Instead, for Laub and Sampson, agency is context-specific and offenders are the architects in the construction of their own lives while deciding whether to intentionally resist or take part in emergent criminal opportunities. This line of reasoning implicates some degree of randomness in the desistance process, which points to concerns raised by Laub and Sampson (2003) regarding predetermined development (e.g., Moffitt, 1993). Therefore, as compared to the theory of cognitive transformation, Laub and Sampson's theoretical accounting of the role of human agency in the desistance process is far less explicit, and as a result, testable hypotheses with reference to agency have been largely undefined (Bottoms, 2006; Sampson & Laub, 2005a).

A final thematic similarity of both theoretical models relates to their reliance upon the relationship of structure and agency to explain desistance from crime. The notion of "situated choice," as conceptualized by Laub and Sampson, refers to an offender's agentic moves within structural turning points, and in turn, how such turning points may impact subsequent offending or desistance. Alternatively, although Giordano and colleagues uphold the structure-agency connection, behavioral change is more readily associated with shifts in identity and thought processes rather than on structural change.

In summary, since the publication of its first articulation and subsequent elaboration, the age-graded theory of informal social control has received considerable attention and has been subject to several empirical assessments. In light of the findings discussed above, this



perspective has, on the whole, been buttressed by several sources yielding evidence consistent with the assertions proposed by Sampson and Laub [1993; Laub & Sampson, 2003 (for additional reviews see Laub et al., 2006; Laub et al. in press)]. While examinations have generally concentrated on the central themes of the first formulation of the life course perspective (e.g., the indirect effect of structural context on antisocial behavior through social bonds, stability in antisocial behavior across the life course, and change in offending due to the influence of structural turning points), the objective and subjective factors (e.g., turning points, routine activities, and human agency) hypothesized to influence the desistance process, as discussed in the expanded theory (Laub & Sampson, 2003), have received increased evaluation more recently.

In spite of its high regard and contribution to the growth of the life-course tradition, the age-graded theory is not without criticism. As discussed above, while some of its more prominent themes were echoed in the theory of cognitive transformation, the perspective was originally formulated as a critique of Sampson and Laub's work. When juxtaposed, the theory of cognitive transformation not only highlights the mechanisms underlying the process of desistance more clearly than the age-graded theory, but also points to concerns related to its generality and its potentially limited reach in reflecting the desistance processes for all offenders.

In situating their theory alongside the work of Sampson and Laub, Giordano and colleagues raised the issue of generalizability and assessed whether the propositions specified by the age-graded theory would be upheld in a more contemporary and diverse sample. Among the criticisms emphasized, Giordano et al. directed attention toward the lack of representativeness in the Glueck sample and the salience of informal social controls given the changed social context since the Glueck men era. Because of stark disparities in lived experiences, family structure, and



accessibility to economic opportunities between racial and ethnic groups, the conclusions utilized to inform the age-graded theory of informal social control may not extend to minority offenders. Such differences in dynamic life events may be reflected in distinctive offending trajectories. Similarly, the influence of turning points asserted by the age-graded theory (e.g., cohesive marriage, military service, and gainful employment) may not apply evenly across race and ethnicity in a contemporary context. Inequalities across various structural domains suggest that alternative prosocial controls, specifically the institution of religion, as introduced by Giordano and colleagues in their theory of cognitive transformation (2002; see also 2008), may hold greater importance for certain offenders in the transition away from crime. Additionally, with most research attention drawn to desistance patterns among serious offenders, testing the age-graded theoretical assumptions with a contemporary, representative sample of youth may provide clarification on the impact of adult social bonds among respondents with broad differences in their antisocial behavior.

Consideration of the role of religion and its impact on offending cessation is covered more extensively in Chapter 4, while the remaining sections of this chapter include a discussion of Sampson and Laub's approach to racial and ethnic differences in offending over the life course, an overview of the empirical studies that examine the extent to which the age-graded theory applies to minority offenders, brief remarks relating to variation in offending levels, and in closing, a final statement that summarizes Sampson and Laub's age-graded theory discussed herein.

#### Race and Ethnicity in the Age-Graded Theory

Laub and Sampson (2003:283) and others (see Paternoster et al., 1997) reference the theoretical generality of their age-graded approach, and argue that the underlying continuity and



change processes involving social bonds are assumed to be the same for all offenders, irrespective of demographic categorizations, situational circumstances, or historical context. Sampson and Laub (1993:255) specifically state that "the causes of crime across the life course are not rooted in race...but rather in structural disadvantage, weakened informal social bonds to family, school, and work, and the disruption of social relations between individuals and institutions that provide social capital." They further suggest that the Glueck sample is similarly situated and comparable to the contemporary "underclass," (Sampson & Laub, 1993:254-255; see also Jencks, 1992) and present their age-graded theory in a "deracialized" manner. Support for the invariance of social bonding across diverse subgroups indicates that robust predictors of socialization processes may be racially and ethnically neutral. For example, in their examination of the association of family structure, social processes, and economic strain on delinquent behaviors, Leiber, Mack, and Featherstone (2009) found that the effect of maternal attachment was equally important in predicting delinquency among White, Hispanic, and Black youth.

However, critics maintain that Sampson and Laub's narrow viewpoint depicts a "distorted perception of the reality of crime and the role of race" considering that their explanation of desistance is based solely on the experiences of an "all-White" sample (Tracy & Kempf-Leonard, 1996:62-63). Without further theoretical specificity, critics of the general age-graded theory insist that Sampson and Laub underappreciate the importance of race/ethnicity in the life course. Notably absent from their explanation is the accounting of unique lived experiences, such as discrimination, barriers to social capital, and a racialized worldview that impinge upon the lives of minorities (Gabbidon, 2015; Unnever & Gabbidon, 2011). Furthermore, in generalizing the experiences of the Glueck men to those in the contemporary underclass, Black and Hispanic/Latino offenders are no longer understood on their own terms but



through their White counterparts. As such, the deracialized approach taken by Sampson and Laub may be discounting the resources and opportunities that are unevenly distributed by race and ethnicity, which may in turn, serve to elongate the course of offending and impede the process of desistance.

In contrast, within the dual taxonomy framework, Moffitt (1994:38-39) acknowledges the overrepresentation of Blacks in criminal offending and contextualizes the nature of this problem in her explanation. While cognizant of important racial differences, she does not extend her theorizing to account for ethnic differences in criminal behavior. In short, Moffitt suggests that higher levels of offending among Blacks than Whites is likely due to their overrepresentation in both life course persistent and adolescent limited classifications. Because of the pronounced racial and economic segregation of Blacks in the US, there are persistent racial disparities in access to fundamental needs such as adequate health care, proper nutrition, and quality education. According to Moffitt, as a result of generations born into racially impoverished circumstances, Blacks experience greater interaction with others on a life course persistent pathway. Additionally, with limited opportunities for employment, Blacks also spend more time caught in the maturity gap which increases the likelihood for engaging in delinquent behavior and becoming ensuared in the consequences that follow. Examinations of Moffitt's race-based arguments are few, but findings generally indicate support for the applicability of these assertions across race (e.g., Bellair et al., 2014; Haynie, Weiss, & Piquero, 2008; Piquero, Moffitt, Lawton, 2005).

Taking into consideration the differences in structural conditions by race and ethnicity may improve our understanding of the factors that direct individuals into and away from crime over the life course. Evidence has consistently documented the disproportionate representation of



minority men as compared to Whites among those incarcerated in the United States (Pettit, 2012; Sakala, 2014; Western, 2006), and who are representative of the most disadvantaged in fundamental sources of social standing including education and employment (Pettit, 2012; see also Travis, Western, & Redburn, 2014).

For example, relative to White prisoners in 2010, Blacks comprise 40% of those incarcerated, but constitute only 13% of the U.S. population while Hispanic/Latinos account for 19% of those incarcerated, yet account for only 16% of the total U.S. population (Sakala, 2014). Noted racial and ethnic disparities are also demonstrated at various levels of the criminal justice system as rates of corrections supervision (e.g., probation, parole) for Blacks offenders have been estimated to be 4 times greater than those for Whites, and Hispanic/Latinos were 1.4 times greater relative to Whites (Hartney & Vuong, 2009:28).

Disparate representation in corrections has arisen as a result of major shifts in punitive legislation, such as "get tough" sentencing policies (e.g., mandatory minimum sentences, "threestrikes" laws, "truth-in-sentencing" laws) and large-scale campaigns such as the War on Drugs (Travis et al., 2014). Over the past 40 years, the highly charged political climate on punishment has profoundly diminished the opportunity structure for segments of the population already impacted by long-standing social and economic inequalities. Thus, to the extent that historical forces contextualize the life course, so has the era of mass imprisonment upon the lives of disadvantaged Black and Hispanic/Latino men, their communities, families, and subsequent generations (Western, 2006; Travis et al., 2014).

In light of systematic discrimination, social inequalities, the racial and ethnic biases of crime control in the United States, and the overrepresentation of Black and Hispanic/Latino men in the criminal justice system, it would appear that race and ethnicity should hold greater



significance in theoretical approaches to offending. However, racial and ethnic differences are, in large part, unaccounted for in prevailing life course explanations. General in its scope, the age-graded theory of informal social control maintains that causal mechanisms of continuity in and change from offending are universal processes.

Empirical assessment of the validity of life course propositions have been conducted with greater frequency in recent years and include examinations using samples with greater representation across gender (e.g., Bersani, Laub, Nieuwbeerta, 2009; Craig & Foster, 2013; Doherty & Ensminger, 2013; Giordano et al., 2002; King, Massoglia, & MacMillan, 2007), or race (e.g., Craig & Connell, 2013; Piquero et al., 2002), across multiple historical periods (e.g., Bersani et al., 2009; Bouffard, 2014), in international contexts (e.g., Bersani et al., 2009; Bersani & van Schellen, 2014; Lyngstad & Skardhamar, 2013; Savolainen, 2009; Skardhamar & Savolainen, 2014), across neighborhood contexts (e.g., Doherty & Bersani, 2016), and among immigrant children (e.g., Bersani & DiPietro, 2016; Bersani, Loughran, & Piquero, 2014). However, many of these tests either focus exclusively on White participants (e.g., European samples), examine only racial differences using White and Black samples, or if Hispanic/Latino individuals are included in the sample, little attention is paid to the potential similarities and dissimilarities of the effects of social bonds across racial/ethnic subgroups.

It is important to note that much of what is known regarding the effects of age-graded turning points have been drawn primarily from white subjects, with assessments of minority differences confined to Black-White comparisons. Although Hispanics/Latinos currently comprise the largest ethnic minority group in the United States (17.6%), and their growth is projected to constitute nearly a third (28.6%) of the total population by 2060 (U.S. Census Bureau, 2014), by comparison, their patterns of offending across various stages of the life course



are much less understood (e.g., Jennings et al., 2010; 2013; Maldonado-Molina et al., 2009; 2010).

Few tests of the age-graded theory include diverse samples comprised of White, Black, and Hispanic/Latino respondents that specifically aim to identify differences in desistance across race/ethnicity (e.g., Bersani & DiPietro, 2014; Craig, 2015; Nielsen, 1999; Schoenberger, 2016). These studies include marriage, parenthood, school, and/or employment as turning points hypothesized to trigger reductions in various types of antisocial behaviors. In light of their collective findings, the empirical question regarding the general applicability of the life course theory across racial and ethnic groups remains unsettled. This nascent body of work provides mixed evidence, with some (e.g., Craig, 2015; Piquero et al., 2002) suggesting that a theoretical reformulation may be warranted.

Overall, the studies detailed below yield evidence that favored the assumptions of the age-graded theory given that participation in various adult transitions led to decreases in offending and/or antisocial behavior. However, the cumulative results provided mixed support for the generalizability of the age-graded theoretical propositions across racial and ethnic subgroups, with some indicating greater benefits of social bonds among minorities as opposed to Whites (e.g., Bersani & DiPietro, 2014), and others suggesting the limited reach of Sampson and Laub's assumptions, which may better reflect the desistance processes of White individuals over minorities (e.g., Craig, 2015; Nielsen, 1999; Schoenberger, 2016).

An early assessment of the age-graded theory among racial/ethnic groups was conducted by Nielsen (1999) who examined whether differential participation in adult institutions (marriage, parenthood, employment, and educational attainment) would explain known differences in rates of drunkenness among Whites, Blacks, and Hispanics. In line with the



theoretical underpinnings of the general theory of crime (Gottfredson & Hirschi, 1990), prior evidence has indicated that with increasing age, White individuals tend to "age out" of heavy and frequent alcohol use. The opposite tends to occur among Black individuals, as a positive association has been noted between age and drunkenness in this population. While previous findings indicate decreased drunkenness with age among Hispanics, levels continue to remain relatively high as compared to Whites.

Nielsen argued that such age-related differences in alcohol consumption could be explained by differential opportunities to take part in adult institutions, and utilized the age-graded social control framework (Sampson & Laub, 1993) to support this notion. With examination of cross-sectional data from the 1991 National Household Survey on Drug Abuse (NHSDA), Nielsen found that the attachments developed as a result of being employed and being in school are associated with decreases in drunkenness when compared to an absence of these attachments (i.e., being unemployed, not in school), which lends support to the age-graded theory. However, once racial/ethnic differences in social bonds were controlled, they did not explain racial/ethnic differences in patterns of alcohol use. This finding has been reiterated in subsequent research that compared changes in local life circumstances and arrest rates among Whites and non-Whites. While marriage was related to reductions in non-violent arrests across race, such changes did not diminish the established association between minorities and violent arrests (see Piquero et al., 2002).

Additionally, Nielsen found that social institutions did not operate similarly among Whites, Blacks, and Hispanics, as the effect of marriage was important in explaining desistance in alcohol use among Whites, less so for Hispanics, and not at all for Black individuals.

According to Nielsen, these findings together provide only partial support for Sampson and



Laub's theoretical claims, as those individuals bonded to social institutions demonstrated decreased rates of drunkenness, yet these types of social institutions did not hold equal importance across racial/ethnic groups. Nielsen explained that the results obtained may reflect that the institution of marriage holds less salience or embodies a different meaning for minorities as compared to Whites. Although these findings provided some initial insight regarding the generalizability of the age-graded theory, the interpretation of results require some degree of caution as Nielsen utilized a cross-section of data, and in so doing, was not able to control for time-stable criminal propensities and did not assess within individual change.

Similar conclusions were drawn in a more recent investigation of the influence of adulthood transitions on criminal desistance among Whites, Blacks, and Hispanics. In like vein with Nielsen (1999), Schoenberger (2016) assessed the generalizability of the age-graded theory by focusing on the differential opportunity structure associated with race/ethnicity that, in turn, facilitates or limits the desistance process. Because of fewer opportunities for marriage and employment among minorities, Schoenberger reasoned that these turning points would operate differently across subgroups of individuals, with minorities at increased risk of continued criminal behavior. Strength and stability of attachments, which may be evinced in quality marriages as opposed to cohabitation, and steady employment of 5 years or longer as opposed to simply being employed, were also assessed in this investigation. In light of declines in marriageability and societal factors related to employment discrimination, Schoenberger hypothesized that minorities would be less likely to benefit from such social institutions as compared to their White counterparts.

Examination of four waves of the National Longitudinal Study on Adolescent to Adult Health (Add Health) found in overall favor of Sampson and Laub's propositions in the combined



sample, and revealed that long-term employment and marital unions were related to decreased odds in criminal involvement, while the lack of such bonds (e.g., cohabitation, being fired/laid off) were related to increased odds of offending. Contrary to Sampson and Laub, stepwise inclusion of the explanatory bonding variables did not eliminate the relationship between race and adult criminality. When the sample was disaggregated by race/ethnicity, Schoenberger found that effectiveness of bonds varied across subgroups. For example, employment duration of 5 or more years was the only significant predictor of decreased odds in offending among Black men, while being in a cohabitating relationship was the only significant predictor of increased odds in offending among Hispanic men. The bonds that specify the more "traditional family man" such as a high-quality marriage, children, currently employed, and higher levels of education were related to decreases in the odds of criminal behavior among White men.

In keeping with the findings elucidated by Nielsen, Schoenberger determined that the study generated only partial support for the age-graded theory given that study findings suggested that social bonds, in general, led to decreases in offending. However, the relationships between race and crime were not eliminated once social bonds were controlled. In disaggregating the sample by race/ethnicity, Schoenberger identified certain bonds that were race- and ethnic-specific in promoting desistance from crime. Of particular importance, Schoenberger noted that the argument regarding selection effects can be raised in this study, as time-ordering of the relationship between marriage and crime, prior individual criminal propensities, and underlying cultural or contextual factors that may be related to the desistance process were not taken into account.

Whereas Schoenberger found the effects of marriage to be more prominent among White men, Bersani and DiPietro (2014) found evidence that opposed this conclusion. In their



examination of the general applicability of Sampson and Laub's age-graded theory, Bersani and DiPietro first questioned whether the impact of marriage on desistance would extend to minorities, and secondly, explored whether the protective effect of marriage would operate similarly across racial and ethnic groups. Relying on arguments similar to Nielsen and Schoenberger, such as disparate structural conditions (e.g., economic opportunities) and distinctive cultural dimensions (e.g., familialism, patriarchy) to explain differences in marriage rates, Bersani and DiPietro rationalized that these same forces likely result in racial/ethnic differences in the effect of marriage on desistance. Across the subgroups they examined, Bersani and DiPietro hypothesized that the marriage effect would be strongest among Hispanics, followed by Whites, with the weakest effect manifested among Black men.

Utilizing 13 waves of the NLSY97 data, results indicated that the effects of marriage generated differing arrest and offending patterns across groups. In support of the age-graded theory, results indicated that marriage reduced the odds of arrest and offending, regardless of race/ethnicity. However, marriage did not operate evenly across groups as higher percentages of decreased odds in arrest were found among Black (29%) and Hispanic (39%) men, as compared to White (10%) men, and higher percentages of decreased odds in offending were found among Black (56%) and Hispanic (50%) men, as compared to White (31%) men.

According to Bersani and DiPietro, these results imply that, although Black men may be impartial towards the prospect of matrimony, they may benefit the most from being married. Importantly, unlike the other examinations discussed, Bersani and DiPietro assessed the time-order of changes in arrests as they relate to the transition into marriage. A time-varying marriage covariate was later entered into each model, and findings revealed that a significant effect remained for White men, but the relationship diminished to non-significance for minority men.



This may be indicative of possible selection effects or differing underlying causal mechanisms, situational or enduring, that operate differently in the desistance process depending upon race/ethnicity (see also Bersani & Doherty, 2013).

The final assessment of the generalizability of Sampson and Laub's age-graded theory across race/ethnicity was recently conducted by Craig (2015) through longitudinal examination of the role of marriage and parenthood on criminal desistance. Although the transition to parenthood was not identified as a central turning point by the Glueck men, it may hold greater importance for desistance among contemporary samples, especially female offenders. Similar to the varying rates of marriage across racial/ethnic groups, parenthood prevalence in the U.S. has also been shown to vary across race/ethnicity, which requires evaluation of this potential turning point using a diverse sample.

Like Schoenberger, Craig utilized 4 waves of the nationally representative AddHealth data to further evaluate the influence of parenthood as a turning point and to assess the generalizability of Sampson and Laub's assumptions across race/ethnicity. In partial support of the age-graded theory, results indicated the relevance of family in the desistance process, given that marriage and children led to decreased offending behavior as compared to those who were not married and those who were not parents. As in the previous studies discussed, these results did not apply equally across race/ethnicity. For example, Craig found that the protective effects of marriage applied to Whites and Hispanics, but not to Blacks. Similarly, the transition into parenthood was found to influence desistance among Whites, but the benefit did not extend to Hispanics or Blacks.

As stated above, this collection of work provides mixed support for the universality of bonds in the desistance process, as the social institution of marriage, in particular, has been



shown to influence a decrease in offending behavior overall, but the benefits of marriage do not exert equal relevance across racial/ethnic subgroups and/or certain bonds may be race- and ethnic-specific in facilitating the desistance process.

With the goal of further assessing generalizability, each study above utilized diverse, nationally representative samples. With key characteristics reflected in the data, results from these examinations ensured greater external validity of age-graded desistance processes that are applicable to all offenders, and not just those who are seriously involved in antisocial conduct.

#### **Attention to Offending Variation in the Age-Graded Theory**

In addition to the lack of minority representation in the Gluecks' (1950) original Boston boys, Tracy and Kempf-Leonard (1996:61) argued that the use of purposive rather than probability sampling further contributed to the generalizability problems of the age-graded theory. Even though Sampson and Laub (1993:26) acknowledged that random selection procedures were not used to obtain the samples, they contended that the matching strategy employed by the Gluecks of the non-delinquent boys to their delinquent counterparts was successfully implemented. As a result, they asserted that the samples were likely representative of the chronically-involved, official delinquent as well as the non-delinquent populations of Boston youth during this time period.

While some have indicated that the non-delinquent controls "did *not* represent a particularly law-abiding group," (Long & Vaillant, 1984:345), Sampson and Laub (1993:26) intimated that involvement in adolescent antisocial behavior was normative in this sample.

Interestingly, although the developmental classifications of adolescent-limited and life-course persistent offenders were not advocated by Sampson and Laub, characteristics of these offender types were likely apparent among the Boston youth (see Nagin, Farrington, & Moffitt, 1995).



The control group, therefore, engaged in levels of antisocial conduct that may be representative of typical of adolescent behavior. More specifically, Sampson and Laub (1993:179) referenced these subjects as "late onset" offenders given their lack of an official label and the absence of behavioral problems in childhood.

Sampson and Laub's (1993, see Chapter 8) comparison of the desistance patterns of the control group to the delinquents revealed important similarities. For example, OLS models indicated that job stability in young adulthood (ages 17-25) was important in decreasing criminal involvement at later stages (ages 25-32) for all men. Further analysis examined men who had ever been married, with similar turning point effects revealed across the control and delinquent groups. More specifically, job stability and marital attachment in young adulthood significantly predicted decreased involvement in later deviance as compared to men without such ties.

Sampson and Laub broadened their assessment to mid adulthood (ages 32-45) using a combined measure of both social bonds across the delinquent and control groups. Their conclusions supported and extended the earlier findings, as turning points established in young adulthood and at older ages continued to significantly inhibit deviant conduct with increasing age.

It is important to note that in order to explicitly examine change from persistent offending, several criminal career perspectives have focused on serious delinquents (e.g., Blumstein et al., 1986; Giordano et al., 2002; Laub & Sampson, 2003; Sampson & Laub, 1993) with little exploration among those with broad differences in offending. With one exception (e.g., Moffitt, 1993), there is relatively little theoretical development on the change processes of young adults that typify the majority of low-level offenders. In general, most adolescent offenders do not demonstrate childhood behavioral problems and do not exhibit extensive



criminal careers, but the social factors that redirect criminal patterning is less understood within this group.

Thus, in drawing comparative models of the delinquent and non-delinquent samples,

Sampson and Laub raised important considerations concerning external validity and variation in

criminal involvement. In light of their conclusions with the non-delinquent sample, Sampson and

Laub enhance the generalizability of the age-graded theory. Regardless of the broad individual

differences in early problems between the two groups, changes in adult social bonds operated

similarly given reductions in deviance for all men. Their theoretical arguments of social bonding

in adulthood applies not only to the few chronic and serious offenders, but also to the other

Glueck subjects with normative levels of criminal involvement in the transition from adolescence

into adulthood.

Despite understanding the greater applicability of Sampson and Laub's turning point thesis, some critics insist that the Gluecks' samples do not adequately capture the variations that exist in populations of offenders, especially with respect to demographic characteristics (Giordano et al., 2002; Tracy & Kempf-Leonard, 1996). On this account, further evaluation of the age-graded universal assumptions across race, ethnicity, and with attention to various offending levels would likely contribute to the current knowledge base regarding offending desistance.

#### **Summary of the Age-Graded Theory**

In closing, this chapter provided an in-depth discussion of a prominent life-course perspective, the age-graded theory of informal social control, which was introduced in Sampson and Laub's (1993) first articulation, *Crime in the Making: Pathways and Turning Points*Through Life, with a subsequent revision published a decade later in *Shared Beginnings*,



Divergent Lives: Delinquent Boys to Age 70 (Laub & Sampson, 2003). Building upon work originally derived from the Unraveling Juvenile Delinquency study (Glueck & Glueck, 1950; 1968), Sampson and Laub formulated their age-graded approach with components acquired from life-course (Elder, 1985), social control (Hirschi, 1969), and self-control theories (Gottfredson & Hirschi, 1990) in order to longitudinally examine social and structural factors associated with dimensions of an offending career, such as continuity and change over the life course (Blumstein et al., 1986).

In *Crime in the Making*, Sampson and Laub implicated social bonds to explain antisocial behavior in childhood, delinquency in adolescence, and offending in adulthood. Central to this perspective is the notion that delinquency and crime result when an individual's bond to society has been weakened. In childhood, disadvantaged structural conditions influence stable patterns of delinquent behavior indirectly through harsh and rejecting parenting. Conventional turning points, or key agents of change established in adulthood may redirect offending trajectories in spite of stable childhood differences in criminal propensity.

Laub and Sampson later clarified the general processes involved in criminal desistance in *Shared Beginnings*, which includes dynamic processes whereby social controls, routine activities, and human agency merge. Empirical support for the validity of the assumptions proposed by the age-graded theory are supplied by numerous examinations (Laub et al., 2006; Laub et al., in press; see also Ezell & Cohen, 2005), with growing attention directed toward the objective and subjective factors involved in the desistance process.

An important challenge to the age-graded theory includes the generalizability of the approach to explain continuation and termination from criminal behavior among minorities and among individuals that differ widely in their levels of offending. The theoretical propositions of



the age-graded theory have been devised from the experiences of the Glueck men—an all-White sample that faced the Great Depression in childhood and came of age during World War II.

Given the ill effects of racial/ethnic discrimination and disparate access to principal sources of social capital, critics assert that Sampson and Laub failed to consider the unique experiences of minorities in their social control framework (Gabbidon, 2015; Giordano et al., 2002; Tracy & Kempf-Leonard, 1996). Evaluations of the general applicability of the age-graded theory across racial and ethnic subgroups have flourished in recent years, but findings have produced equivocal support.

Similarly, critics points to additional obstacles in generalizing findings from the age-graded theory to the larger population given Sampson and Laub's use of non-probability samples (Tracy & Kempf-Leonard, 1996:61). With this lack of representation in the data, the degree to which social bonding is involved in processes of desistance remains in question. Rigorous testing of the age-graded assumptions therefore requires a longitudinal, population-based adolescent sample where racial and ethnic demographics and variations in offending levels are represented.

Additionally, while the bulk of desistance literature has typically referenced life events in adulthood such as marriage, military, and employment, a critical oversight is consideration of alternative means to turn away from crime. A potential domain of social control such as religiosity/spirituality has been granted far less attention, although it may be intuitive that this particular social institution serves to increase the likelihood of desistance from antisocial behaviors. Much like the traditional turning points, a religious orientation may similarly function to activate the desistance process by strengthening social control, inculcating prosocial conduct, and lessening antisocial opportunities. Because religious activities and the church occupy a more central position in the lives of minorities (e.g., Ellison & Sherkat, 1999; Frazier, 1963; Lincoln &



Mayima, 1990; Pew Research Center, 2014; 2015), religiosity/spirituality may operate as a more pronounced transition in the desistance process for Black offenders in particular. The relationship between religion and crime and its influence on desistance is discussed in greater depth in the following chapter.



#### **CHAPTER FOUR:**

# RELIGION, CRIME, AND THE SALIENCE OF RELIGION AS A TURNING POINT

As a purported agent of socialization, religion is a familiar correlate within the static interpretation of the social control tradition. In spite of the accumulated literature on religion and its relation to delinquency/crime in the last five decades, the topic has generally failed to capture the research imagination of criminologists, and has led some to designate religion as the "forgotten factor" (Johnson & Jang, 2010:121). Introduction of the religious influence on criminal desistance is generally connected to respondents' self-history narratives revealed in the work of Giordano and colleagues (2002; 2008). Such accounting was suggestive of the notion that with increased religious involvement, offenders may be more inclined to turn away from antisocial behavior. As an identified catalyst for cognitive transformation (Giordano et al., 2002), religious involvement may additionally operate as a resource for emotional coping (Schroeder & Frana, 2009), and may promote reinvention of self through "being born again" or "saved" (Maruna, Wilson, & Curran, 2006:164). However, the omission of religion in dynamic theoretical models and in the desistance literature leaves a critical gap in understanding the range of benefits that religious involvement may offer in reducing crime.

A thorough discussion of the role of religion in the desistance process forms the basis of this chapter, but a historical review of religion and its impact on controlling deviant behavior is first considered. Following an evaluation of the literature that explores religion as a turning point, a discussion of religiosity/spirituality across racial and ethnic groups is then provided. The



impact of religion among diverse subjects with differing degrees of antisocial conduct is also briefly considered. The chapter closes with an overall summary of the work reviewed and highlights limitations in the existing literature.

### **Historical Review of Religion and Crime**

Modern conceptions of religiosity/spirituality and their connection to crime are traced to the classical school. For example, in his general theory of crime, Bentham (1789/1907) understood religion as a primary sanctioning system with a powerful constraining effect on human tendencies (Gottfredson & Hirschi, 1990:7). With a similar recognition of the influential force underlying religion, Durkheim (1912/1995) believed this institution to be a fundamental component of society and culture.

Religious involvement and its influence on behavior entered more contemporary criminological theorizing in view of its compatibility with the tenets of Hirschi's (1969) social control theory. Although it was not originally specified in the development of the theoretical model, the religious bond can be assumed to restrict our naturally hedonistic nature with participation in conforming activities that facilitate religious ties including prayer, worship, and fellowship. In addition, the extent to which an individual is connected to socializing institutions such as the family and school, the strong investments made to the institution of religion are hypothesized to constrain wayward behavior through attachment, commitment, involvement, and belief (see Akers, 2010; Baier & Wright, 2001). For example, in contrast to those lacking a religious bond, youth who are tied to their religious community, devoted to following biblical instruction, who are regularly involved in church-related activities, and believe in the moral order are more likely to forgo sinful temptations that undermine their religious faith. Conversely,



should their religious bonds become broken or weakened, then uncommitted youth have greater freedom to deviate, and an increased risk of engaging in delinquent behavior.

Examination of the religious effect on delinquency had been conducted previously, but revitalizing the empirical assessment of this relationship is most notably linked to Hirschi and Stark's (1969) controversial study of the "hellfire hypothesis." The inverse relationship between religiosity and crime was largely based on common-sense assumptions that religion operates to implement social control through reinforcement of conformity to the conventional, moral order (e.g., Stark, Kent, & Doyle, 1982). More simply, the hellfire hypothesis suggests that as religiosity increases, involvement in delinquent behavior decreases.

Contrary to expectations, however, the conclusions drawn by Hirschi and Stark among high-school students from Richmond, California, indicated that religious adherence to a belief system of supernatural sanctions had very little to do with delinquency. In other words, youth that claimed a religious belief system of punishments involving, for example, eternal damnation were not any less likely to commit deviant acts than youth who did not hold such beliefs.

Confounded by these results, academics were subsequently motivated to examine religiosity further in the many years that followed (e.g., Albrecht, Chadwick, & Alcorn, 1977; Burkett, 1977; 1980; Burkett & White, 1974; Higgins & Albrecht, 1977; Jensen & Erikson, 1979; Stark et al., 1982; Tittle & Welch, 1983). Greater exploration of the various conditions that likely impacted the association between religion and delinquency ensued. Among the earlier studies, divergent findings only contributed to the long-standing debate, and left unresolved the fundamental question of whether religiosity inhibits participation in delinquent activity (Johnson & Jang, 2010; Sloane & Potvin, 1986).



# "Different Types" Arguments<sup>3</sup>

In response to the hellfire findings, social science scholars contemplated the reasons for Hirschi and Stark's null findings. The inability to discern a significant relationship revealed two streams of empirical approaches and corresponding hypotheses, which guided subsequent research objectives towards examination of "different types" (e.g., types of deviance, types of religious denominations, types of communities) or examinations related to the "spuriousness" of religion and deviant behavior association (Cochran & Akers, 1989; Evans, Cullen, Dunaway, & Burton, 1995; Jang, 2013a). Findings drawn from investigations that explore religion and crime relating to "different types" of conditions and the "spuriousness" of the relationship are discussed in more detail below.

Types of deviance. The first replication of the hellfire study (Burkett & White, 1974) examined religiosity and its impact on different types of antisocial behaviors in addition to the serious delinquent acts that Hirschi and Stark observed in the original analysis (e.g., theft, vandalism, and assault). The rationale for drawing a distinction in antisocial behaviors relates to the degree of condemnation from secular and religious institutions. For example, personal and property offenses receive wide disapproval from various societal agencies, so an inhibitory impact from religiosity may be unnecessary or less influential. In bringing attention to the "antiascetic hypothesis," Burkett and White reasoned that the effects of religiosity would likely be more evident among behaviors that violate an ascetic standard, such as premarital sex, underage drinking, and smoking marijuana. Secular proscription directed against these types of behaviors

<sup>&</sup>lt;sup>3</sup> Numerous arguments that specify the conditions under which religiosity is theorized to impact delinquency are discussed in this chapter, including various "types" of factors (e.g., types of religious affiliations, types of communities) as well as factors that may mediate that relationship (e.g., level of arousal, peers). Although attention to these perspectives are raised, the current study does not evaluate the influence of these differing perspectives or control for them in analyses.



are not as clear, but are strongly prohibited when gauging wrongdoing from a religious viewpoint (Middleton & Putney, 1962; see also Cochran, 1988).

Burkett and White's replication generated important similarities and differences from the initial hellfire study. First, in keeping with Hirschi and Stark, results corroborated that religious participation was only weakly related to delinquency. Secondly, in support of their anti-ascetic perspective and in contrast to the hellfire study, Burkett and White also found strong, negative associations between religious participation and behavior in violation of an ascetic standard such as alcohol and marijuana use. To better convey the nature of this relationship, they noted that "religious participation is, it would appear, more closely related to some kinds of delinquent behavior than to others" (Burkett & White, 1974:459). As the evidence accumulated, a general consensus developed regarding the linkage between religiosity and ascetic offenses, specifically juvenile drinking and drug use (e.g., Albrecht et al., 1977; Burkett, 1977; Burkett, 1980; Burkett & Warren, 1987; Rohrbaugh & Jessor, 1975). However, later studies failed to find unequivocal support for the anti-ascetic hypothesis that emphasizes a greater religious influence on alcohol and/or drug use (e.g., Benda, 1995), while others maintained that the impact of religion extends to other types of delinquent behavior (Evans et al., 1995).

Types of religious denominations. Building upon the above investigations, Albrecht and colleagues (1977) examined religious effects on additional types of ascetic deviance such as smoking cigarettes, drug and alcohol use, and engaging in premarital sex. Going a step further, they assessed these anticipated relationships among adolescent members of the Church of the Latter Day Saints (Mormons). Given that the Mormon faith forbids participation in such conduct, Albrecht and colleagues noted a marked prohibiting impact on the behaviors they examined with this group.



Following this line of thinking gives rise to the "norms qualities hypothesis" which suggests that a religious impact on deviance varies depending on the denomination (Cochran & Akers, 1989; Nelsen & Rooney, 1982; see also Krohn, Akers, Radosevich, & Lanza-Kaduce, 1982). Religious affiliations impose differing behavioral and attitudinal norms for their congregants, which may in turn shape behavior. For example, the degree of conservative values promoted in certain fundamentalist religious affiliations may contribute to parishioners' levels of religious involvement and rule compliance. In churches that take a more conservative stance, it would be expected that religiosity has a stronger inhibitive influence on deviance (Albrecht et al., 1977; Nelsen & Rooney, 1982).

In another early examination of this "different types" condition, Jensen and Erikson (1979) examined interactions of religious denominations and various types of deviant behaviors among Mormon, Catholic, and Protestant subjects. Their findings demonstrated negative associations with substance use most apparent among Mormon youth as compared to youth affiliated with other types of religions. Further evidence of religious norming is found in Nelsen and Rooney's (1982) study of substance use among high school seniors from six Northeastern states. Their results indicated that certain norms related to church attendance and religious affiliation predicted drug use. Specifically, Nelsen and Rooney found that marijuana use and use of harder drugs varied according to church attendance. They maintained that religious faiths generally disapprove of these behaviors so variation in the percentages of reported drug use was due to differing degrees of exposure to moral teachings (see also Cochran & Akers, 1989).

Overall, investigations of the "norms qualities hypothesis" generated mixed findings, with some denoting that religious affiliation was important in predicting behavioral compliance (e.g., Bock, Cochran, & Beeghley, 1987; Cochran, Beeghley, & Bock, 1988; Nelsen & Rooney,



1982). Some specified otherwise, and suggested that religious affiliation has minimal impact on participation in antisocial conduct (e.g., Cochran & Akers, 1989, Evans et al., 1995).

Types of communities. In addition to locating the types of deviant behaviors and denominations for which religion exerts a protective effect, the moral makeup of the community, which may be characterized as more religious or secular, has also been examined to explain the puzzling hellfire results. Higgins and Albrecht (1977) were the first scholars to consider the role of community context and surmised that Hirschi and Stark's contradictory findings were not generalizable to alternate regions of the United States. They argued that the null findings obtained by Hirschi and Stark were due to sampling in Richmond, California, which was depicted as predominantly nonreligious. Alternately, the significant relationship detected by Higgins and Albrecht between church attendance and delinquency was likely due their sampling in the more socially conservative, religious locality of Atlanta, Georgia.

According to Stark and colleagues (1982; 1996), location matters and it would be expected that religion has a greater impact on delinquency in areas with a greater religious orientation. Stark (1996:164), proposed that "religion is empowered to produce conformity to the norms only as it is sustained through interaction and is accepted by the majority as a valid basis for action," which is fundamental to his "moral communities hypothesis."

As anticipated, in their study of a national sample of teen boys, Stark and colleagues (1982) found that areas composed of residents bound to a religious order, had higher rates of church attendance, and indicated greater relevance of religion in their lives manifested strong inverse associations to delinquency. Alternatively, in more "secular communities" located on the West Coast where religion had diminished significance, the relationship to delinquency had very little to no effect. With this explanation, Stark and colleagues provided a basis for understanding



the inconsistent conclusions reached regarding religion and its effect on delinquency among some of the earlier replications of the hellfire study.

There are some, however, who have found results incompatible with those of Stark and colleagues, which led to the development of an alternate hypothesis (Tittle & Welch, 1983). Finding that a religious impact on deviant behaviors was greatest within nonreligious contexts and where moral norms were absent or unclear, Tittle and Welch (1983:674) designated this particular condition as "secular social disorganization theory." Thus, in communities that were lacking clear behavioral norms, were not socially integrated, and were in need of role models to demonstrate conforming behavior, it was proposed that religion served as a final means to instill conformity with the law.

## "Spuriousness" Arguments

Subsequent to Hirschi and Stark's hellfire study, tests of the various conditions under which religiosity was hypothesized to exert a constraining effect on delinquency, whether through differing types of deviance, religious denominations, and/or community contexts, have supplied evidence supportive of this inverse association (e.g., Cochran & Akers, 1989; Sloane & Potvin, 1986; Tittle & Welch, 1983). Based on the repetitive evidence, scholars have concluded that an empirical generalization on the matter had been reached (Cochran & Akers, 1989). Moving beyond this line of inquiry, succeeding questions were raised regarding the means by which the link between religion and crime might be fully explained. Such inquiries led to the proposal of the "spuriousness hypothesis."

Alternative explanations suggested the possibility that Hirschi and Stark's hellfire conclusion of a null religion-delinquency relationship may indeed be correct (Burkett & Warren, 1987). From this perspective, religiosity and deviance are not causally related, but the association



is either coincidental or due to the presence of a third factor. Potential factors that may influence the relationship between religion and deviance include suboptimal arousal (Ellis, 1987; Ellis & Thompson, 1989), social control (Elifson, Petersen, & Hadaway, 1983; Cochran, Wood, & Arneklev, 1994), and peer associations (Burkett & Warren, 1987; Elifson et al., 1983).

Controlling for these particular indicators in analyses may reveal that the inverse relationship between religiosity and deviant behavior is likely spurious (Cochran et al., 1994; see also Benda, 1995).

According to arousal theory (Ellis, 1987; Ellis & Thompson, 1989), individuals who are biologically predisposed toward seeking higher levels of arousal may find participation in routine religious activities aversive due to boredom susceptibility. They may instead be prone toward actively pursuing more intense sources of stimulation such as substance use. Thus, the effect of religion on deviant behavior is conditioned by variation in degrees of stimulus-seeking as a result of neurological deficiencies (Ellis & Thompson, 1989).

A second potential explanation suggests that the spurious relationship between religion and deviance may be attributed to more proximate means of social control like peers or family (Burkett & Warren, 1987; Cochran et al., 1994; Elifson et al., 1983; Johnson, Jang, Larson, & Li, 2001). Because religion may be an influential socializing institution amid other forces that shape moral values, its direct influence may be reduced to nonsignificance once additional social controls are taken into account. According to Elifson and associates (1983), religion decreases adolescent involvement in delinquency, but the reason for this apparent relationship was due to moral values instilled by parents and/or peers. Similarly, Burkett and Warren (1987) found in their study of 264 youth in high school that the impact of religion on marijuana use is largely a function of the kinds of peers selected.



With attention to both factors, Cochran and colleagues (1994) assessed the effect of religious participation and religious salience on a range of deviant behaviors while controlling for measures of neurological arousal and social control. Using a sample comprised of high-school students located in Oklahoma, their results indicated that the purported effects of religiosity on deviance were indeed spurious, as the relationship attenuated to nonsignificance once these measures were incorporated into the statistical model. However, true to previous findings regarding ascetic offenses, a strong relationship between religiosity-delinquency remained for alcohol and tobacco use, which indicated a pronounced inhibitory effect of religion on these types of behaviors. Interestingly, Cochran and colleagues also concluded that the influence of social controls were more important than religiosity, as significant negative associations were found among all forms of delinquent activity under study.

As the various approaches above indicate, scholars have long sought to better understand the nature of the religion-deviance nexus. Due to disparate findings among the replications of the hellfire study early on, confirmation of religious practices and beliefs in decreasing criminal involvement remained in question for many years. However, based on cumulative evidence, clear patterns emerged that prompted scholars to declare that the inverse relationship between religiosity and delinquency was an empirical generalization (Cochran & Akers, 1989). This argument is maintained owing to the preponderance of conclusions drawn from recently conducted systematic reviews and meta-analyses. As noted briefly below, the literature continues to support the hypothesis that greater religiosity is predictive of less participation in criminal and delinquent activity.



#### Overall Evaluation of the Religion-Delinquency Relationship

The most recent and comprehensive systematic review of the religion and crime/delinquency literature consisted of 270 examinations published between 1944 and 2010 (Johnson & Jang, 2010). Results indicated that a majority of these examinations (90%, 244/270 studies) found a beneficial, negative effect of religion on criminal/delinquent acts, with far fewer studies finding either no effect or results with mixed evidence (9%, 24/270 studies), and only 2 out of 270 studies (less than 1%) that demonstrated a positive association or deleterious impact of religion on some measure of deviance.

A more rigorous meta-analysis was conducted recently which assessed 62 publications from 1967 until 2015, and comprised an examination of 145 total effect sizes (Kelly, Polanin, Jang, & Johnson, 2015). Analyses were conducted separately for behavioral and attitudinal measures of religiosity and across alcohol use, drug use, and delinquency among adolescent participants. Much like the findings revealed by systematic reviews of the literature, data indicated significant, negative mean effects in each of the 6 religiosity/deviance conditions which indicated overall that as religiosity increases, deviant behavior decreases. The smallest effect size was observed for alcohol use and religious attitudes (r = -.16), while the largest effect was noted for drug use and church attendance (r = -.22) among adolescents. Collectively, the findings from both systematic reviews and meta-analyses are consistent in documenting that greater religious involvement protects individuals from engagement in deviant behavior.

<sup>&</sup>lt;sup>4</sup> For additional systematic reviews of the religion-deviance literature, see Johnson, Li, Larson, and McCullough (2000) that focuses on juvenile delinquency, and see Chitwood, Weiss, and Luekefeld (2000) that centers on publications related to alcohol/substance use. Meta-analyses conducted on the religion and crime relationship include Baier and Wright (2001) which examines 60 studies on religion and crime conducted between 1969 and 1998; Yeung, Chan, and Lee (2009) which focuses on publications from 1995 to 2007 related to religiosity and youth licit and illicit substance use; and Yonker, Schnabelrauch, and DeHaan (2012) which examines 75 studies on religiosity/spirituality from 1990 to 2010 on delinquent and drug deviance among adolescents and young adults.



## Religiosity/Spirituality as a Turning Point

The relationship between religion and crime has, by and large, been observed from static theoretical approaches and has amassed an impressive body of research. In contrast to examination of the static attributes of the religion-crime relationship, however, taking a more dynamic viewpoint may enlighten our understanding of the salience of religious bonds across the life course and their impact on change processes. To the extent that religious practice and beliefs have an inhibiting influence on delinquent actions, it may also be expected that religious bonds established in adulthood are a relevant means of social investment that counteract prior delinquent trajectories. Whereas marriage, military, and employment are figured most prominently as conventional turning points, changes in religiosity may be similarly conceptualized as a vehicle of transformation insofar as it produces opportunities for development of social capital, reorders routine activities, provides supervision/monitoring, severs past experiences from the present, and/or engenders shifts in identity (Laub & Sampson, 2003).

Given the causal mechanisms that characterize salient turning points in the life course, it would appear that a religious transformation from antisocial behavior is compatible with such processes. For example, the institution of religion may be viewed as a source of informal social control as religious commitment has been found to constrain antisocial conduct and encourage the development of prosocial behaviors (Johnson, Jang, Li, & Larson, 2000; Smith, 2003). Secondly, social capital may develop with church membership as congregants establish kinship ties and form supportive networks with one another through reciprocated emotional and spiritual connections (Taylor & Chatters, 1988). Third, according to the adage that "idle hands are the devil's workshop," (Hirschi, 1969:22) routine involvement in prosocial activities such as church attendance, prayer, and other structured forms of religious engagement may diminish



opportunities for continued deviance (Chu, 2007; Jang, 2013). Lastly, serious offenders have intimated in life-history narratives that religiosity has provided them a means to break from past transgressions in order to transform into a more idealized self that is unlike their prior antisocial identity (e.g., Giordano et al., 2002; 2008; Maruna et al., 2006; Maruna & Roy, 2007).

In sum, this evidence provides an understanding of how religious processes may operate as a turning point likely to foster the desistance process. Although Sampson and Laub did not include the institution of religion as a key life transition, it may be surmised that changes in religious participation and beliefs would result in a modification of prior offending trajectories. Importantly, however, when asked whether or not religion could serve as a turning point from crime, an Irish-Catholic participant of the Glueck study indicated "No, it's a crock of shit" (Laub & Sampson, 2003:246). Another participant indicated that he "was a born-again Christian and a strong believer in Alcoholics Anonymous (AA)" (Laub & Sampson, 2003:139), but credits the turnaround primarily to his wife's pleas to seek assistance for alcohol abuse. Beyond these participants' narratives, nothing more is stated within the age-graded theory regarding the beneficial impact of religion as a catalyst for change.

With the growing application of the life course perspective to the study of crime, much research has concentrated on the major life events specified by Sampson and Laub as conduits of change with growing research interest in alternative turning points. Nevertheless, the paucity of attention directed toward religiosity in the desistance literature has resulted in a limited understanding of its impact on change, and in turn, has not been well-substantiated as a correlate of desistance (Johnson & Jang, 2010). While offender narratives have depicted the relevance of a religious pathway following serious involvement in crime (e.g., Giordano et al., 2002; 2008; Hallet & McCoy, 2014; Maruna, 2001; Schroeder & Frana, 2009), its demonstrated utility using



more rigorous quantitative assessments have provided mixed evidence thus far. Some evidence points to a protective effect of religion in discouraging the onset of anti-ascetic behaviors as well as a turning point effect in promoting desistance (Bakken et al., 2014; Chu, 2007; Jang, 2013), while others have found no evidence between religion and desistance from a variety of deviant behaviors (Giordano et al., 2008; Ulmer et al., 2012).

Importantly, although trends in religious practice and beliefs vary across racial and ethnic minorities (e.g., Pew Research Center, 2014; 2015; Wallace, O'Malley, Bachman, Schulenberg, & Johnston, 2016) investigation of the potential group differences in the salutary effects of religiosity on the desistance process remains a prominent gap in the literature. Only two studies to date have examined the impact of religiosity on change from deviant behaviors across race/ethnicity (Chu & Sung, 2009; Stansfield, 2017). Additionally, these investigations have utilized samples comprised of individuals deeply involved in deviant behaviors, and it is uncertain if a religious transition is evident within a sample that reflects variation in antisocial conduct. Bearing in mind these limitations, the discussion below first turns to the evidence that applies a life course frame to examine the influence of religion on the process of desistance, and then moves to racial/ethnic differences in religiosity/spirituality. The minimal evidence that evaluates a religious turning point across race/ethnicity is then reviewed. Finally, a brief comment on exploring the external validity of a religious transition among individuals that vary in their antisocial involvement is then provided.

The first study to explore the dynamic impact of religion on desistance was conducted by Chu (2007) who assessed the influence of religious behavior (e.g., regular church attendance) and salience (e.g., the value of religion on participants' lives) on marijuana and harder drug use (e.g., hallucinogens, tranquilizers, barbiturates, amphetamines, etc.) among a national sample of



young adults. Using three waves of the NYS data, Chu found religious behavior to be a stronger influence than religious salience in preventing and in limiting a continuation of both minor and serious forms of drug use in adulthood. While religious salience was important in inhibiting the onset of substance use among participants, its effect on desistance was not significant.

Chu maintained that the effects of religiosity, whether in behavior or salience, did appear to impede continued use among those already drug-involved; nonetheless, its primary role in this sample was preventive in the initiation of drug use. More specifically, Chu found that this religious effect was more prominent in preventing the onset of the use of harder drugs among White as compared to non-White participants. It should be noted that, as is the case with several previous studies that have examined the relationship between religion and crime, only two indicators, namely church attendance and the importance of religion, were included in the analysis. These single items alone may provide a rather narrow interpretation of the religiosity/spirituality influence. In addition, other sources of social control that are known to trigger the desistance process, such as marriage or employment, were not included as controls in this initial examination (Ulmer et al., 2012).

Shortly following, a second examination of the influence of religion on criminal desistance was conducted by Giordano and colleagues (2008), which focused on three waves of quantitative and qualitative longitudinal data collected over the course of 21 years. The sample was comprised of serious delinquents institutionalized in state-level juvenile correctional facilities and originally interviewed in 1982, with subsequent follow-up interviews conducted in 1995 and 2003. Through exploration of quantitative data, a life course investigation of the influence of religion on desistance was assessed using two indicators of religiosity. These



included a behavioral component (e.g., church attendance), and a measure of spirituality operationalized as the degree of perceived "closeness to God."

Quantitative analyses revealed no significant associations between religiosity and long-term criminal desistance. Additional interaction variables, gender and race, and their association with religiosity were examined, but no significant relationships with desistance were found. Through utilization of this specific sample, thus, distinct patterns of offending were not evident between males and females, and between Whites and minority offenders. However, strong marital attachment indicated a significant protective influence among those who desisted as compared to offenders characterized by unstable offending histories. Religion was clearly identified as an important factor in sustained change in the self-narratives of study participants (see also Giordano et al., 2002). A religious effect, however, may have dampened with time as the extensive number of years between data points failed to produce a beneficial association between religion and antisocial behavior.

Building on these prior studies, a more recent investigation assessed religiosity and its influence on a range of criminal career dimensions including onset, persistence, and desistance of marijuana use. Supplementary analyses also examined variables theorized to mediate the relationship between religion and desistance (Ulmer et al., 2012). Intervening variables included in these analyses were reflective of social learning, social bonding, self-control, and strain to explain the partial effects of religion in relation to dimensions of delinquent behavior. Improving upon the work of Chu (2007) and Giordano and colleagues (2008), multiple indicators of religiosity, such as frequency of prayer, parents' religious involvement, religious denomination, belief of being a "born again" Christian, and belief of biblical literalism were incorporated in the main analyses. In addition, the typical measures of religiosity, such as church attendance and



perceived importance of religion, were among these multiple measures. Three waves of the nationally representative AddHealth data were utilized to compare patterns of adolescent marijuana use categorized as either initiation of use, unstable/intermittent use, desistance, or persistent use over time.

Ulmer and colleagues reached results very similar to those obtained by Chu (2007), which indicated that the effects of religion were primarily preventive in discouraging initiation of marijuana use, and that an increase in religiosity did not predict desistance from marijuana use. Rather, with regard to changes in religiosity over time, participants who decreased in their level of religious involvement were more likely to initiate and persist in using marijuana as compared to participants whose religious involvement remained stable.

With regard to the supplementary analyses, approximately a third of the effect of religious involvement on the various dimensions of marijuana use were explained by increased social bonding, fewer delinquent peers, and greater self-control, while variables related to strain theory did not appear to mediate the religion-deviance relationship. According to Ulmer and colleagues (2012), the remaining two-thirds of the prosocial effect of religious involvement exerted on marijuana use were unique and not accounted for by theories of delinquent behavior.

In contrast to the previous studies discussed above, more recent examinations of a religious turning point on change has yielded evidence that increased religiosity demonstrates desistance from antisocial behaviors over time (Bakken et al., 2014; Jang, 2013). The first study evaluated the role of marriage, religiosity, and participation in volunteering activities as potential insulators and/or transitions in emerging adulthood, and their subsequent impact on binge drinking. Identification of the appropriate function of such events, whether more protective (i.e., insulator) or transformative (i.e., turning point), and their impact on cessation of problematic



drinking behaviors observed between adolescence and young adulthood was an additional research goal of this investigation (Jang, 2013).

As hypothesized, examination of multiple waves of the National Education Longitudinal Study of 1988 (NELS:88) through a series of regression analyses [ordinary least squares (OLS), logistic, and zero-inflated negative binomial (ZINB)] revealed the importance of marriage and religious involvement during emerging adulthood. These particular events operated as both an effective turning point for individuals with previous drinking difficulties, and as an insulator for individuals without alcohol-related problems in adolescence. Whereas marriage and religion demonstrated increased odds in protection and termination of drinking during emerging adulthood, participation in volunteering activities, however, did not yield significant effects as a turning point or insulator (Jang, 2013).

Finally, a second evaluation recently conducted also demonstrated the significance of religiosity/spirituality as a turning point. Its impact was examined on continued substance use among previously incarcerated serious offenders returning to the community (Bakken et al., 2014). Similar to Ulmer and colleagues, this final study incorporated a multiple-item measure of religiosity/spirituality into analyses, which by contrast, was more comprehensive and perhaps a better construct of religious involvement than single items such as church attendance and perceived importance of religion. Additionally, congruent with most of the studies discussed above, anti-ascetic behavior rather than antisocial deviance was assessed, specifically outcomes of alcohol, marijuana, and cocaine use. Like Giordano and colleagues, the sample was comprised of serious offenders with documented involvement in criminal behavior and substance use, as opposed to representative samples to evaluate change in antisocial conduct. Study findings revealed the importance of religiosity/spirituality in the cessation from all three substances at the



time of reentry, although effects were found to be weaker for marijuana use. Having an affiliation with a religious organization, however, was not a significant predictor of desistance from these substances. As hypothesized, results indicated that with greater involvement in religious practices such as prayer, church attendance, reading the Bible, and having a spiritual belief system provided a supportive means for offenders to counteract prior substance use upon return to the community.

### Racial and Ethnic Differences in Religiosity/Spirituality

Although observance of religious practice has increasingly declined overall in more recent decades, the institution of religion continues to be an important social facet in the United States as individual religious attendance remains relatively high in comparison to other nations (Ellison & Hummer, 2010). However, important racial and ethnic variation in religiosity/spirituality persists as Black Americans, as compared to all other subgroups in the United States, are more religiously oriented in their practices, belief system, and spirituality.

According to a recent report from the U.S. Religious Landscape Survey (Pew Research Center, 2015), greater numbers of Blacks far outpace their Hispanic/Latino and White counterparts on several measures of religiosity including weekly attendance in religious services (47%, 39%, and 34% respectively) and belief in God with absolute certainty (83%, 59%, and 61% respectively). Other survey items that reflect noted differences between Blacks and all other racial/ethnic categorizations includes the importance of religion in one's life, frequency of prayer, frequency of religious study, and belief in heaven and hell, among additional measures (Pew Research Center, 2015).

Racial/ethnic differences in religiosity extend into younger age groups as well. For example, similarly high frequencies in religious behavior and perceived importance of religion



among minorities as compared to Whites are found in studies that focus on adolescents. A recent analysis of the nationally representative Monitoring the Future (MTF) study found that a greater share of Black adolescents (42%), as compared to Mexican-American (36%) and White adolescents (36%) regularly attend religious services. In addition, higher percentages of Black adolescents (47%), in comparison to Mexican-Americans (27%) and Whites (25%) perceive religion to be a very important aspect of their lives (Wallace et al., 2016).

On the whole, the percentages above indicate that minorities are more deeply engaged in religious practices, with Black respondents demonstrating the greatest involvement with highest reported rates in both their religious behaviors and beliefs. These stark differences may be attributed to the fundamental role of Black churches within the African-American community. Their inextricable connection to Black lives has historical roots traced to slavery in providing refuge and an opportunity for the enslaved to assemble and organize (Frazier, 1963). The Black church has since operated within spiritual as well as secular realms in supplying outreach and support to families, educational reform, and for political mobilization (Billingsley & Caldwell, 1991; Ellison & Sherkat, 1999; Lincoln & Mayima, 1990). By comparison, much less is known about religiosity/spirituality among the heterogeneous population of ethnic minorities in the US. With rates of practice and beliefs falling between Blacks and Whites, and with a rise in Hispanicoriented churches nationwide, religion remains a significant and powerful institution in the lives of Hispanic/Latinos (Pew Research Center, 2014). The variation in religious salience across race and ethnicity may suggest that religion and the church are more of an ingrained and lasting source of identification among minorities as compared to Whites.



# Religiosity in the Desistance Process among Minorities

Currently, there is little clarity on the impact of religious involvement on desistance across racial and ethnic groups. To the best of the author's knowledge, only two studies to date, have examined the salience of religiosity as a turning point in the desistance process with comparisons drawn across race and ethnicity (Chu & Sung, 2009; Stansfield, 2017). The first investigation employed the Drug Abuse Treatment Outcome Study (DATOS) data and examined the degree of religious involvement between Black and White clients in substance use recovery and whether or not the effect of religiosity operated similarly on desistance across these groups following treatment (Chu & Sung, 2009). From an offender reentry framework, the second investigation utilized data from the *Pathways to Desistance* study (Mulvey et al., 2004) to evaluate the role of religiosity/spirituality on change from criminal behavior and substance use across White, Black, and Hispanic respondents (Stansfield, 2017).

With regard to level of religious involvement among study participants, and consonant with prior literature, the analysis conducted by Chu and Sung revealed that Black participants reported greater religious involvement over Whites, with over half of Black women (53%), and nearly half of Black men (46%) in the sample attending church. In contrast, only a third of White women (30%) and a quarter of White men (26%) reported attending church. Controlling for a number of demographic, peer, social bonding, prior criminality, and treatment variables, Chu and Sung found that church attendance, after a year-long follow-up period, had a significant impact on substance use desistance among Black participants. This same effect was not a significant predictor of desistance among White participants.

Using a multilevel mixed-effects modeling framework to assess the impact of spiritual beliefs on change from antisocial conduct, Stansfield found that holding these beliefs was



unimportant in predicting decreased criminal behavior in the full model. When analyses were conducted in subgroups divided by race and ethnicity, religiosity/spirituality significantly predicted reductions in criminal behavior for Whites, but this effect did not extend to minority offenders. Differential results across race and ethnicity were also revealed for substance use desistance, as religiosity predicted reductions in the full model and for White and Black offenders, but not for Hispanics. Stansfield noted that the observed racial/ethnic differences in desistance are due perhaps to the ways that faith-based initiatives are limited in assisting offenders. Although churches may offer job skills training and housing to offenders transitioning back into the community, this does not reverse the structural disadvantages such as poverty and racism that minority offenders likely face.

# Attention to Offending Variation in the Study of Religious/Spiritual Turning Points

In referencing the age-graded framework, the collection of works discussed in this chapter have drawn greater attention to an alternate source of prosocial bonding, namely religion, to enact change (e.g., Bakken et al., 2014; Chu, 2007; Chu & Sung, 2009; Giordano et al., 2002; 2008; Jang, 2013; Stansfield, 2017; Ulmer et al., 2012). Of these investigations, most have focused on individuals with serious involvement in substance use and/or offending (Bakken et al., 2014; Chu & Sung, 2009; Giordano et al., 2002; 2008; Stansfield, 2017), and two have evaluated religiosity across race/ethnicity (Chu & Sung, 2009; Stansfield, 2017). Evaluation of a research sample with diverse composition may promote the generalizability of the age-graded theory. Specifically, the extent of external validity and applicability of religiosity/spirituality in effecting change can be determined among minorities as compared to Whites, and among those with short-lived as well as enduring problems with deviance.



Bearing these issues in mind, few evaluations of the role of religiosity/spirituality on change processes have been conducted using a nationally representative sample (but see Chu, 2007; Jang, 2013; Ulmer et al., 2012). These works attempted to elucidate the processes by which a religious effect may operate, whether as a means to prevent initiation of alcohol/drug use or as a change agent to redirect a continuation of these behaviors. Due to the behavioral variation captured within the data examined, a comprehensive understanding of how religiosity functions to inhibit deviant conduct was feasible in these studies. In the present case, examination of a representative sample, rather than a sample comprised of serious offenders only, provides a key opportunity to understand whether the effect of a religious/spiritual turn is general across race/ethnicity and whether its influence is relevant across subjects given the wide-ranging differences in offending behavior. Importantly, with increased attention to these individual differences in antisocial behavior, a thorough research approach toward understanding the impact of religiosity/spirituality on developmental processes is undertaken. Such findings will be useful to the field for development of theory (e.g., Jang & Johnson, 2010), and for faith-based rehabilitation efforts that consider most offenders, and not only a select few with serious problematic behaviors.

# **Summary of the Religion-Crime Nexus**

In conclusion, explication of the relationship between religion and delinquency/crime has long been debated since Hirschi and Stark's (1969) empirical analysis of the hellfire hypothesis. Failure to draw significant connections between religiosity and delinquent behaviors ignited a series of replication studies to evaluate findings that appeared inconsistent with common sense. Subsequent studies have been characterized as utilizing either a "different types" or



"spuriousness" approach to analysis, which then provided some clarification for Hirschi and Stark's counterintuitive results (Jang, 2013a).

These prominent explanations include the "anti-ascetic hypothesis," which accounts for variations in offense type including minor forms of deviance that are considered to be condemned by religious codes (Burkett & White, 1974; Middleton & Putney 1962; Cochran & Akers, 1989); the "norms qualities hypothesis" that focuses on the degree of conservative values that characterize religious denominations and their impact on participation in deviance (e.g., Bock et al., 1987; Cochran et al., 1988; Nelsen & Rooney, 1982); and the "moral communities hypothesis," which considers variation in the type of community examined, whether more secular or religiously devout (Stark et al., 1982). Lastly, inappropriate specification of the relationship between religion and delinquency serves as the basis for the "spuriousness" perspective, which suggests that the incorporation of theoretically relevant, intervening variables into analytic models may result in a better assessment of the association (Cochran et al., 1994; Elifson et al., 1983; Ellis, 1987).

The accumulated studies that followed the hellfire study produced generally consistent evidence indicating an inhibitory effect of religion on deviant behavior (Cochran & Akers, 1989; Sloane & Potvin, 1986; Tittle & Welch, 1983). Furthermore, evaluation of the nature of the religion-delinquency/crime relationship through systematic reviews and meta-analyses of the existing literature repeatedly find that religiosity is moderately and negatively associated with deviant behaviors (e.g., Johnson & Jang, 2010; Kelly et al., 2015).

The influence of religion aligns with various explanations of delinquent behavior including static interpretations such as social control and social learning theories, and corresponds with Sampson and Laub's dynamic perspective of age-graded informal social



control. In spite of this, religion has not been featured in developmental/life course theorizing as a key explanatory variable (Johnson & Jang, 2010). However, in view of several works that establish the consistent impact of religiosity on deviant outcomes, it may also have relevant application as a turning point in the desistance process (Chu, 2007). Self-reported narratives from serious offenders have detailed the significance of initiating a religious transformation in order to change prior antisocial behavior (e.g., Giordano et al., 2002; 2008; Hallet & McCoy, 2014; Maruna, 2001; Schroeder & Frana, 2009). Alternately, quantitative life course assessments have yielded conflicting results as some scholars give credit to the protective as well as transformative effects of religion on desistance (Bakken et al., 2014; Chu, 2007; Chu & Sung, 2009; Jang, 2013; Stansfield, 2017), while others find that increased religiosity over time does not result in offending cessation (Giordano et al., 2008; Ulmer et al., 2012).

Consideration of the above literature raises important challenges that require mention.

First, as a result of conflicting results regarding the influence of religiosity on deviant conduct over time, the benefit of a religious transition on processes of desistance remains uncertain.

Secondly, the impact of religiosity on adult criminal involvement (secular forms of deviance), has not been clearly substantiated as only two studies, heretofore, have examined this relationship (Giordano et al., 2008; Stansfield, 2017). Third, with regard to methodological limitations, these studies save one (Stansfield, 2017) failed to employ advanced statistical techniques in order to account for inter-individual and intra-individual variation in deviant behaviors over time. Fourth, in a number of these studies, operationalization of religiosity/spirituality has been limited to single-item measures of either church attendance or religious attitudes (Ulmer et al., 2012), by which a more precise reading of the complex nature of religious behaviors and beliefs and their role in the desistance process are required. Lastly,



relatively absent from this empirical literature is attention to whether the potentially transformative effect of religiosity/spirituality on criminal behavior can be generalized to racial and ethnic minorities and among individuals who vary in their deviant conduct.

As stated at the outset, with attention to Sampson and Laub's age-graded theory, and as an outgrowth of the work of Chu and Sung (2009) and Stansfield (2017), this study seeks assessment of the generalizability of the life course perspective through examination of a religious turning point. The present investigation aims to provide greater clarity regarding the dynamic influence of religion on cessation of deviant behaviors in adulthood, the types of behaviors for which a religion transition is important, and identification of offenders for whom religion is most salient. Given the open inquiries above regarding the religion-desistance relationship, the importance of the proposed study, research questions, and hypothesized relationships are discussed in the next chapter.



#### **CHAPTER FIVE:**

### IMPLICATIONS FOR THE PROPOSED RESEARCH

As presented in previous chapters, the theoretical underpinnings of Sampson and Laub's age-graded perspective (1993) are based on the experiences of a specific population of offenders from a specific historical context, and as a result, questions arise concerning the universal characterization of the social mechanisms implicated in the desistance process. Situating the life course theory in this general frame is controversial and may be problematic in overcoming historical specificity and racial and ethnic differences in processes of continuity and change.

According to Sampson and Laub, turning points from stable offending pathways that are established in adulthood, such as marriage, military, and employment, are assumed to be equivalent for all members of the population, regardless of historical period, context, society, or demographic grouping. While the tenets of the age-graded theory are empirically supported (Ezell & Cohen, 2005; Laub et al., 2006; Laub et al., in press), tests of the influence of these turning points generalized across racial and ethnic groups have produced mixed evidence (Bersani & DiPietro, 2014; Craig, 2015; Nielsen, 1999; Schoenberger, 2016).

While far from conclusive, inconsistent findings call into question the generality of the age-graded theory. Therefore, expansion of the theoretical scope to include examination of additional prosocial institutions that may potentially redirect offending trajectories toward a more conventional lifestyle may provide beneficial insights. Although religion was not a recognized socializing transition among the Glueck men, qualitative reports from self-history



narratives from recent samples propose that religiosity is an important source for change (Giordano et al., 2002; 2008; Hallet & McCoy, 2014; Maruna, 2001; Schroeder & Frana, 2009). However, preliminary investigations of the empirical adequacy of this alternate turning point have yielded mixed evidence in attesting its influence on desistance from deviant behaviors over time (e.g., Bakken et al., 2014; Chu, 2007; Chu & Sung, 2009; Giordano et al., 2008; Jang, 2013; Ulmer et al., 2012; Stansfield, 2017). Moreover, only two studies to date have sought to assess the potentially transformative role of religiosity in the desistance process across race/ethnicity (Chu & Sung, 2009; Stansfield, 2017). This limited body of work raises several questions, as understanding of religion and its influence on desistance among diverse individuals remains particularly understudied.

With attention to the significant gaps in knowledge related to desistance from antisocial behavior, the proposed research effort proceeds with meaningful examination of the life course perspective and is organized around the following lines of inquiry: 1) generalizability of the agegraded theory, 2) theoretical elaboration, 3) elucidation of the nature of the religion-desistance relationship, and 4) methodological limitations of prior research. Owing to the lack of representativeness of the Glueck sample, the theoretical claims that form the basis of the agegraded perspective may not generalize to current and diverse populations of adolescents followed into adulthood. Inasmuch as Sampson and Laub maintain that the age-graded theoretical propositions transcend time, race, and ethnicity, empirically substantiating these assertions is necessary for theoretical validation.

Because the institution of religion was not originally specified as a salient transition in the age-graded theory, the second line of inquiry involves possible theoretical elaboration to include the conventional influences of religion on processes of desistance. Given the declines in



socializing structures of marriage and employment in recent decades (see e.g., Cherlin, 2004; Hill & Yeung, 1999; Shanahan, 2000) greater recognition of religion as a source for interpersonal bonds may be of some benefit to contemporary adolescent offenders making progress towards change in adulthood.

The third line of inquiry involves greater exploration of the role of religion in offending cessation, as religious explanations for the movement away from antisocial behavior are largely omitted in desistance research. Such clarification would involve identification of the influential dimensions of religiosity, whether as a multifaceted factor comprised of religious behavior and beliefs, or through external/behavior only (e.g., church attendance), or through internal/beliefs only (e.g., religious teachings should be obeyed exactly as written in every situation), to better understand their impact in promoting the likelihood of desistance. Furthermore, examination of whether religiosity/spirituality extends to antisocial or secular forms of deviance in addition to anti-ascetic behaviors may shed light in directing policy efforts toward efficacious offender treatment initiatives.

Finally, the fourth line of inquiry emphasizes the methodological limitations of prior research. Life course models generally include longitudinal examination of between- and within-individual variation. However, the few studies that explored religion and its impact on desistance are lacking in measurement quality. Given the failure to utilize dynamic modeling approaches to track within-individual changes in offending over time and with the assessment of single-item indicators, current evidence on the religiosity-desistance relationship may be imprecise.

Discussion of the importance and justification for the proposed research is the primary focus of this chapter. Bearing in mind the small number of studies conducted in this area of research and drawing upon the four lines of inquiry above, the theoretical, methodological, and



practical implications that articulate the significance of religion as an alternate turning point are considered. The proposed research questions and associated hypotheses are presented at the close of this chapter.

# **Generalizability of the Age-Graded Theory**

A growing body of knowledge has critically examined the propositions of Sampson and Laub's social control framework, and the preponderance of this evidence generally lends support for the conclusions that formulate the theoretical model (e.g., Ezell & Cohen, 2005; Laub et al., 2006; Laub et al. in press). However, exceptions include recent studies that empirically assess the generalizability of turning points among racially and ethnically diverse subjects (Craig & Connell, 2013; Bersani & DiPietro, 2014; Craig, 2015; Nielsen, 1999; Piquero et al., 2002; Schoenberger, 2016). Investigations involving contemporary samples render important questions regarding the validity of turning points on four fronts: the historical specificity of institutional ties, racial and ethnic variation in the prevalence of social bonds, racial and ethnic variation in the strength of turning points, and briefly, attention to differences in offending variation.

### **Historical Specificity of Institutional Ties**

The age-graded complexities of life during the Glueck men era involved a childhood during the deepening of the Great Depression, adolescence during the rise of the Nazi regime, and the U.S. entry into World War II (and the Korean War for the younger cohort of the Glueck subjects) during the transition into young adulthood. U.S. involvement in war overseas furnished appealing opportunities for the delinquent and disadvantaged Glueck sample to turn away from crime by means of military enlistment and toward greater economic security with assistance from the G.I. Bill (Laub & Sampson, 2011:376-379; see also Elder, 1986).



With the economic postwar prosperity in the 1950s, came the renewal of marriage and family. The prevailing gendered identities of the suburban male breadwinner/female homemaker roles symbolized an American ideal, which ushered in the rise of the nuclear family and the momentous "baby boom" generation (Weiss, 2000). Thus, the life course patterns observed among the Glueck men in their approach toward adulthood and the social investments made with respect to institutions of military, marriage, family, education, and employment, were bound by the historical context and the customary social forces that defined such times. Arguably, these turning points may be historically contingent and reflective of 1950s economic productivity (Sampson & Laub, 1996), as some findings point to their diminishing importance among contemporary offenders (Giordano et al., 2002). Moreover, the transformative life events distinguished by the Glueck men were not similarly advantageous for men of color.

According to Turner and Bound (2003), military service in combination with the availability of the G.I. Bill were not particularly beneficial for Black servicemen from the South, as compared to White and racial minority veterans from other regions of U.S. This was likely due to the limited educational options Black men encountered upon their return from war given the predominance of segregated colleges and the underfunded historically Black universities in the South (Turner & Bound, 2003). From this standpoint, it appears that educational opportunities to sever from a delinquent past were not equivalent across racial groups, and the

<sup>&</sup>lt;sup>5</sup> There is a significant gap in empirical studies that examine the benefits extended to Hispanic/Latinos for their military service during World War II and the Korean War. This may be due to a lack of military records for Hispanic/Latino Americans prior to the Vietnam War, in spite of their lengthy history of participation in the military since the War of 1812 (see Dansby, Stewart, & Webb, 2001; Lutz, 2008). However, notable biographical accounts have been available more recently, including, for example, *The American G.I. Forum: Origins and Evolution* (Allsup, 1982), *The American GI Forum: In Pursuit of the Dream, 1948-1983* (Ramos, 1998), *A Legacy Greater than Words: Stories of U.S. Latinos and Latinas of the WWII Generation* (Rivas-Rodriguez, 2006), and *World War II and Mexican American Civil Rights* (del Castillo, 2008).



possibility for greater economic stability in the postwar years appeared to be more favorable for White veterans.

Historical patterns of social inequality among minorities occurred long before and have continued since the "golden age" of the 1950s, but such dynamics have been given little consideration within the age-graded perspective. Sociohistorical macro-level changes across more recent decades that may have hindered pathways out of offending may include, for example, punitive anticrime legislation initiated in the early 1970s and the age of mass incarceration that followed, the crack cocaine epidemic and the War on Drugs during the 1980s, the 9/11 terrorist attacks in 2001 and the subsequent War on Terror campaign, the global financial crisis that took place between 2007 and 2009, and most recently, the Black Lives Matter movement that arose in response to widely publicized police-related deaths of young Black men (see also Laub, 2016; Laub et al., in press; Sampson & Laub, 2016).<sup>6</sup>

Although they have not been given much empirical attention, these historical events may be especially consequential in reinforcing systems of social inequalities and in shaping life trajectories in racially and ethnically specific ways. Yet, Sampson and Laub maintain that theoretical processes of desistance should extend to the current social context and apply equally to minorities. The historical formation of barriers in access to social capital that persist along racial and ethnic lines casts doubt on the universality of their assumptions. For example, attention to the unique experiences of minority offenders reveal racially distinct circumstances that Piquero and colleagues (2002:667) have referenced as "breaking points" in the life course. In more recent history, one such race-based transitional event that operates to disadvantage the

<sup>&</sup>lt;sup>6</sup> An assessment of macro-level changes on individual trajectories of offending are beyond the scope of the current examination. For additional information on cohort effects and/or the impact of historical context on the individual life course see Sampson (2013; 2015).



pathways of Black men includes incarceration. This particular shift in the life course has been demonstrated to be a far more likely transition for Black males than either military service or college graduation (Pettit & Western, 2004).

### Racial and Ethnic Variation in the Prevalence of Social Bonds

Another point of contention regarding the generalizability of the age-graded perspective concerns variation in the prevalence of traditional turning points across race and ethnicity. This may be attributed to wide gaps in access to sources of social capital or to the shifting salience of turning points over time. Given the changed nature of marriage, family structure, economic productivity, and military service since the postwar period in which the Glueck men matured, structural institutions may have differentially configured across racial and ethnic groups, and may have also waned in their substance over subsequent decades.

For example, the dramatically changed nature of family composition, increasing births outside of marriage, and with cohabitation and same-sex unions on the rise, Cherlin (2004:848) has characterized these contemporary modifications as the "deinstitutionalization of marriage." Although rates of traditional marriages increased sharply with the economic security that followed World War II, marital rates have since steadily declined (Stevenson & Wolfers, 2007). While rates of marital unions are comparable for Whites and Hispanic/Latinos, the lowest rates of marriage, highest likelihood for divorce, and the greatest tendency to be in a poor quality marriage is most evident among Blacks (Bulanda & Brown, 2007). Similar changes have also been observed in labor force participation rates since the end of World War II, with far fewer prospects for employment overall in more recent decades as compared to the past, but with persistently higher rates of joblessness among men of color (Acs, Brasell, Sorenson, & Turner, 2013; Wilson, 1987).



Finally, with regards to military service, the end of conscription was perceived as a vehicle toward increased social and economic mobility among marginalized groups, which resulted in greater representation of minorities and individuals from lower-class backgrounds in the armed forces (Levy, 1998). However, evidence suggests that the beneficial impact of entrance into the military on criminal careers may be dependent upon race/ethnicity and the historical time frame (Bouffard, 2005; Craig & Connell, 2013; MacLean & Elder, 2007).

More specifically, in contrast to the favorable outcomes associated with service in World War II among the Glueck men, Bouffard (2005) found that service in the all-volunteer force, which was initiated in 1969, may operate as a breaking point for some. As compared to those who did not serve, Bouffard observed that military service was associated with a greater likelihood of violent behavior, with significant differences in reported violent offenses detected among Hispanic (22% military vs. 5% non-military) and White (12% military vs. 7% non-military) service members, but with no significant differences found among Blacks (16% military vs. 12% non-military).

## **Racial and Ethnic Variation in the Strength of Turning Points**

Another consideration regarding generalizability involves a growing literature indicating that the impact of transformative life events also tends to differ across race and ethnicity.

Although the tests are few, recent examinations of the inhibitive effects of adulthood bonds on deviance including marriage, parenthood, employment, and education demonstrated inconsistency across subgroups. According to this body of work, the benefit of marriage generally aided in the desistance process as theorized by Sampson and Laub; however, findings altogether suggested greater importance of marital bonds among Whites as compared to either Blacks or Hispanics (Bersani & DiPietro, 2014; Nielsen, 1999; Schoenberger, 2016).



A notable exception included an examination conducted by Craig (2015), which did not yield significant decreases in criminal behavior following marriage for White or Black individuals, but was found to be an important mechanism in explaining desistance among Hispanics. With reference to parenthood, Craig found that the benefits extended only to Whites, with neither marriage nor parenthood predicting desistance from offending for Blacks. Another interesting exception suggested that the deterrent impact of marriage, while dissimilar in its strength across race/ethnicity, was clearly indicative of reduced offending for Black and Hispanic men, but was less so for Whites (Bersani & DiPietro, 2014).

An additional assessment of turning points provided evidence which indicated that the 1950s traditional conception of a man's role as husband, father, and provider may explain desistance among current samples. Results evinced by Schoenberger (2016) revealed that bonds related to marriage, children, and employment were largely important for White males only. However, further subgroup analyses suggested race- and ethnic-specific turning points such as employment stability, operationalized as job duration of 5 years or longer, predicted desistance for Black males. A cohabitating relationship led to increases in offending behavior for Hispanic males. Collectively these recent findings reinforce the notion that turning point effects among contemporary samples are variable in their significance across race and ethnicity, which raises doubts concerning the universal application of the age-graded theory.

## **Attention to Offending Variation**

A final concern regarding the generalizability of the age-graded theory draws attention to differences in offending and the use of a representative sample. Tracy and Kempf-Leonard (1996) advised that the validity of Sampson and Laub's findings which originated from reanalysis of the Glueck data must be carefully considered given a number of important



challenges. They noted that the Glueck samples of non-delinquent and delinquent youth were biased and lacking in representativeness due to the nonprobability sampling methods used.

Clearly, and as stated throughout this text, the offending and change patterns that emerged from the homogeneous Boston youth sample may not be replicable among more diverse populations.

Importantly, Tracy and Kempf-Leonard further advised that studies of criminal careers should not be limited to individuals with an official delinquency status only. Without greater representation of the population of adolescent offenders included in the data, caution should be applied when drawing general conclusions regarding patterns of offending. However, with non-delinquents matched to the delinquent youth, Sampson and Laub were able to substantiate that adult social bonds operate to continuously decrease offending behavior across both groups. Consideration of the various levels of offending, therefore, provides greater precision in establishing correct inferences made from the sample to the larger population.

To summarize, the age-graded theory of informal social control has been presented as a general life course theory, but is based upon the lived experiences of the Gluecks' (1950) delinquent sample of White, male subjects born in the 1920s and 1930s, who transitioned into adulthood during a time of historic economic expansion. Therefore, the theoretical explanations proposed for continuity and change in offending may not generalize to contemporary and diverse samples. The institutional ties implicated by the Glueck men in redirecting their prior offending trajectories, such as marriage, employment, and military service, may be specific to the 1950s era in which they approached adulthood and may be dependent upon the postwar economic opportunities that were particularly favorable for White men (see Sampson & Laub, 1996). Over time and in tandem with macro-level social changes that disadvantage minorities, persistent patterns of inequities may have also diffused into social institutions that include family,



marriage, employment, and education. As such, the prevalence of adult social bonds as well as their impact in deterring continued offending tend to vary across race and ethnicity. Although Sampson and Laub assert that the age-graded theory has universal application, recent tests demonstrate that turning points do not extend evenly to Whites, Blacks, and Hispanics/Latinos. While it is still premature to draw conclusions regarding generalizability, some acknowledgement that key adult bonds are not as relevant for certain segments of the population may divert attention to alternate sources of social capital.

Given these limitations in the generalizability of the age-graded perspective, it would be critical to assess the universal assumptions proposed using a nationally representative sample of adolescents in order to draw general conclusions. These limitations also point to consideration of possible theoretical elaboration. While the role of religion has not been a central focus in either life course theorizing or longitudinal examination, assessment of its impact as a turning point from deviant behavior may be critical for policy initiatives. However, the beneficial influence of religiosity on processes of desistance must be understood among more heterogeneous samples and from a more recent vantage point.

### **Theoretical Elaboration**

Because of vast socioeconomic differences across race/ethnicity, impediments to structural turning points may be greater for minority offenders. Examination of an alternate route from continued offending, specifically religiosity/spirituality, may be of notable import for those lacking in key resources (Giordano et al., 2002). However, due to the "heathen effect" within our secular discipline, criminology has largely overlooked religion and its connection with crime (Cullen, 2010). This neglect has resulted in theoretical and empirical deficiencies, and virtually no framework from which to inform research objectives.



With a paradigm shift toward evaluation of offending over the life course, scholars have recognized the need to develop an age-graded explanation with a focus on religious influence and its association to antisocial conduct (Cullen, 2010; Johnson & Jang, 2010). Alternately, in view of its compatibility with the social control framework, it may be useful to elaborate Sampson and Laub's age-graded theory to include religion as a relevant turning point among contemporary offenders. As the negative association between religiosity and antisocial conduct has been established (Baier & Wright, 2001; Johnson & Jang, 2010; Kelly et al., 2015), it would be logical to additionally surmise a religious impact on behavioral changes over time.

Accordingly, through the lens of the age-graded framework, religion may impart the necessary socialization in adulthood to alter the stable offending pathways established in childhood and adolescence. Religiosity/spirituality may operate as a turning point to the degree that it 1) enhances social control (Johnson et al., 2000; Smith, 2003), 2) renders attachment with prosocial others (Taylor & Chatters, 1998), 3) reconfigures routines toward involvement in more disciplined practices such as prayer and church attendance (Chu, 2007; Jang, 2013), and 4) with forgiveness and redemption, provides a renewed sense of self with the capacity to break from sins of the past (Giordano et al., 2002; 2008; Maruna et al., 2006; Maruna & Roy, 2007).

Incorporation of religiosity/spirituality into offender treatment has generally been outside the remit of the criminology/criminal justice realm. Nevertheless, its value for desistance from antisocial behaviors can be observed from drug treatment and offender reentry programs. For example, spiritually-based 12-step recovery programs such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) are mainstays in the treatment of drug addiction. Although inconsistent evidence regarding the effectiveness of these initiatives on sustained substance use recovery have been a source of contention, the organizations have held a long standing in



addiction treatment and continue to be a popular source of supportive services (Kelly, Stout, Magill, Tonigan, & Pagano, 2011).

Along a similar line, with the number of prisoners released into the community exceeding 600,000 annually (Carson & Sabol, 2012), attention to faith-based reintegration interventions have increased in recent years (Sumter, 2006). Although efforts to reduce recidivism have generally emphasized housing, employment, and drug treatment, preliminary investigations of faith-based reentry programs have generated mixed support, with some findings indicating decreases in recidivism (e.g., Duwe & King, 2012) and others finding limited program impact on participants' rearrests (e.g., Willison, Roman, Wolff, Correa, & Knight, 2010).

Although the religion-crime nexus is still not a well-developed body of knowledge, and its place in criminology continues to be debated, preliminary findings suggest that serious offenders may turn to religion as an alternate pathway out of crime (Bakken et al., 2014; Giordano et al., 2002; 2008; Hallet & McCoy, 2014; Maruna, 2001; Schroeder & Frana, 2009). Until an age-graded theory of religion and crime is developed, systematic approaches to the influence of religion/spirituality on desistance accord well with Sampson and Laub's life course framework. The Glueck men they interviewed, however, indicated otherwise (Laub & Sampson, 2003:139, 246). It is possible, however, that religion was not a recognized turning point from crime due to the lack of representation among the Glueck men. Because religious practices and beliefs occupy a more central role in the lives and identities of minorities, particularly for Black Americans, it may be reasonable to expect that religion, as a mechanism of change, does not operate equally across subgroups of offenders. Additional findings in support of this claim, would warrant theoretical elaboration and reconsideration of the generalizability of the age-graded theory.



# **Elucidation of the Nature of the Religion-Desistance Relationship**

A limited number of studies have generated mixed support for the impact of religiosity/spirituality on change from various forms of antisocial conduct (Bakken et al., 2014; Chu, 2007; Chu & Sung, 2009; Giordano et al., 2008; Jang, 2013; Stansfield, 2017; Ulmer et al., 2012), and as a result, a great deal is unsettled concerning the nature of this relationship. First and foremost, because investigations of the religion-desistance nexus are so few, the question of whether or not religiosity/spirituality operates as a turning point in the desistance process remains unresolved. While some evidence points to the protective effect of a religious/spiritual bond on various deviant behaviors (Bakken et al., 2014; Chu, 2007; Chu & Sung, 2009; Jang, 2013; Stansfield, 2017), other studies suggest that a religious mechanism does not impart any influence on desistance from offending behavior over time (Giordano et al., 2008; Ulmer et al., 2012).

Moreover, a second shortcoming of the literature involves the insufficient attention directed to variations in the transformative impact of religion across race and ethnicity. Although routine religious behaviors and beliefs are far more prevalent among minorities (Pew Research Center, 2014; 2015) as compared to Whites, the differences in a religious impact on desistance across racial and ethnic categories have not been examined extensively. Thus far, only two studies have drawn subgroup analyses of religiosity on desistance (Chu & Sung, 2009; Stansfield, 2017), so firm conclusions relating to racial/ethnic differences in developmental patterns have yet to be established. Chu and Sung demonstrated that due to the markedly higher percentage of religious practices observed among Blacks as compared to Whites (Pew Research Center, 2015; Wallace et al., 2016), multivariate results correspondingly demonstrated a racially



specific impact of religious behavior on drug use desistance among Black participants, while none was found among Whites (Chu & Sung, 2009).

To date, there is only one study that assesses the religion-desistance relationship across race *and* ethnicity, including Hispanic/Latino offenders (Stansfield, 2017). With assessment of the attitudinal dimension of religiosity, this study demonstrated that religious beliefs were important in reduced criminal behavior for Whites, and in reduced substance use for Whites and Blacks. However, a protective religious effect did not significantly decrease either type of antisocial behavior for Hispanic offenders. Given these results from an initial test across racial *and* ethnic groups, it will be important to observe if a null religiosity-desistance effect will be repeated among Hispanic individuals within a different sample.

Returning to the issue of generalizability, it is important to further note that Chu and Sung and Stansfield examined religiosity/spirituality on desistance among samples of individuals with serious involvement in antisocial behaviors. Assessment of the theoretical propositions among a general sampling of adolescents may provide a more rigorous test of the generalizability of the age-graded theory. With a focus on individuals with serious problems in offending and/or substance use only, the findings generated may not extend to individuals who are less involved in such behaviors. With examination of a general sample of adolescents, variation in offending behavior that reflects those less seriously involved as well as those more seriously involved, may provide a better assessment of the generalizability of Sampson and Laub's theoretical propositions, and a greater understanding of the religion-desistance relationship.

A third shortcoming within the current religion-desistance literature involves consideration of the dimensions of religiosity/spirituality, whether reflective of external religious behaviors (e.g., church attendance) or internal spiritual beliefs (e.g., "Religious teachings should



be obeyed exactly as written in every situation;" "I often ask God to help me make decisions;"), or whether these components in combination are effective in hindering continued engagement in deviance. Some examinations reveal that religious behaviors alone are sufficient in triggering the desistance process (Chu, 2007; Chu & Sung, 2009; Jang, 2013), while some indicate that simply holding religious beliefs are adequate in hastening change (Stansfield, 2017). Others suggest that both external and internal dimensions of religiosity/spirituality are important elements in the change process (Bakken et al., 2014; Ulmer et al., 2012).

The final shortcoming regarding this body of work relates to the types of behaviors for which a religious turn is important. The majority of these studies focus on cessation from substance use including binge drinking (Jang, 2013), minor infractions of marijuana use (e.g., Ulmer et al., 2012), or a combination of both minor and harder forms of substance use (Bakken et al., 2014; Chu, 2007; Chu & Sung, 2009). With the exception of investigations that did not significantly predict marijuana use cessation (Bakken et al., 2014; Ulmer et al., 2012), it appears that religiosity/spirituality is an important predictor of desistance from anti-ascetic types of behaviors. It is unclear, however, if this influence also extends to antisocial conduct or secular forms of deviance. Recent meta-analytic findings of studies conducted over the past four decades indicate that the effect sizes for religiosity were strongest in inhibiting drug use, followed by delinquent behaviors, with the smallest decreases evinced in alcohol use (Kelly et al., 2015).

Given this evidence, it is likely that a religious transition may encompass desistance from secular types of deviance in addition to ascetic violations. Only two studies, however, have examined secular deviance outcomes (included various property and violent crimes) among serious offenders. Results from these investigations demonstrated little to no impact of a



religious/spiritual transformation on continued offending (Giordano et al., 2008; Stansfield, 2017).

In brief, attending to the noted gaps in our understanding of the relationship between religion and desistance would enhance the age-graded explanatory model and inform policy efforts with 1) greater clarity regarding the role of religion in processes of desistance,

2) greater knowledge of the various aspects of religiosity, whether a combination of religious behavior and beliefs, through religious behavior alone, or through spiritual beliefs alone, that are sufficient to enact change in deviant pathways, 3) identification of adolescents, whether Black, Hispanic/Latino, and/or White, for whom religiosity/spirituality may extend a beneficial impact, and 4) an increase in awareness of the types of behavioral change, whether anti-ascetic, antisocial, or both, for which religion is most important.

# **Methodological Limitations**

The final line of inquiry focuses on two methodological limitations that stem from previous investigations of the religion-desistance relationship, which includes reliance on single-item measures to gauge religious/spiritual involvement and the utilization of inadequate methodologies to analyze change. First, prior conceptualizations of religiosity within the desistance literature have often incorporated one core indicator, typically church attendance, rather than multiple items that capture various operational definitions. These findings suggest that increases in religious behaviors alone, without consideration of the spiritual aspects of religion, are sufficient in fostering sustained changes in antisocial conduct (Chu & Sung, 2009; Jang, 2013). This may or may not be the case. In either instance, clarification of the breadth of religious behaviors and beliefs required to cultivate change in prior deviance is relevant for informing potential treatment efforts. Religiosity is complex and may hold a different meaning



across individuals. Thus, addition of several items into analyses may better capture the range of a religious/spiritual construct (Fetzer Institute, 2003).

Second, directed by the life course framework, empirical assessment of behavioral change requires methodological techniques that are capable of controlling for persistent and latent criminal propensities while also explaining between- and within-individual variation in antisocial outcomes (see Horney et al., 1995). Application of inappropriate methods to longitudinal data does not establish temporal ordering and may yield biased estimates of the relationship under investigation (Nagin & Farrington, 1992). Useful modeling strategies that operate in accordance with developmental and life course frameworks include, for example, group-based trajectory methods (Nagin & Land, 1993; Nagin, 2005; Piquero, 2008), latent growth curve analysis (Acock & Li, 1999), and multilevel mixed effects modeling (Rabe-Hesketh & Skrondal, 2012). Given these methodological concerns and in order to address the proposed research questions and hypotheses below, mixed effects longitudinal modeling will be used to assess behavioral change over time. Further explication of this particular technique is discussed in the following chapter.

### **Research Questions and Hypotheses**

First and foremost, the proposed research seeks to address the gaps in understanding that relate to the generalizations proposed within Sampson and Laub's age-graded theory of informal social control in two specific ways: through examination of a racially and ethnically diverse sample comprised of contemporary youth, and through examination of an alternate structural turning point, specifically religiosity/spirituality. Consideration of a religious transition may serve as a relevant means of redirecting prior offending pathways, and given the results, may contribute to theoretical elaboration of the life course perspective. The proposed research also



attempts to understand the nature of the religion-desistance relationship in order to inform offender treatment efforts.

In positing a general life course theory, Sampson and Laub (1993; Laub & Sampson, 2003) argued that the principal causal influence underlying both continuity and change in offending involved social bonds. As such, further theoretical specification across historical contexts and sociodemographic characteristics, including race and ethnicity, are deemphasized. With the lack of representation among the Glueck sample they examined, and in light of the historical period in which the subjects transitioned from adolescence into adulthood, the applicability of the universal age-graded theoretical propositions among diverse and contemporary offenders may be limited.

Recent assessment of this deracialized perspective, however, has produced evidence at odds with racial/ethnic invariance. For example, scholars have previously noted that the social bonds implicated in the age-graded theory, including marriage, employment, and parenthood, better accounted for desistance among Whites, and identified that certain sources of social capital were specific to race and ethnicity (e.g., Schoenberger, 2016). Meanwhile, other scholars found that the benefits of marriage were far more evident for minorities as compared to Whites (e.g., Bersani & DiPietro, 2014).

Furthermore, because the major turning points specified by the Glueck men are not equivalent in their prevalence and strength across subgroups (see Bersani & DiPietro, 2014; Craig, 2015; Nielsen, 1999; Schoenberger, 2016), additional assessment of an alternate exit from continued offending, in particular religiosity/spirituality, may enrich theoretical approaches in explaining desistance and may inform treatment efforts in assisting offenders at various levels of criminal involvement. With the paucity of attention directed toward the examination of religion



and its influence on crime/delinquency in general, and in relation to its influence on the desistance process in particular, the first proposed research question (RQ) asks:

RQ1: Does religiosity/spirituality operate as a turning point from deviant behaviors using a representative sample of adolescents transitioning into adulthood?

The number of longitudinal examinations that assess the role of a religious transition from antisocial conduct are scant, and yield mixed support for a beneficial effect of a religious/spiritual turning point on change processes. Keeping in mind that the effect of religiosity on various forms of deviance has been well-established (Baier & Wright, 2001; Johnson & Jang, 2010; Kelly et al., 2015), it may be reasonable to assume that religion may operate as a structural turning point. The first hypothetical statement indicates:

H1: As an elaboration of the age-graded theory of informal social control, a religious/spiritual transition will decrease continued deviance in adulthood.

Secondly, previous examinations of the religion-desistance relationship have provided some initial insights, but has also raised a number of shortcomings in the literature specifically relating to the impact of differing religious dimensions. It is uncertain whether a combination of behavior and beliefs, or through religious behavior only, or through religious beliefs only, that may be most influential in processes of desistance. Accordingly, the second research question asks:

RQ2: What aspects of religiosity/spirituality (both religious behavior and beliefs, behavior only, or beliefs only) prompt change in deviant behavior?

Prior investigations of the religion-desistance relationship have drawn little attention to the multifaceted nature of religiosity-spirituality, typically relying upon single-item indicators to evaluate change. As such, relatively little is understood regarding the impact of religious behavior and religious beliefs combined in facilitating change, or what impact these factors have on deviance when assessed separately.



In accordance with the available literature (Chu, 2007; Chu & Sung, 2009; Jang, 2013), findings from the current examination may reveal that increases in religious behavior alone are sufficient to redirect continued involvement in offending. As such, policy initiatives that aim to reduce recidivism may consider routine church attendance being useful towards that end. Evidence regarding spiritual beliefs on desistance is limited, but some point to the importance of holding religious attitudes to hasten the desistance process, although its impact may be minimal (Stansfield, 2017). Importantly, comparisons drawn to assess the impact of these differing dimensions has not yet been conducted. With these considerations, it is hypothesized that:

H2: Religious behaviors in combination with religious beliefs fosters change from deviant behavior.

H3: Behavioral religiosity alone, specifically church attendance, fosters change from deviant behavior.

*H4: Holding religious beliefs alone does not foster change from deviant behavior.* 

Another objective of the proposed study seeks further assessment of the generality of the age-graded theory through examination of the invariance of a religious turning point effect across racial and ethnic subgroups. The third research question therefore asks:

RQ3: Does a religious turning point have a differential impact across race and ethnicity?

As discussed above, the research contributed by Chu and Sung (2009) and Stansfield (2017) provide preliminary evidence to address this gap in the research. With a single study thus far to examine the religiosity-desistance relationship among Hispanics, and given a lack of significant effects found within this group, questions remain concerning the role of religion in the change process for ethnic minorities (Stansfield, 2017). Building upon these findings, and given the heightened involvement of Blacks in religiosity/spirituality, (e.g., Pew Research Center, 2015; Wallace et al., 2016), and with similarly high rates of religious behavior and



beliefs found among Hispanic/Latinos (Pew Research Center, 2014; 2015), the proposed research hypothesizes:

H5: A religious turning point effect will have a differential impact across racial and ethnic groups.

H6: A religious turning point effect will be strongest for Black respondents as compared to White and Hispanic/Latino respondents.

H7: A religious turning point effect will be weakest for White respondents as compared to Black and Hispanic/Latino offenders.

Finally, clarification regarding the types of conduct, whether as a form of secular deviance, anti-ascetic, or both, for which a religious turning point may be most influential towards change is necessary in light of mixed evidence (Bakken et al., 2014; Chu, 2007; Chu & Sung, 2009; Giordano et al., 2008; Jang, 2013; Ulmer et al., 2012). In addition, due to the null findings reached among serious Hispanic offenders in Stansfield's (2017) recent investigation, further examination of religiosity on differing crime types and across race/ethnicity is required to assess for whom a religious impact is most beneficial. Taking note of these limitations, the remaining set of proposed research questions inquire:

RQ4: Does the impact of religiosity reflect desistance from secular deviance (e.g., property and violent crime)?

RQ4a: How does this relationship differ across race and ethnicity?

RQ5: Does the impact of religiosity reflect desistance from ascetic offenses (e.g., substance use)? RQ5a: How does this relationship differ across race and ethnicity?

Answering these research questions posed would provide informed guidance towards development of faith-based treatment initiatives that aim to divert continued offending. Should religiosity/spirituality impact both secular and ascetic deviance, offender interventions may be designed to target desistance from both types of behaviors. In taking stock of the available literature, evidence provides greater support for a religious turning point in desistance from



ascetic deviance, namely substance use (e.g., Bakken et al., 2014; Chu, 2007; Jang, 2013). Yet, it remains unclear whether or not this effect extends to secular deviance (e.g., Giordano et al., 2008), and up to this point, very little is known regarding the differential impacts of religiosity across race/ethnicity. Based on these extant findings, the hypothesized relationships relating to the nature of religion on desistance suggest:

H8: A religious turning point effect will explain desistance from anti-ascetic behaviors only.

H9: This effect will be largest for Black, in comparison to White and Hispanic respondents.

In sum, the proposed expectations, shaped by the available evidence, indicates that religiosity/spirituality will operate as a deviance-inhibiting turning point (Bakken et al., 2014; Chu, 2007; Jang, 2013), but its variable significance will be contingent upon race and ethnicity. In building upon the research of Chu and Sung (2009) and Stansfield (2017), and given that minorities engage in religious practices and hold spiritual beliefs to a greater extent than Whites, it is expected that a religious transition in adulthood will be most evident among Blacks, followed by Hispanic/Latinos offenders (Pew Research Center, 2014; 2015; Wallace et al., 2016). Addressing these particular questions are a major component of the assessment of the universal assumptions of Sampson and Laub's age-graded theory, and may lead to theoretical elaboration to include religion and a socializing institution that prompts change in deviance.

With greater attention to examination of the role of religiosity/spirituality as a potential turning point, additional factors are considered which may have important implications for policy and treatment initiatives. Guided by the available literature, it is anticipated that a religious transformation will be effective in curtailing ascetic violations, such as substance use. Based on the available evidence regarding the impact of religiosity across crime types, and



examination of these relationships across race/ethnicity, a differential impact is likely and will be most apparent among Black adolescents. Finally, such changes are driven by a combination of church attendance and holding religious beliefs, as well as with church attendance alone.

Alternately, however, holding religious beliefs will not be a sufficient catalyst to enact sustained behavioral change.



#### **CHAPTER SIX:**

#### **METHODOLOGY**

The primary objective of this chapter is to provide ample description of the methodology and analytic strategy for the proposed research. The chapter opens with a description of the sample examined, which is a nationally representative cohort of American youth who have been followed into adulthood. The following section then describes the operationalizations and coding schemes of the relevant measures that will be included in analyses. In conclusion, an explanation of the main analytic strategy involving multilevel mixed effects modeling (Rabe-Hesketh & Skrondal, 2012) is provided which will be utilized to assess the research questions and hypotheses posed in the previous chapter.

# **Data and Sample**

The proposed research analyzes data from the National Longitudinal Survey of Youth 1997 (NLSY97), which is the newest cohort among six longitudinal projects coordinated by the U.S. Department of Labor, Bureau of Labor Statistics. The study was intended to capture school to work transitions among participants followed from adolescence into adulthood (Center for Human Resource Research (CCHR), 2003; Moore et al., 2000]. The NLSY97 is a representative sample of American youth born in the years 1980 to 1984. Study participants selected for inclusion met the age criteria of 12 to 16 years as of December 31, 1996. Baseline interviews were initiated in 1997, with follow-up interviews conducted annually.

During the first phase of multistage cluster probability sampling, project interviewers screened 75,291 households to locate and invite youth for participation in the study. From these



households 9,808 youth comprised the targeted sample, which resulted in a final subset of 8,984 youth completing the main interview (Moore et al., 2000). Two samples were drawn to form the NLSY97 cohort. The first and largest share of participants comprise a self-weighting cross-sectional sample (n = 6,748) intended to be representative of the eligible population of youth in the U.S. in 1997. The second is a supplemental oversampling of Hispanic and non-Hispanic, Black adolescents (n = 2,236), born in the same time frame as the cross-sectional sample. This second sample was devised in order to permit analyses across racial and ethnic groups (CCHR, 2003).

Project interviewers asked the youth respondent and their parent (or caretaker) to spend approximately an hour to complete each interview. Responses to survey questions that were more sensitive in nature, including involvement in illegal activities and substance use, were collected through the audio computer-assisted self-interview (ACASI) method. Through utilization of this technology, youth participants were able to key directly into the computer without parents or interviewers knowing their responses. Utilization of this technology encourages a greater likelihood of respondent cooperation and more truthful responses, thereby increasing validity and enhancing the quality of the data (CCHR, 2003).

To date, 16 rounds of interviews have been conducted, with the most recent available round reflecting data fielded in 2013. Together the NLSY97 data represent a progression from one stage of life (adolescence) into another (adulthood). From the first interview to the most

<sup>&</sup>lt;sup>8</sup> More detailed information on the study operations, sampling, interviewing, and data collection methods are available in the *National Longitudinal Survey of Youth 1997 (NLSY97): Technical Sampling Report* (Moore et al., 2000) found at <a href="https://www.bls.gov/nls/97techsamp.pdf">https://www.bls.gov/nls/97techsamp.pdf</a>, in the *NLSY97 User's Guide: A Guide to Rounds 1-5* (CCHR, 2003) found at <a href="https://www.bls.gov/nls/97guide/nls97usg.htm">www.bls.gov/nls/97guide/nls97usg.htm</a>, and on the NLS website: <a href="https://www.nlsinfo.org">www.nlsinfo.org</a>.



<sup>&</sup>lt;sup>7</sup> Sample weights are used in the NLSY97 data to adjust for population representativeness. This is particularly important in correcting for bias that may arise due to nonresponse and to the oversampling of Hispanic and Black respondents. Weights in the NLSY97 data are applied where necessary to produce unbiased estimations of the population total (CCHR, 2003; Moore et al., 2000).

current data available, respondent ages range from 12 to 34 years, and capture a vital time period when transitions from antisocial conduct are likely to occur (Laub & Sampson, 2003; Sampson & Laub, 1993).

To enable the assessment of religiosity/spirituality and its association to patterns of change in deviant behaviors over time, 13 total rounds of data are utilized. Several baseline measures collected in 1997 serve as time-stable controls, with a measure of religious behavior collected in 2000 until 2011, and measures of religious beliefs collected in the years 2002, 2005, 2008, and 2011 serving as independent variables. In keeping with temporal ordering, dependent measures (secular violations, anti-ascetic violations, and a combined measure of these two types) consist of observations taken from 2000 and on. As of the latest round, 7,141 participants provided interviews, indicating an overall retention rate of 79.5%. The retention rate of the supplemental sample (83.0%) is higher than that of the cross-sectional sample (78.3%).

In light of the research questions and hypotheses proposed, examination of NLSY97 data is ideal for several reasons. First, the NLSY97 data contain multiple and repeated measures of religiosity as well as antisocial behavior, which permits exploration of the temporal effect of changes in religious involvement in concert with processes of desistance from deviant behavior. Second, evaluation of the generalizability of Sampson and Laub's age-graded theoretical assumptions across racial and ethnic subgroups requires a diverse sample. The sizable representation of Black and Hispanic/Latino respondents, as a result of the oversampling design of the NLSY97, allows for reliable estimation to draw comparisons across demographic categorizations. Third, in using data that is nationally representative, as opposed to samples of serious offenders only, external validity is increased and signifies that the findings from this study can be applied to a wider range of individuals. Fourth, because the NLSY97 sample is



drawn from households as opposed to schools, the experiences of school dropouts who are at a marked increase of engaging in criminal actions are more likely to be represented in the data (Bersani & DiPietro, 2014). Fifth, by following the same individuals over an extended number of years, examination of the NLSY97 data overcomes the methodological limitations of prior religion-desistance research. In particular, dynamic statistical approaches such as multilevel mixed effects models that account for within- and between-individual variation on offending behavior during the transition to adulthood may be implemented while also controlling for selection effects (Horney et al., 1995; Nagin & Farrington, 1992; Osgood, 2010). Lastly, the NLSY97 data are extensive and contain information relevant to this study, including dependent measures of secular as well as ascetic deviance. The richness of the data also yields important demographic information as well as theoretically relevant controls. These controls include variables that characterize early individual characteristics (e.g., early criminal propensity, early criminal behavior), family processes (e.g., maternal bonding), structural background factors (e.g., urbanicity, family structure, family size), in addition to measures of social bonds established in adulthood (e.g., marriage, parenthood, employment, military enlistment, and higher education).

# **Description of Study Measures**

The current study is directed by key life course assumptions to model within- and between-individual change from deviant behavior (e.g., Horney et al., 1995; Laub & Sampson, 2003), and includes a host of variables that comprise the measures employed in analyses. A summary of the operationalizations and frequency distributions of these variables are presented in Table 1.

Most of the analytical variables described below have been dichotomized. This coding scheme has been adopted bearing in mind the advantages that it presents. First, when analyzed



dichotomously, sensitivity of measurement is equated and may better reveal the nature of the associations examined (Farrington & Loeber, 2000). Secondly, according to Farrington and Loeber (2000), a dichotomization strategy allows for the ease of interpretation and presentation of findings, and may not necessarily lower the measured strength of associations. The variable descriptions, coding, and justification for their use are provided in fuller detail below. An explanation of the dependent variables is provided first, with a discussion of the independent and control variables to follow.

## **Dependent Variables**

Following previous operationalizations for secular and ascetic deviance (see Cochran, 1988:299), self-reported responses to delinquency indicators in each round of the NLSY97 data are used to formulate the dependent measures. Violations of a secular standard including property, violent, and drug sale crimes, are utilized for the first outcome measure. The second outcome measure characterizes violations of ascetic norms and reflect self-reported use of illicit substances including marijuana and harder drugs such as cocaine.

Secular deviance. While examinations of the religion-desistance nexus have focused primarily on changes in substance use over time (e.g. Bakken et al., 2014; Chu, 2007; Jang, 2013), far fewer have investigated whether or not a religious turning point generalizes to other forms of deviant conduct such as property or violent crimes. Giordano and colleagues (2008) explored the role of religiosity/spirituality on long-term, sustained criminal desistance; however, no significant associations were found among the serious offenders they examined. More recently, Stansfield (2017) assessed the influence of religious beliefs on reduced criminal offending as well as substance use across subgroups of racial and ethnic categories of serious offenders. In spite of the greater endorsement of spiritual attitudes among Black and Hispanic



offenders in this sample, Stansfield found a significant transformative effect for reduced criminal activity among White offenders only. Together findings from these studies suggest that the role of religiosity/spirituality on change from criminal conduct remains inconclusive. Further assessment of this relationship will extend the existing literature and may improve the ability to discriminate among the types of deviance for which a religious transition is likely to have an impact.

At the initial interview, adolescent respondents were asked if they had *ever* 1) purposely damaged or destroyed property that did not belong to them; 2) stolen something from a store or something that did not belong to them worth less than 50 dollars; 3) stolen something from a store, person or house, or something that did not belong to them worth 50 dollars or more including stealing a car; 4) committed other property crimes such as fencing, receiving, possessing or selling stolen property, or cheated someone by selling them something that was worthless or worth much less than what it was worth; 5) attacked someone with the idea of seriously hurting them or have a situation end up in a serious fight or assault of some kind; and/or 6) sold or helped sell marijuana (pot, grass), hashish (hash) or other hard drugs such as heroin, cocaine or LSD. In follow-up rounds, the wording of these questions shifted, as respondents were then asked whether or not they had engaged in each these activities *since the date of last interview* (occurring approximately 1 year prior).

Of note, these delinquency items were asked of every youth respondent from Rounds 1 to 7. In subsequent interviews, the questions were only asked of individuals who had reported a prior arrest in addition to a small comparison group. This results in a large number of missing values for these measures in later rounds and may be a potential limitation of the current work. This issue is discussed further in the Data Limitations section.



For each round of interviews, items relating to involvement in secular actions are coded as dichotomous indicators (0 = no; 1 = yes). To examine the patterning of this type of violation over time, an additive scale was constructed to form a count-based measure of secular deviance (0 = no participation in any secular violations; 6 = participation in all secular violations). This coding scheme is similar to prior investigations that draw on NLSY97 data and analyze repeated observations of delinquent conduct (see Apel et al., 2007; Apel, Paternoster, Bushway, & Brame, 2006; Sweeten, Bushway, & Paternoster, 2009).

Assessment of the scale reliability of the secular deviance items were conducted using the coefficient alpha (Cronbach, 1951) at various time points (2000,  $\alpha$  = .67; 2005,  $\alpha$  = .67; 2010,  $\alpha$  = .59), and across racial and ethnic groups in 2000 (Whites  $\alpha$  = .67; Blacks  $\alpha$  = .65; and Hispanics  $\alpha$  = .70). In 2000, the types of secular violations in which respondents reported the greatest involvement include assault (8%; n = 673) and petty theft (7%; n = 659).

Estimations of the alpha coefficient for the secular deviance scale are slightly below the traditionally accepted threshold level of .70 (Nunnally, 1978; Schmitt, 1996; Taber, 2016). This particular limitation is not isolated to the secular deviance outcome measure, but also impacts the combined measure of secular and ascetic deviance, the religious beliefs scale, and the combined measure of religious behavior and beliefs described below. Although higher values of scale reliability are preferred for these measures, the degree of interrelatedness of these items within their respective scales may be insufficient, and in turn, may ultimately weaken the results from the analytical models. In spite of this possibility, the measures are included in present analyses due to their use as additive scales in prior examinations (Apel et al., 2006; 2007; Day et al., 2009; Ganzach, Ellis, & Gotlibovski, 2013; Ganzach & Gotlibovski, 2013; Sweeten et al, 2009). Furthermore, at the preliminary stages lowered scale reliability may not necessarily demonstrate



that a poor measure is being used for subsequent analyses (Nunnally, 1978; Taber, 2016). This issue is reviewed further in the Data Limitations section of this chapter.

Ascetic deviance. Much like static examinations of religion on deviant behaviors, dynamic investigations of religious transitions have generally explored anti-ascetic behaviors as outcome measures, namely substance use. Examination of religiosity on ascetic wrongdoing is in keeping with the prior literature that specifies the greater likelihood of disapproval for behaviors such as substance use within religious institutions (Burkett & White, 1974; Cochran, 1988; Middleton & Putney, 1969).

Life course assessments have generally produced mixed evidence regarding the nature of the religion-desistance relationship. For example, some scholars conclude that religiosity operates primarily to prevent the onset of illicit substance use (Chu, 2007; Ulmer et al., 2012), while some have indicated that religiosity fosters change toward the cessation of alcohol/substance use (Bakken et al., 2014; Jang, 2013). Still others find that religion bears little to no influence as a turning point in substance use desistance (Ulmer et al., 2012). In light of the racial/ethnic variation in religious involvement, it remains unknown if a beneficial religious effect on deviant actions exerts equal relevance across demographic subgroups, as only two studies have examined these relationships across race/ethnicity (Chu & Sung, 2009; Stansfield, 2017).

To examine change in patterns of ascetic violations, information on marijuana use and harder drug use are employed to formulate the second outcome measure. During the initial interview, adolescent respondents were asked if they had *ever* used marijuana in their lifetime, and for subsequent rounds, respondents were inquired about their use of these substances *since* the date of last interview. Starting in the second round of interviews (in 1998), the series of



questions on respondent drug use was expanded. Information on involvement with harder drugs was collected, specifically asking respondents if they had *ever* "used any drugs like cocaine or crack or heroin, or any other substance not prescribed by a doctor, in order to get high or to achieve an altered state." In following the same pattern for follow-up questions, respondents were subsequently asked about their use of hard drugs *since the date of last interview*.

Similar to the measurement of secular violations described above, and based on previous studies that examine measures of substance use acquired from the NLSY97 (e.g., Apel et al. 2006; 2007), items that demonstrate the use of marijuana, or use of harder drugs are first constructed as dichotomous indicators (0 = no; 1 = yes). In 2000 about one in five respondents reported use of marijuana (22%; n = 1,994), with a much smaller number reporting use of harder drugs (6%; n = 543).

It is important to note that for analyses that examines the extent of a religious impact on change in deviant behaviors (Research Question 4), the outcome of secular violations is evaluated separately from ascetic violations. For the remaining models, a combined scale with counts of both secular (6 delinquency items) and anti-ascetic (2 substance use items) deviance ranging from 0 to 8 is used. Using counts of these behaviors together provides indication of prevalence, frequency, and severity of involvement in antisocial conduct (see Apel et al., 2007). As noted above, this index measure also shows acceptable values, but with some scales indicating lowered levels of internal consistency across time points (2000,  $\alpha = .70$ ; 2005,  $\alpha = .64$ ; 2010,  $\alpha = .54$ ), and across racial/ethnic subgroups in 2000 (Whites  $\alpha = .71$ ; Blacks  $\alpha = .66$ ; and Hispanics  $\alpha = .73$ ).

<sup>&</sup>lt;sup>9</sup> At time this document was written, data used to formulate the ascetic deviance measures were not yet available through *NLSY Investigator* for the final collection round (2013). Observations for ascetic deviance therefore extend from 2000 to 2012.

#### **Definition of Desistance**

Of the various ways that desistance is conceptualized in the literature (e.g., see Bushway et al., 2001; Uggen & Massoglia, 2003), two noted but conflicting definitions are typically considered. The first conceptualization is based on the criminal career dimension of termination characterized by a discrete condition of instantaneous and permanent desistance (Bushway et al., 2001; Kurlychek, Bushway, & Brame, 2012). When defined this way, desistance is measured as a binary variable. In contrast, the second conceptualization reflects the theoretical basis of the life course perspective and conceives desistance as a developmental process with a variable rate of participation in antisocial conduct over the course of a criminal career (Laub & Sampson, 2003). Over time eventual reductions in offending levels approach a zero state (Bushway et al., 2001; Laub et al., 1998).

Drawing on the second definition, this study examines desistance as a gradual process of slowing deviant behaviors, with secular and ascetic deviance outcomes set to vary over time. In addition to accounting for the variation occurring within- and between- individuals, exploration of change in deviant behaviors in concert with a religious transition will yield greater insight into the dynamic processes that foster change.

# **Independent variables**

Prior investigations of the influence of religion on processes of desistance have often relied on a single item of church attendance (e.g., Chu & Sung, 2009; Jang, 2013), while others have focused on the influence of spiritual attitudes alone (e.g., Stansfield, 2017). Scholars maintain that the operationalization of religiosity with single-item measures is limited and does not fully capture the complexity of this construct (e.g., Bakken et al., 2014; Ulmer et al, 2012). Studies that employ multiple indicators of religiosity/spirituality, however, also yield



inconsistent findings regarding the effect of religion on the change process. For example, some suggest that religiosity is not important for marijuana use cessation (Ulmer et al., 2012), while others find that religiosity is a significant predictor of substance use desistance, particularly from alcohol and cocaine use (Bakken et al., 2014).

In light of these differing results, investigations have not yet attempted to disentangle the effects of the various dimensions of religiosity on the desistance process. As such, the proposed study attempts to clarify the nature of this association by discerning the religious factors, whether behavioral or beliefs or a combination of both aspects that predict change from deviance.

Distinction of the strength of these effects separately is needed in order to better identify the processes of religiosity that likely contribute to desistance.

**Religious behavior**. An item that characterizes behavioral religiosity asks respondents how often they have attended a religious service (e.g., service at a church, synagogue, or mosque) in the past 12 months. Responses range from 0 to 7 and reflect service attendance in the last year as never to every day, respectively. This measure is assessed yearly beginning in 2000 when respondent ages range from 15 to 21 years, and extends to 2011 when the sample is approximately 26- to 32-years-old. In 2000, approximately 16% (n = 1,460) of youth respondents reported attending weekly worship services in the previous year.

**Religious beliefs**. Five items comprise the measure of religious beliefs and reflect respondent endorsement to: 1) "I don't need religion to have good values" (reverse coded); 2) "Religious teachings (Bible, Koran, Torah, etc.) should be obeyed exactly as written in every situation;" 3) "I often ask God to help me make decisions;" 4) "God has nothing to do with what happens to me personally" (reverse coded) and 5) "I pray more than once per day," coded as 0 =



false, 1= true. <sup>10</sup> Consistent with prior studies that examine the religious beliefs items available in the NLSY97 data (e.g., Day et al., 2009), the items are summed and form an index with scores ranging from 0 to 5. Higher scores reflect greater endorsement of religious beliefs. In terms of internal consistency, this measure has acceptable values for most years the information was collected (2002,  $\alpha = .66$ ; 2005,  $\alpha = .70$ ; 2008,  $\alpha = .71$ ; and 2011,  $\alpha = .74$ ), but show lowered values across minority groups (Whites  $\alpha = .70$ ; Blacks  $\alpha = .53$ ; and Hispanics  $\alpha = .53$ ). In 2002 when questions regarding religious beliefs are first asked of respondents, a high percentage agreed that they asked God to help them make decisions (63%; n = 5,636), while approximately a third believed that religious teachings should be obeyed exactly as written (34%; n = 2,998).

Because measures of religious beliefs are captured in 2002, 2005, 2008, and 2011 only, analyses that examines the impact of religious beliefs (Research Question 2) relies on observations available from 2002 to 2011. Further, when assessing the multidimensional impact of a religious turning point, the religious behavior item is combined with religious beliefs to form an overall religiosity/spirituality index measure that ranges from 0 to 12. Greater individual religiosity would be demonstrated with higher scores in this combined measure. Reliability assessment of these items together indicate low values of internal consistency across time (2002,  $\alpha = .54$ ; 2005,  $\alpha = .57$ ; 2008,  $\alpha = .58$ ; and 2011,  $\alpha = .60$ ), and across racial/ethnic groups (Whites  $\alpha = .61$ ; Blacks  $\alpha = .41$ ; and Hispanics  $\alpha = .44$ ). Again, these low scale reliabilities may be due to the few number of test items that form this combined index, and/or may be ascribed to the

 $<sup>^{10}</sup>$  The final item "I pray more than once per day" may be interpreted by some as a reflection of religious behavior rather than an item to gauge religious attitudes. Taking this into consideration, exploratory factor analysis (EFA) was conducted and revealed a lone underlying construct of religious beliefs, with all items loading onto this single factor (eigen value = 1.32, p <.001), with loadings between 0.41-0.62. Given that the item in question has an acceptable factor loading value onto the religious beliefs construct (.52), it was retained in analyses.

reduced sample sizes across separate subgroups. Additionally, these indicators as a combined measure may actually be reflective of differing religious constructs.

Because patterns of religious behaviors and beliefs tend to vary over time, it is necessary to account for these changes during adolescence and into adulthood (e.g., Argue, Johnson, & White, 1999; Uecker, Regnerus, & Vaaler, 2010). These independent variables are therefore treated as time-varying across the relevant rounds of data.

# **Race and Ethnicity**

Of particular importance to the current research is exploration of the role of race and ethnicity within the life course framework, and this is accomplished through examination of a religious transition across demographic subgroups. To draw comparisons of a religious/spiritual bond across race/ethnicity, separate subgroups are devised in order to conduct a parallel set of analyses. Whites comprise 52% (n = 4,665) of the sample, followed by Blacks (26%; n = 2,335) and Hispanics (21%; n = 1,901). A very small number of respondents included in the mixed-race category (0.9%; n = 83) were dropped from analyses, which results in a final subsample of 8,901 individuals.

Main analytic models that examine the impact of religiosity/spirituality on deviant behavior using the full sample include dummy coded race and ethnicity control variables, with White as the reference category. When the potentially variable impact of religiosity/spirituality across race and ethnicity are assessed, separate models are analyzed across subgroups separated as White, Black, and Hispanic respondents.



### Control Variables<sup>11</sup>

While attempting to minimize the effects of selection and taking into consideration that a number of background factors may play an important role in explaining both religiosity and change in offending, several control variables are included in the analytical models. These controls are informed by the developmental/life-course literature (e.g., Gottfredson & Hirschi, 1990; Laub & Sampson, 2003; Sampson & Laub, 1993; 1996), from examinations that focus on age-graded life-course transitions (e.g., Bersani & DiPietro, 2013; 2014; Bersani & Doherty, 2013), and from prior longitudinal investigations that utilize the NLSY97 data (e.g., Landers, Mitchell, & Coates, 2015; Mitchell, 2016; Mitchell & Caudy, 2017; Pyrooz, 2014). Several control variables utilized in the analysis are treated as time-invariant, stable characteristics that account for gender, individual differences in antisocial propensity, prior religiosity, structural background factors, maternal bonding, and neighborhood context. In addition to the independent, dependent, and age variables, controls for the various types of adulthood social bonds are likely to change over time. Thus, these variables are specified as time-varying also.

**Demographics.** Demographic characteristics such as gender and age are primary correlates of involvement in and out of religious and delinquent behaviors. Gender differences in change from delinquency and drug use have received little theoretical and empirical attention, as much of the literature places emphasis on the desistance processes of male offenders. However, a growing body of work that focuses on female desistance specifies that certain adult bonds are likely to be more salient for female offenders. These include, for example, religiosity/spirituality

<sup>&</sup>lt;sup>11</sup> As noted in Chapter 4, a number of factors and perspectives concerning the influence of religiosity were considered, including types of religious affiliation. This is an important variable that has been controlled for in prior life course examinations of change in deviant behavior (see e.g., Ulmer et al., 2012). Because the NLSY97 data collected this information from respondents beginning in 2005, this presents a problem with temporal ordering if the measure is included as a control measure.



(Giordano et al., 2002), motherhood (e.g., Kreager, Matsueda, & Erosheva, 2010) and military enlistment (Craig & Foster, 2013).

Given that age is inversely related to crime, offenders are generally younger as peak rates of lawbreaking are evinced between the ages of 15 and 18 years (Blumstein et al., 1986; Wolfgang et al., 1972). Shortly thereafter, with the approach of adulthood, rates of criminal behavior sharply decline. From a life course perspective, the downward trend in offending during adulthood is attributed to age-graded life events (e.g., marriage, military enlistment, and employment) that operate to redirect offending trajectories (Sampson & Laub, 1993).

Demographic characteristics are also predictors of religiosity/spirituality. For example, women universally outnumber men in their participation of religious activities (Sherkat & Ellison, 1999; Stark, 2002). Additionally, prior investigations of the age-religion relationship show patterns opposite those of the age-crime curve. More specifically, evidence consistently suggests that religious salience steadily declines from adolescence into emerging adulthood (Arnett, 2004; Uecker, Regnerus, & Vaaler, 2010), with rates of religious affiliation increasing in later adulthood (Argue et al., 1999).

Given these demographic correlates of both desistance and religiosity, *gender* and *age* are controlled with gender dichotomized as 0 = female, 1 = male. Change in age is predictable from year to year, but age is set to vary over time to account for individual growth in relation to involvement in antisocial conduct (Osgood, 2010). The sample consists of 51% (n = 4,559) male and 49% (n = 4,342) female participants, whose average age at the initial interview was 14.4 years (SD = 1.5).

**Early individual characteristics.** Certain individual characteristics that emerge in the first years of life, such as a propensity towards offending, are associated with desistance and



religiosity. According to Gottfredson and Hirchi (1990), self-control is predictive of individual differences in the tendency to engage in criminal conduct that remains stable throughout the life course. Individuals with low self-control may experience problems manifested through inattention, insensitivity, poor/negative emotionality, and/or an inability to get along well with others. Other behavioral indicators of low self-control includes arrest and substance use at early ages (see Gottfredson & Hirchi, 1990:90-91; DeLisi & Vaughn, 2008).

Low self-control is also a general characteristic, which results in social failures in a variety of contexts and life domains. Gottfredson and Hirschi (1990) argue that, in spite of aggregate declines in offending, individuals low in self-control have greater involvement in criminal behavior than those with higher levels of self-control. Thus, change in offending may be less likely for people lacking in self-control. Development of this antisocial orientation may selectively lead toward a greater likelihood of future criminal behavior and a decreased likelihood of participation in religious activities (Ellis, 1987; Ellis & Thompson, 1989).

To account for individual differences, two measures have been created that includes *early criminal propensity* and *early problem behaviors*. The first is comprised of items based on the Child Behavior Checklist (CBCL, Achenbach & Edelbrock, 1987) and follows a prior examination that forms these same items into a propensity construct (Caudy, 2011). These particular questions, however, were only asked of respondents born in 1982, 1983, and 1984.

The early criminal propensity measure considers 4 items collected from respondents during Round 1. Two items were asked of both genders: "You lie or cheat" and "You are unhappy, sad, or depressed." Two additional items were asked of females only, and included "Your school work is poor" and "You have trouble sleeping." Parallel items asked of males only included "You have trouble concentrating or paying attention" and "You don't get along with



other kids." Study participants provided responses to these items on a 3-point scale as not true, sometimes true, and often true, with higher scores (range 0-8) suggesting a greater propensity toward delinquency. Participants with scores of 6 or greater were subsequently coded as having *early criminal propensity* (= 1), as compared to all others (= 0). A small percentage of youth reported experiencing these behavioral/emotional difficulties (8%; n = 450). The scale demonstrates high reliability in the first round ( $\alpha = .94$ ), and across race/ethnicity (Whites  $\alpha = .94$ ; Blacks  $\alpha = .94$ ; and Hispanics  $\alpha = .94$ ).

The second measure, *early problem behaviors*, follows a previous study that uses 3 items to capture antisocial conduct at an early age (e.g., Bersani & DiPietro, 2014). Respondents reporting involvement in 2 of the 3 items, including onset of arrest, substance use (alcohol and marijuana), and sexual activity at or before age 13 are coded (0 = no, 1 = yes) as demonstrating problematic behaviors at an early age. Respondents meeting this criteria (4%; n = 354) may be at increased risk of continued antisocial behavior and may be less inclined to participate in religious/spiritual activities.

In addition, to control for the influence of *prior religiosity* on changes in offending behavior, an item that measures the number of days in a typical week that a respondent and his/her family participated in religious activities are considered. Religious participation was asked of respondents aged 14 and younger who were residing in the same household of their parents/caretakers. This measure included assessment of behaviors such as church attendance and reading scripture together as a family, and was collected in the first four rounds of data collection. Reports of religious involvement with family (0 = no, 1 = yes) in these early years are controlled. About 40% (n = 3,559) of the adolescent respondents reported involvement in weekly religious activities with their families.



Structural background factors. Guided by the propositions of the age-graded theory (Sampson & Laub, 1993) and prior tests of the generalizability of this perspective (e.g., Bersani & DiPietro, 2013; 2014), a number of structural aspects that are likely associated with desistance and religiosity are taken into account. In childhood, sources of structural disadvantage, such as family disruption and poverty, indirectly influence stable patterns of antisocial conduct through family processes. These pathways are modified later in life given social bonding processes in adulthood (Sampson & Laub, 1993). Additionally, recent evidence suggests that religiosity offers a buffering, protective benefit between the harms associated with poverty and psychological adjustment or well-being (Gebauer, Nehrlich, Sedikides, & Neberich, 2013; Joshanloo & Weijers, 2016a; 2016b).

Measures of structural background factors control for *family structure*, *family size*, *socioeconomic status*, and *poverty status*. Formulation and the coding structure of these controls is based on prior longitudinal examinations that have used the NLSY97 data to analyze life course events (Bersani & DiPietro, 2013; 2014; Pyrooz, 2014). *Family structure* characterizes intact households in which the respondent reports living with both biological parents (= 1), as compared to households with differing family compositions including single-parents, stepparents and extended family as caretakers (= 0). Approximately half of respondents had an intact family structure (49%; n = 4,358). *Family size* considers the number of individuals residing in the household who are under the age of 18 years. The typical household in 1997 had approximately 2 children under age 18 (SD = 1.3). *Socioeconomic status* is constructed with proxy measures of parental education, and is reflected within 3 mutually exclusive dummy variables. These categories represent at least one parent receiving some college education, at least one parent graduating from high school (reference category).



Nearly half (46%; n = 4,109) of respondents had at least one parent that received some college education, nearly a third (32%; n = 2,871) that had at least one parent that completed their high school education, and a smaller percentage (10%; n = 850) where neither parent completed high school.

Finally, a control variable representing *poverty status* is created from 2 items that involves the measure of income to poverty ratio in the year prior to the first interview, and if the respondent had ever gone through hard times. Going through hard times may involve the respondent living in a place without water or electricity, or in a homeless shelter. Due to the high percent of missing values for these items, respondents meeting the poverty status criteria were those at or below the poverty line or had ever experienced periods of hardship (= 1). Approximately 18% (n = 1,637) of the sample was either at or below the poverty line as assessed in 1997, or reported having experienced hard times in the past.

Maternal attachment. As mentioned above, the age-graded theory places emphasis on parental attachment, or the familial processes occurring "under the roof," which are unified with contextual factors to explain delinquency trajectories (Sampson, 1992:77; Sampson & Laub, 1993). That is, the social context indirectly impacts delinquency through a harsh and rejecting parenting style. Evidence also shows that adolescents who are attached to their mothers are also likely to be more religious (Bahr, Maughan, Marcos, & Li, 1998), but they also point to the mediating role of religiosity between parental bonding and delinquency. Findings indicate that bonding with parents is related to subsequent religiosity, which in turn, impacts delinquency involvement (e.g., Litchfield, Thomas, & Li, 1997). It is important, therefore, to control for processes of bonding as represented by measures that tap into maternal bonds.



In the first round of interviews, 8 items assessed the relationship between the respondent and his/her residential mother. The first three statements correspond to a 5-point response scale (from strongly disagree to strongly agree) and include items such as: "I think highly of her," and "She is a person I want to be like." The five remaining items also correspond to a 5-point response scale (from never to always) and include questions such as: "How often does she praise you for doing well?" and "How often does she help you do things that are important to you?" Scores for the 8 items range from 0 to 32, with higher scores indicating greater levels of an affectional tie to their mother. To capture those on the higher end of the distribution, respondents with scores of 28 or greater are coded as demonstrating high levels of attachment (= 1).

Additional items of family bonding processes relate to maternal monitoring/supervision. These questions ask about the degree of maternal knowledge regarding the respondent's whereabouts and friends, and includes questions such as: "How much does she know about your close friends, that is, who they are?" and "How much does she know about who you are with when you are not at home?" Responses are also arranged on a 5-point scale that corresponds to mother knows nothing to knows everything. Scores range from 0 to 16, with higher scores indicating greater monitoring and supervision of the respondent by their residential mother. Individuals with scores of 12 or greater are thus coded as having a higher degree of maternal supervision (= 1).<sup>12</sup>

A combination of the two indicators above forms the overall *maternal bond* measure indicating high degrees of maternal attachment and supervision/monitoring. Those endorsing higher scores in both measures of attachment and monitoring/supervision represent greater

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<sup>&</sup>lt;sup>12</sup> The summary measures that form the maternal support and maternal monitoring/supervision scales were constructed by CCHR, and as a result, scale reliability and dimensionality with the current subsample was not assessed (but see CCHR (1999) *NLSY97 Codebook Supplement Main File Round 1: Appendix 9: Family Process and Adolescent Outcome Measures*, for more information on the reliability and validity of these variables).

degrees of bonding to their mother (= 1). About 43% (n = 3,800) of youth respondents reported a strong bond with their mother with a high degree of maternal awareness of their activities.

Context. Urban disorder and its relation to delinquency has held a long-standing tradition in theoretical criminology, with early studies proposing that disorganized areas such as the innercity are likely to be criminogenic (e.g., Burgess, 1925; Shaw & McKay, 1942). Disorder is captured by decaying physical evidence of dilapidated housing, abandoned buildings, public drug use, and prostitution (Sampson & Raudenbush, 1999). In addition to these characteristics, disadvantaged neighborhoods tend to be limited in their social processes including collective efficacy, which then gives way to greater delinquency and crime (Sampson, Raudenbush, & Earls, 1997; Sampson & Raudenbush, 1999). For serious offenders, residential mobility from disadvantaged neighborhoods to a new location operates as an important turning point from continued offending by severing previous connections to deviant peers (Kirk, 2012). Similarly, religious involvement provides a means of social control, which in turn lowers delinquent actions, in spite of neighborhood disadvantage (Johnson et al., 2000).

Context variables which are held constant include *urbanicity* and an index of *neighborhood disorder*. Construction of these particular variables is consistent with prior developmental research that makes use of the NLSY97 data to examine factors related to the patterning of criminal careers (e.g., Mitchell, 2016; Mitchell & Caudy, 2017; Pyrooz, 2014). The first measure controls for the community in which the respondent grew up, whether the innercity (= 1) or other location, which includes the suburbs or rural area (= 0). Individuals growing up in the inner-city account for 21% (n = 1,908) of the sample.

The second control represents *neighborhood disorder* and is comprised of items asking if, in a typical week, respondents hear gunshots in their neighborhood and if there are any gangs in



the respondents' neighborhoods. This item also includes interviewer perceptions of the respondent's neighborhood conditions and subjective determination of whether most of the buildings are dilapidated or poorly kept. Reporting of at least 2 of the 3 above characteristics are coded (= 1) as indicative of *neighborhood disorder*. Respondents living in run-down, disorganized communities account for a minority of the sample overall (10%; n = 934).

Time-at-risk. Although the NLSY97 is not a high-risk offender sample, an important control measure includes an accounting of incarceration time. Because confinement may impact the opportunity to become involved in offending behavior, especially among those who are actively engaged, excluding this control may underestimate individual rates of offending (see Piquero et al., 2001). One way to control for this type of exposure includes taking into account the time spent confined (see Loughran et al., 2016; Mulvey & Schubert, 2012). In the present study, the total number of months that respondents are incarcerated is included in the analyses. Of respondents who self-reported having been incarcerated previously, nearly 2 months on average were spent imprisoned (SD = 10.6).

Adult social bonds. Traditional life course events as discussed within the age-graded theory that likely trigger the change process may involve a *quality marriage*, *stable employment*, and *military service* (Sampson & Laub, 1993; 1996). Alternate turning points that have received empirical attention recently and are incorporated in the current work include attainment of *higher education* (e.g., Rambaut, 2005) and *parenthood* (e.g., Kreager et al., 2010; Landers et al., 2014).

Given that individuals are likely to transition in and out of social bonds, the bond measures are specified to vary over time. This strategy involves formulations of dichotomous controls that demonstrate either the presence or the absence of a particular bond in each round of data. This can include, for example, respondents coded as married (= 1) or unmarried (= 0);



employed (= 1) or unemployed (= 0). Note that in each round, respondents hold only one status for each bond, that of being married or not, or being employed or not. This strategy reflects the time-varying nature of adult social bonds and is also applied to military enlistment, attainment of higher education, and parenthood.

Once respondents reach age 15, they are queried each year about their marital status. Controlling for a *quality marriage* combines 3 items. The first item asks respondents about their marital status (0 = other, 1 = married), in combination with two items that gauge the quality of this relationship by asking how close the respondent feels towards their partner and how much they feel that their partner cares about them. The relationship quality items are assessed on a scale from 0 to 10, with higher responses indicating a more loving bond with their spouse. In following the example of a prior study utilizing a similar construct (see Hardie & Lucas, 2010), married respondents rating 9 or 10 total on these items are coded as having a high quality bond in their marriage (= 1). By 2013, approximately 44% (n = 3,924) of respondents indicated they were married.

The stable employment control is formulated from an item that is asked of respondents every year about the total number of weeks worked at any employee-type job since the date of last interview. The *stable employment* control represents respondents who reported working at a job for one year or greater (= 1). As of 2013, this included a majority of respondents (85%; n = 7,604) having had stable employment. Other social bonds acquired in adulthood that are controlled include *parenthood* (= 1), which is represented by respondents reporting at least one

<sup>&</sup>lt;sup>13</sup> The items that are used to gauge a quality marriage are only captured between 2000 and 2007. These measures in each round are highly skewed, with the majority of respondents providing ratings of their marriage at 9 or 10. Despite the limitation of this measure, the characterization of marital relationships was retained due to the consistency of these responses within the available data. Of married individuals, approximately halt reported having a quality and affectionate relationship with their spouse (48.0%; n = 1,565).

Table 1. Description and Summary Measures of Study Variables (n = 8,901)

Variables	Description	n or M (SD)	%
Dependent Variables			
Secular Deviance <sup>a</sup>	Ever purposely damage or destroy property	545	6
(low to high)	Stolen something worth less than \$50	659	7
	Ever stolen something worth \$50 or more	279	3
	Ever commit other property crimes	230	3
	Ever attack someone with the idea of seriously hurting them	673	8
	Ever sold drugs	519	6
		M=0.4 (SD=0.9); Range 0-6	
Ascetic Deviance <sup>a</sup>	Used marijuana	1,994	22
(low to high)	Used hard drugs like cocaine, crack or heroin	543	6
ζ ,		M=0.3 (SD=0.6)	; Range 0-2
Combined Deviance Measure	Committed acts of secular and/or ascetic deviance	M=0.7 (SD=1.2); Range 0-8	
Independent Variables			
Religious Behavior	"In the past 12 months, how often have you attended a worship s	ervice?"	
(low to high)	Everyday	53	< 1
	Several times a week	613	7
	About once a week	1,460	16
	About twice a month / 24 times	510	6
	About once a month / 12 times	503	6
	Less than once a month / 3-12 times	1,046	12
	Once or twice	1,756	20
	Never	2,000	23
		M=2.4 (SD=2.1); Range 0-7	



Table 1. continued

Variables	Description	f or M (SD)	%
Religious Beliefs a, b	"I don't need religion to have good values."	3,984	45
(low to high)	"The Bible should be obeyed exactly as written."	2,998	34
	"I often ask God to help me make decisions."	5,636	63
	"God has nothing to do with what happens to me personally."	5,890	66
	"I pray more than once a day."	2,755	31
		M=2.8 (SD=1.5)	; Range 0-5
Combined Religiosity Measure	Demonstrated religious involvement/endorsed religious beliefs	M=4.7 (SD=3.1); Range 0-12	
Race/Ethnicity a, c, d	White	4,665	52
•	Black	2,335	26
	Hispanic	1,901	21
Demographic Controls			
Gender	Male	4,559	51
	Female	4,342	48
Age <sup>a</sup>	18	20	< 1
	17	608	7
	16	1,702	19
	15	1,864	21
	14	1,841	21
	13	1,708	20
	12	1,158	13
		M=14.4 (SD=1.5) Range 12-18	
Early Individual Controls			
Early Criminal Propensity <sup>a</sup>	High level of early criminal propensity	450	8



Table 1. continued

Variables	Description	f or M (SD)	
Early Problem Behaviors <sup>a</sup>	Reported 2 or more early problem behaviors	354	4
Prior Religiosity <sup>a</sup>	In a typical week, family does something religious	3,559	40
Structural Background Controls			
Family Structure <sup>a</sup>	Both biological parents living in the home	4,358	49
Family Size	Number of individuals in household under age 18		
(low to high)	12	2	< 1
,	10	1	< 1
	9	6	< 1
	8	38	< 1
	7	61	< 1
	6	122	1
	5	371	4
	4	920	10
	3	2,047	23
	2	3,276	37
	1	2,054	23
	0	3	< 1
		M=2.4 (SD=1.3)	) Range 0-12
Socioeconomic Status <sup>a, e</sup>	Parent went to college	4,109	46
	Parent graduated high school	2,871	33
	Neither parent graduated high school	850	10
Poverty Status <sup>a</sup>	At or below poverty line or ever gone through hard times	1,637	18



Table 1. continued

Variables	Description	f or M (SD)	Variables
Social Bonding Control  Maternal Attachment <sup>a</sup>	High levels of maternal bonding, monitoring/supervision	3,800	43
Context Controls  Urbanicity <sup>a</sup>	Grew up in inner-city	1,908	21
Neighborhood Disorder <sup>a</sup>	Reported 2 or more indicators of neighborhood disorder	934	10
Time-at-Risk Incarceration Time	Total number of months spent incarcerated	M=1.8 (SD=10.6) Range 1-299	
Adult Social Bonds  Quality Marriage <sup>a</sup>	Married	3,924	44
Stable Employment <sup>a</sup>	Held stable employment > 1 year	7,604	85
Parenthood <sup>a</sup>	Had at least one biological child living in household	4,448	50
Educational Attainment <sup>a</sup>	Attended post-secondary education	5,579	63
Military Service <sup>a</sup>	Served in a branch of the armed forces	533	6

#### Notes:

<sup>&</sup>lt;sup>e</sup> Reference category is Neither parent graduated from high school.



<sup>&</sup>lt;sup>a</sup> Item(s) represent dichotomous measure(s) with frequencies/percentages reflecting the presence of that indicator (0 = no, 1 = yes).

<sup>&</sup>lt;sup>b</sup> Two items, "I don't need religion to have good values," and "God has nothing to do with what happens to me personally," are reverse-coded.

<sup>&</sup>lt;sup>c</sup> Separate models are estimated based on racial/ethnic categories, specifically White, Black, and Hispanic members. Participants reporting membership in the 'Other' race category comprised a relatively small percentage (0.9%) of the sample. These cases were not included in analyses.

<sup>&</sup>lt;sup>d</sup> Reference category is White.

biological child living in the same household, respondents reporting *educational attainment* (= 1) or attendance at some level (2-, 4-year college, or graduate program) of higher education, and/or ever having *military service* (= 1). By 2013, half of the sample were parents with at least one biological child living in the same residence (50%; n = 4,448), a high percentage had entered post-secondary education (63%; n = 5,579), and a very small percentage had served in the military (6%; n = 533).

### **Data Limitations**

First, the current study is reliant upon self-reported outcomes, which may be considered problematic in obtaining truly valid conclusions. Difficulties associated with respondent memory and underreporting may call into question the accuracy of findings drawn from the use of such measures (Thornberry & Krohn, 2000). Furthermore, the NLSY97 data lacks sources of complimentary assessments, such as official arrest records, that are necessary to substantiate measurement concordance of outcomes. In spite of these drawbacks, self-report survey is the prevailing approach to examine patterns of criminal involvement and continues to be regarded as a reliable and valid method (Hindelang, Hirschi, & Weis, 1981; Krohn, Thornberry, Gibson, & Baldwin, 2010; Thornberry & Krohn, 2000). In addition, recent evidence suggests reasonable concordance with self-report measures of criminal behavior in the NLSY97. Results demonstrated an association between self-reported arrest and self-reported offending measured in the first round of interviews, with significantly greater odds of arrest among those reporting involvement in any criminal activity (19%) in comparison to those reporting no involvement (6%) (see Shulman, Steinberg, & Piquero, 2013).

It is also important to note that information on delinquent and criminal activity was collected from every participant during the first 7 interviews (1997 to 2003). In the rounds that



followed, the administration of these survey items changed. Subsequent delinquency data were only gathered from participants who had ever reported having official contact with the police (e.g., arrested or taken into custody for illegal behavior) in addition to a comparison group comprised of approximately 10% of randomly selected respondents. Although the criminal activity of those more likely involved in antisocial behavior continues to be assessed in the NLSY97 project, the change in survey administration presents a potential limitation given large percentages of missing values in the latter rounds.

Prior investigations that explore self-reported offending outcomes provide several reasons that the missing values do not result in biased estimations. Together these studies indicate that the NLS97 delinquency data are missing at random for most respondents, percentages of missing are fairly similar across racial/ethnic groups, and these percentages of missing across groups do not significantly differ (Landers et al., 2015; Mitchell, 2016; Mitchell & Caudy, 2017). For these reasons, it may be expected that the shift in survey administration for delinquency data do not yield biased results.

In addition, assessment of reliability for certain scales (e.g., secular deviance, combined deviance measure, religious beliefs, and combined religiosity measure) indicated lowered internal consistency given alpha values estimated below the generally acceptable level of .70 (e.g., Nunally, 1978). For these measures, attenuated reliability may be due to test length given the small number of items in each scale, and/or reliability may lessen as a result of the decrease in sample sizes when alpha is calculated across smaller subgroups. Therefore, in light of these conditions, a low alpha coefficient may be expected (Schmitt, 1996).

A way to improve scale reliability is to add more test items (Cronbach, 1951; Nunnally, 1978; Schmitt, 1996). However, low alpha levels cannot be corrected in this instance given the



NLSY97 is a secondary source of data. In the current analyses, inclusion of these scales with limited reliability may lead to underestimations or non-significant associations with the relationships of interest. It remains to be seen whether this particular shortcoming will be overcome, but results discussed in the next chapter will clarify whether low scale reliability is a matter of concern. According to Schmitt (1996:353) the values set for alpha thresholds are arbitrary, as "there is no sacred level of acceptable or unacceptable level of alpha." As such, low values for the alpha coefficient for these scales are taken as a potential problem for attenuated associations. In turn, current analyses will be interpreted with caution. Nonetheless, usefulness of the scales may be revealed in forthcoming examinations of the religion-desistance relationship.

### **Analytical Method**

Guided by the proposed research questions and hypotheses, use of a multilevel mixed effects approach, specifically random intercept models, will be used as the primary analyses. Multilevel mixed effects techniques are important tools in the evaluation of life course propositions given their applicability in modeling change over time. Random intercept models have been employed in prior investigations that examine the impact of religiosity on desistance among high risk offender samples (e.g., Stansfield, 2017; Stansfield et al., 2017).

As a simplistic form of hierarchical linear modeling, the purpose of this statistical approach is to allow for accurate estimation of longitudinal relationships between predictor variables and outcomes of interest that are inherently organized in a hierarchical structure (Bryk & Raudenbush, 1992; Luke, 2004; Snijders & Bosker, 1999). For example, in the present study, repeated observations of religiosity/spirituality and counts of deviant behaviors are "nested" within the same individual over the course of several years. With use of the correct statistical approach, these multiple measurements then enable the study of change across time points.



To accurately represent the two-level structure of longitudinal data, an improved method over traditional regression techniques is required to disentangle and convey processes operating at the lower level or within individuals (level 1), as well as those at the higher level or between individuals (level 2) in relation to the outcomes of interest (Bryk & Raudenbush, 1992; Snijders & Bosker, 1999). Consisting of both fixed and random effects, the random intercept model accounts for the variability that exists at each level, thereby providing a solution to the serial correlation that arises from repeated observations for each individual. With serial measures, observations are not fully independent and the results yield underestimated standard errors. This poses a greater risk of committing a Type 1 error (Horney et al., 1995; Johnson, 2010; Osgood, 2010). This violation is resolved with use of a multilevel framework that incorporates a random intercept that is assumed to vary from individual to individual (Raudenbush & Bryk, 2002; Snijders & Bosker, 1999).

In addition to the statistical pitfalls related to analyzing hierarchical data with static approaches, the interpretation of results reached may render an incomplete picture of the social processes at work which may ultimately lead to misguided policy (Johnson, 2010). For example, given that minorities are more committed to religion, with higher percentages engaging in religious practices and holding spiritual beliefs over Whites (Pew Research Center, 2014; 2015), it may be difficult to determine whether differences in the outcomes are due to race/ethnicity (or some other unobserved, preexisting difference) or if change in offending is due to the influence of a religious transition. Application of mixed models to the current study, therefore, is particularly useful for examination of within-individual variation as each respondent may have a unique start in his/her own transition, and as respondents may evolve differently over time. With a focus on modeling inter-individual change, the NLSY97 respondents examined herein operate



as their own controls, precluding selection effects that may confound the true relationship between religiosity and change from antisocial behavior (Osgood, 2010). Finally, another advantage of the mixed effect approach over regression is its capacity to handle the unbalanced nature of hierarchically-structured, longitudinal data due to variation in missing observations across respondents (Raudenbush & Bryk, 2002; Snijders & Bosker, 1999).

# **Poisson versus Negative Binomial Distribution**

Because the dependent variables of interest include counts of secular violations, ascetic violations, and a combined index of both forms of deviance, the distribution with consideration of the random effects was assumed to be Poisson. Following negative binomial estimation of the models with the outcome measures, a test of the log-transformed overdispersion parameter alpha (lnα) was conducted using a likelihood-ratio test. With large and significant chi-bar values for the secular violations and the combined index, the probability that the data represent a Poisson distribution is essentially zero, and negative binomial modeling is preferred instead (see StataCorp, 2013:7). Thus, negative binomial estimation as opposed to Poisson, with the secular and combined measure was employed. Alternately, Poisson estimation was conducted with the ascetic outcome measure.

# **Analytical Steps**

In review, multilevel mixed effects models are employed 1) to evaluate the impact of religiosity/spirituality as a turning point from deviance in the transition to adulthood, 2) to further understand the nature of religion on deviance, and assess whether change is facilitated through religious behavior, or through endorsement of religious beliefs, or through a combination of both features, 3) to test the generality of Sampson and Laub's age-graded theory through a parallel set of models that estimate the varying influence of religiosity among



respondents grouped according to racial and ethnic categorizations (Whites, Blacks, and Hispanics), and 4) to assess the extent of a religious/spiritual impact on change from differing forms of deviant conduct, including violations of a secular or an ascetic standard. To identify for whom and for what type of deviance religiosity/spiritually is most effective, examination of its potentially variable impact across racial and ethnic groups for secular violations separately from ascetic violations is also conducted.

Analyses proceeds in several steps, but begins with examination of patterns of religious behaviors, religious beliefs, secular deviance, and ascetic deviance across racial and ethnic subgroups to assess the differing rates of participation in these behaviors over time. Percentages of involvement for these behaviors is plotted for each racial/ethnic subgroup at each time point. Chi-square analyses are then conducted to examine significant differences in participation of these behaviors between White and Black respondents, between White and Hispanic respondents, and between Black and Hispanic respondents.

To address the research objectives listed above, several mixed effects models are estimated controlling for time-varying covariates and stable individual characteristics. Analyses are grouped into 3 broad sets that includes 1) a main model that examines the overall relationship between a combined measure of religiosity/spirituality and a combined measure of secular/ascetic deviance, 2) a series of 12 models utilizing *religious behavior* as the primary independent variable to evaluate its influence on deviant conduct across race/ethnicity, its impact on secular deviance across race/ethnicity, and its impact on ascetic deviance across race/ethnicity, and 3) another series of 12 models that employs *religious beliefs* as the primary independent variable to assess its influence on deviant conduct across race/ethnicity, its impact on secular deviance across race/ethnicity, and its impact on ascetic deviance across



race/ethnicity. Finally, to examine the effect sizes across models, a *z*-test for the equality of coefficients for unequal sample sizes was used when appropriate (Brame, Paternoster, Mazerolle, & Piquero, 1998; Clogg, Petkova, & Haritou, 1995; Paternoster, Brame, Mazerolle, & Piquero, 1998).

To provide greater insights into the dynamic relationship between a religious turning point and continued deviance, it is important to adjust the time-varying independent variables of interest to allow for appropriate modeling of within-individual and between-individual effects. This procedure involves separation of these sources of variation into two parts (see Horney et al., 1995; Osgood, 2010; Raudenbush & Bryk, 2002). First, person-specific means for the main independent variables (e.g., religiosity/spirituality index, religious behavior, and religious beliefs) are created which represent the variation between individuals. Next, to reflect the variation within individuals, variables are formulated that represent deviations of the value of each independent variable from the respective person-specific mean. Both of these effects are then included in each model. As noted above, given the significance of within-individual change for life course theory, a mixed effects approach estimates within-individual change in order to evaluate the likelihood of continued deviant behavior for an individual when involved in a religious transition and when they are not involved.



### **CHAPTER SEVEN:**

### **RESULTS**

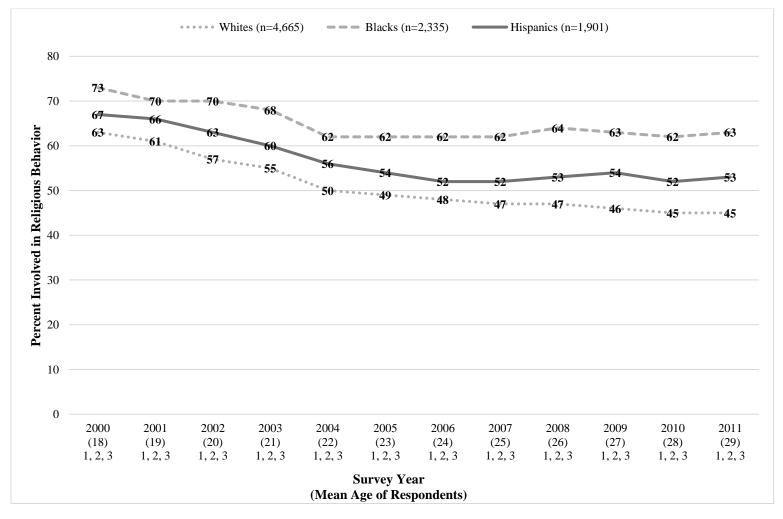
The analyses presented herein addresses the research questions that drive the current study, with results discussed in 2 phases. The first phase of findings include descriptive statistics of the independent and dependent variables of interest. To illustrate differences over time in the average rates of religious behavior, religious beliefs, secular deviance, and ascetic deviance across race/ethnicity, percentages for each subgroup are summarized across rounds. The second phase includes preliminary analyses and a presentation of the multilevel mixed effects results that longitudinally examines the impact of a religious/spiritual turning point on deviant conduct. The chapter concludes with a final summation of the results, which are then are connected back to the research questions and hypotheses presented.

### **Religiosity/Spirituality Trends**

As shown in Figure 1, ever attended church/religious services is plotted for each year between 2000 and 2011 for White, Black, and Hispanic subgroups. In line with prior evidence, higher percentages of minority respondents reported attending church as compared to Whites, with greatest religious involvement found among Blacks which is followed by Hispanic respondents (Chu & Sung, 2009; Wallace et al., 2016; Pew Research Center, 2014; 2015). These distinctive patterns of religious practice persist over the course of the 12-year observation period, with statistically significant differences between each of the racial/ethnic subgroups (between Whites and Blacks, between Whites and Hispanics, and between Blacks and Hispanics) found in each year.



Figure 1. Percentages of NLSY97 Respondents Involved in Religious Behavior Over Time Differentiated by Race/Ethnicity (n = 8,901)



# Note:

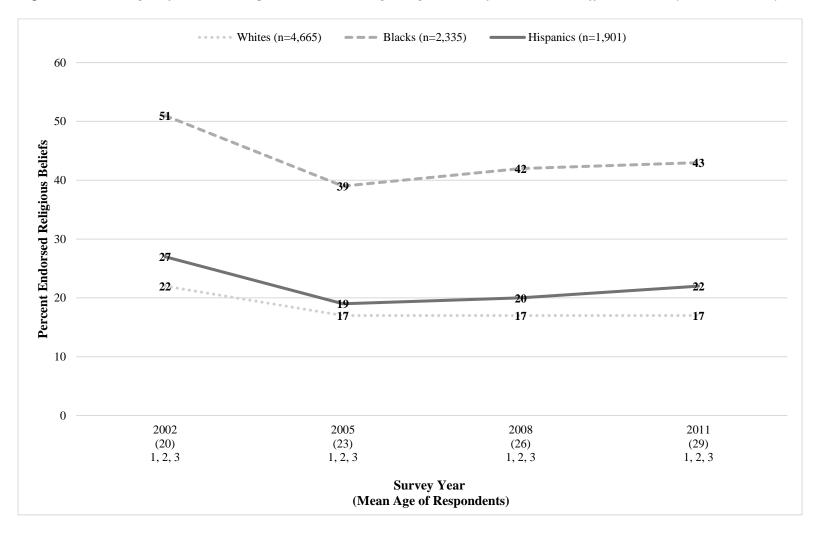
<sup>&</sup>lt;sup>3</sup> Significant differences (p < .05) between Black and Hispanic respondents.



<sup>&</sup>lt;sup>1</sup> Significant differences (p < .05) between White and Black respondents.

<sup>&</sup>lt;sup>2</sup> Significant differences (p < .05) between White and Hispanic respondents.

Figure 2. Percentages of NLSY97 Respondents Endorsing Religious Beliefs Over Time Differentiated by Race/Ethnicity (n = 8,901)



## Note:

<sup>&</sup>lt;sup>3</sup> Significant differences (p < .05) between Black and Hispanic respondents.



<sup>&</sup>lt;sup>1</sup> Significant differences (p < .05) between White and Black respondents.

<sup>&</sup>lt;sup>2</sup> Significant differences (p < .05) between White and Hispanic respondents.

In 2000, when the average NLSY97 respondent is approximately 18 years of age, large shares of individuals within each subgroup reported involvement in religious behavior. This includes 73% of Black, 67% of Hispanic, and 63% of White respondents reporting church attendance in the previous year. Further into adulthood, these percentages steadily decrease for all subgroups, but appears to decline most for Whites given an 18-point difference, or 28.6% decrease in church attendance from 2000 to 2011. These findings mirror results from prior research indicating an overall decline in religious behavior as youth transition from adolescence into adulthood (Uecker et al., 2007), with Whites having a greater tendency as compared to other demographic groups, to lower their frequency of religious involvement into adulthood (Arnett, 2004; Desmond, Morgan, & Kikuchi, 2010; Pew Research Center, 2012). This may indicate a diminishing salience of religious practice for Whites as they age.

Alternately, current results also show that church attendance may continue to be an important component in the lives of minority respondents, with smaller percentage point decreases for Hispanics (14-point difference, or 20.9% decrease), and the smallest decrease for Blacks (10-point difference, or 15.9% decrease) over this observation period (Arnett, 2004; Pew Research Center, 2012). Purported reasons for these racial/ethnic differences may include, for example, shifts in political viewpoints toward greater liberalism among young adults (Pew Research Center, 2012), and the church remaining a central institution, source of social support, and operating as a familial extension for minorities in particular (Christerson, Edwards, & Flory, 2010; Ellison & Sherkat, 1999; Lincoln & Mayima, 1990; Pew Research Center, 2012; 2014).

Echoing the subgroup differences in religious behavior, rates of religious beliefs are also found to vary across race/ethnicity (see Figure 2). Black respondents are far more likely to have a religious belief system with greater agreement overall to statements such as "religious



teachings should be obeyed exactly as written" and "I often ask God to help me make decisions" in comparison to the other subgroups. This finding is consistent with prior evidence that draws comparisons of religious attitudes across race/ethnicity, with the highest levels of religious beliefs demonstrated among Blacks (Arnett, 2004; Pew Research Center, 2015; Wallace et al., 2016). Although the percentages of Hispanics holding religious beliefs is comparable to White respondents, fewer percentages of Whites overall endorse such statements. For example, in 2002, 51% of Blacks report holding religious beliefs, while only 27% of Hispanics and 22% of Whites report having these same beliefs. Statistically significant differences in these trends across subgroups continue over time, with the highest percentages over and above others are found among Blacks.

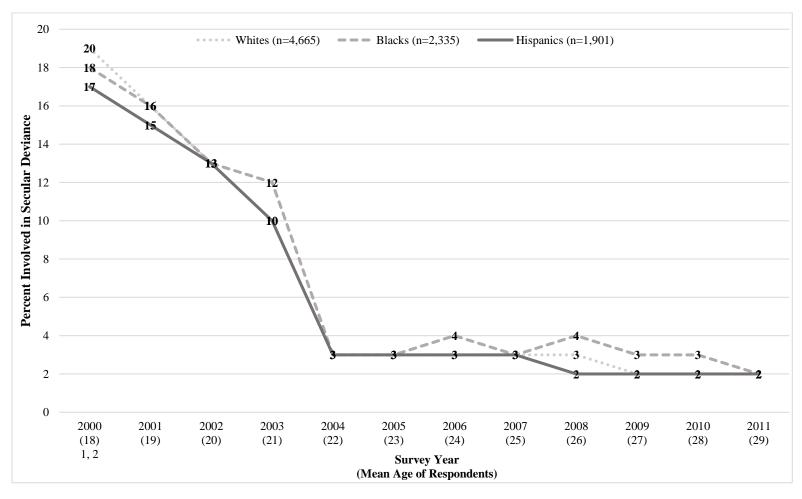
Overall, it appears that endorsement of religious beliefs is highest in 2002 when respondents are youngest (20 years of age on average). These percentages drop considerably at the second time point in 2005, with a 12-point difference (or 23.5% decrease) for Blacks and a 5-point difference (or 22.7% decrease) for Whites. The largest difference in holding religious beliefs from the first time point to the second is among Hispanics, with an 8-point difference (or 29.6% decrease). These percentages increase slightly as minority respondents age further into adulthood, but stay virtually the same for Whites over time.

#### **Secular/Ascetic Deviance Trends**

Racial/ethnic variation of involvement in secular forms of deviance, such as property, violent, and drug sale offenses, from 2000 to 2011 are plotted in Figure 3. Significant differences in percentages of those reporting participation in secular deviance was observed in the first year only, and was found between Whites and Blacks, and between Whites and Hispanics. Beyond



Figure 3. Percentages of NLSY97 Respondents Involved in Secular Deviance Over Time Differentiated by Race/Ethnicity  $(n = 8,901)^{14}$ 



#### Note:

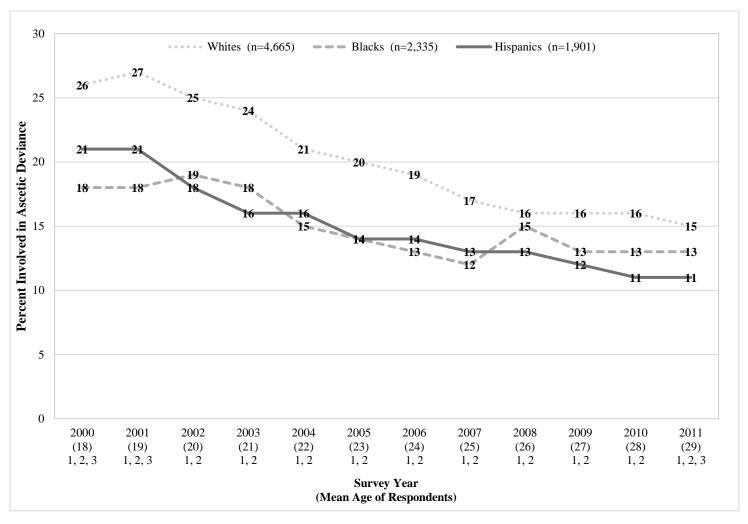
<sup>&</sup>lt;sup>14</sup> Presentation of this figure may be misleading as information on delinquent conduct was restricted beginning in 2003. In subsequent years, delinquency questions were only asked of individuals who reported a prior arrest in addition to a 10% random sampling of respondents.



<sup>&</sup>lt;sup>1</sup> Significant differences (p < .05) between White and Black respondents.

<sup>&</sup>lt;sup>2</sup> Significant differences (p < .05) between White and Hispanic respondents.

Figure 4. Percentages of NLSY97 Respondents Involved in Ascetic Deviance Over Time Differentiated by Race/Ethnicity (n = 8,901)



#### Note:

<sup>&</sup>lt;sup>3</sup> Significant differences (p < .05) between Black and Hispanic respondents.



<sup>&</sup>lt;sup>1</sup> Significant differences (p < .05) between White and Black respondents.

<sup>&</sup>lt;sup>2</sup> Significant differences (p < .05) between White and Hispanic respondents.

this first year, rates of participation were fairly similar across subgroups with steady and lower rates reflected in later years.

Of particular importance is the substantial decline observed from 2003 to 2004 when reported rates of participation in secular deviance drop by 73% overall. At first glance, it would appear that the illustration reproduces the dramatic decline in the age-crime curve following peak rates of offending in the transition toward adulthood. However, as noted in the previous chapter, data collection of the delinquency items in the NLSY97 survey changed in 2003. Responses to these items were only collected from those who reported ever having prior official contact in addition to a small comparison group of randomly selected individuals. Although the percentages reflected in Figure 3 may capture, to some extent, the aggregate declines in antisocial behaviors that are associated with age (Blumstein & Cohen, 1987; Caspi & Moffitt, 1995; Farrington, 1986), the large decreases viewed here are likely reflecting changes in survey administration.

Finally, with findings similar to previous studies of racial/ethnic differences in drug use prevalence (Bachman et al., 1991; Wallace et al., 2002), patterns of ascetic deviance, specifically illicit use of marijuana and harder drugs like cocaine, in the NLSY97 sample indicate significant differences between subgroups (see Figure 4). Specifically, White respondents, as compared to Blacks and Hispanics, reported the highest average rates of illicit drug use. Between 2000 and 2011, these rates remained highest for Whites, setting them apart from minorities in their antiascetic involvement. Important differences were evident between Whites and Blacks, and between Whites and Hispanics every year. Significant variation in ascetic deviance between Black and Hispanic respondents were found in the earlier years of the observation period, with Black youth displaying lower rates of ascetic deviance. As the years progress, it appears that percentages of involvement in this type of deviance is fairly similar for Black and Hispanic



respondents given the lack of significant differences between these two groups until the final round of observation.

In general, individuals' use of illicit substances reportedly diminish with age. The largest decrease in ascetic deviance over time are found among Hispanics with a 10-point difference in percentage (or 47.6% decrease), which is followed by Whites with an 11-point difference (or 42.3% decrease) over time. Although Figure 3 should be viewed advisedly, the decreasing rates of participation in both secular and ascetic deviance following the transition into adulthood suggests some degree of concordance with the age-crime relationship (Hirschi & Gottfredson, 1983). These findings also align with the life course perspective that found the inevitability of desistance in both predatory crimes and drug use into later adulthood (Laub & Sampson, 2003).

## **Preliminary Analyses**

Prior to a running the mixed effects analyses, an important initial step with longitudinal data is to run an unconditional model, otherwise known as a one-way analysis of variance (ANOVA) that includes the dependent variable only, to assess the between-individual variance against a null hypothesis that there is no random-intercept in the model. Failure to reject the null hypothesis indicates a lack of variability at the differing levels, suggesting that static approaches or traditional regression methods are preferred over random effects modeling (Rabe-Hesketh & Skondal, 2012; Raudenbush & Bryk, 2002).

Evaluation of the differential variability can be conducted using a likelihood-ratio test where the unconditional model is analyzed with and without a random-intercept specified (Rabe-Hesketh & Skrondal, 2012). With the random-intercept estimates stored, the two models are then compared using the likelihood-ratio test. Given the small and significant *p*-value in the present



analysis (LR  $\chi^2$  = 12,397.11; p < .001), the null hypothesis that there is no random-intercept is rejected, which provides support for the use of a multilevel mixed effects strategy in answering the current research questions posed.

In response to the research questions that drive the current study, analyses are divided into 3 main sets that apply a multilevel mixed effects approach to a 1) main model that estimates the impact of a combined measure of religious behaviors and beliefs on deviant conduct (violations of both secular and ascetic standards); then, to compare the impact of religious behavior separately from holding religious beliefs, the next set of analyses includes 2) *religious behavior* as a primary independent variable on outcomes of interest, and 3) *religious beliefs* as a primary independent variable on outcomes of interest.

For ease and to provide a more meaningful interpretation of the results, the coefficient estimates are first exponentiated (Hilbe, 2011) and then percentage differences in the odds of the outcome are presented. Finally, to compare the effects of religiosity across certain models, *z*-tests that evaluate the equality of coefficient estimates are estimated (Brame et al., 1998; Clogg et al., 1995; Paternoster et al., 1998).

### Religiosity/Spirituality as a Turning Point

The central focus of the current investigation is assessment of the generality of the age-graded theory of informal social control with an alternate social bond in adulthood, specifically religiosity/spirituality, and its impact on deviant behaviors within a more diverse and contemporary sample. In addition to examination of this transition, evaluation of the nature of the religion-desistance relationship and further assessment of the universal assumptions of the age-graded theory across racial/ethnic subgroups are conducted.



Overall, present findings indicate that religious behaviors and beliefs are modest predictors of decreased deviance over time given the relatively few significant and negative within-individual effects across models. Depending on the religious predictor examined (e.g., combined measure of religious behavior and religious beliefs, religious behavior alone, or religious beliefs alone), most coefficients for the between-individual effects of religiosity are significant across models. As discussed in the previous chapter, these results are not of substantive interest for the current research because these associations are likely confounded by alternative explanations (see Horney et al., 1995; Osgood, 2010). Rather, the focus is directed to estimations of within-individual change, which indicate that differences in deviant conduct are attributed to the causal impact of religiosity/spirituality and are not due to preexisting characteristics. Greater interest lies with results that demonstrate the within-individual effect of a religious/spiritual transition that demonstrates whether individuals commit more acts of deviance when they are less religious as compared to when they are more religious.

Previous analyses of the religiosity-desistance relationship that utilized a mixed effects modeling strategy to account for dependencies in the data (e.g., Stansfield, 2017; Stansfield et al., 2017) did not pay particular attention to within-person change. The current study therefore provides nuanced, but important insights on the social control function of religiosity on change from deviant behaviors. The strength and significance of a religious/spiritual turning point effect, however, varies depending on factors such as the type of religious dimension (religious behavior and/or religious beliefs), the type of deviance (secular or ascetic), and the racial/ethnic subgrouping (White, Black, and/or Hispanic). Results from each model are explained first, and their congruence with corresponding hypotheses are then discussed. Final evaluation of the study hypotheses requires consideration of the results in full.



Results from the main model analysis conducted with the full sample show an overall non-significant within-individual effect of religious behavior combined with religious beliefs on deviant behavior (Table 2). This initial finding suggests that religiosity is not an influential factor in promoting internal processes of change within individuals over time. Given these results, support for the first hypothesis has not been established.

Further, in this model, the coefficient for the between-individual religiosity/spirituality effect is significant and negative, which is in the expected direction. This result is similarly patterned in the remaining models (see Tables 3-10), with all between-individual effects of religious behavior and/or religious beliefs demonstrating a significant and negative association with the specified deviant behaviors. Although the influence of prior individual differences cannot be ruled out, these values suggest that respondents who attend church with greater frequency and/or who endorse religious beliefs to a greater degree, engage in less deviant behaviors over time as compared to respondents who attend church and hold religious beliefs to a lesser extent, net of controls for social and demographic characteristics.

Table 2 highlights several control variables that repeatedly predict involvement in deviance across subsequent models. These predictors include gender, age, early criminal propensity, early problem behaviors, presence of a maternal bond, time spent incarcerated, and social ties in adulthood such as having a quality marriage and military service. In short, these trends indicate that males, in comparison to females, display greater involvement in deviant conduct, and that participation in deviance decreases with age. Factors that are predictive of higher risk of participation in deviance include having previously spent time incarcerated as well



Table 2. Multilevel Mixed Effects Main Model of Religious Behavior/Beliefs Combined on Deviant Conduct  $^{a}$  (n = 8,901)

	Coefficient	SE
Fixed effects		
Between-subject religious behavior/beliefs	-0.155***	0.014
Within-subject religious behavior/beliefs	-0.028	0.016
Black	0.191*	0.088
Hispanic	0.009	0.092
Controls		
Gender	0.322***	0.066
Age	-0.068***	0.008
Early criminal propensity	0.228*	0.114
Early problem behaviors	0.585***	0.161
Prior religiosity	-0.029	0.071
Family structure	-0.088	0.068
Family size	-0.051	0.028
Parent-college graduate	0.367**	0.126
Parent-HS graduate	0.154	0.126
Poverty status	-0.209*	0.091
Maternal bond	-0.208**	0.073
Urbanicity	-0.077	0.077
Neighborhood disorder	0.181*	0.092
Incarceration time	0.014***	0.003
Marriage	-0.427***	0.121
Employment	-0.137*	0.064
Parenthood	-0.117	0.089
Educational attainment	-0.158**	0.059
Military service	-0.586**	0.203
Constant	0.805**	0.238
Model $\chi^2$	277.8	36
Random effects		
$\sqrt{oldsymbol{\psi}}$	0.980	0.081

Notes: \* p < .05; \*\* p < .01; \*\*\* p < .001



<sup>&</sup>lt;sup>a</sup> Deviant conduct includes secular and ascetic deviance as a combined measure.

Table 3. Multilevel Mixed Effects Model of Religious Behavior on Deviant Conduct  $^{a}$  (n = 8,901)

	Coefficient	SE
Fixed effects		
Between-subject religious behavior	-0.318***	0.021
Within-subject religious behavior	-0.014	0.001
Black	-0.019	0.075
Hispanic	-0.057	0.079
Controls		
Gender	0.360***	0.056
Age	-0.080***	0.004
Early criminal propensity	0.268**	0.103
Early problem behaviors	0.765***	0.154
Prior religiosity	-0.046	0.062
Family structure	-0.150*	0.060
Family size	-0.048*	0.024
Parent-college graduate	0.257*	0.103
Parent-HS graduate	0.017	0.104
Poverty status	-0.122	0.078
Maternal bond	-0.225***	0.064
Urbanicity	-0.050	0.067
Neighborhood disorder	0.247**	0.081
Incarceration time	0.015***	0.003
Marriage	-0.367***	0.069
Employment	-0.045	0.032
Parenthood	-0.299***	0.051
Educational attainment	0.025	0.031
Military service	-0.739***	0.128
Constant	0.799***	0.164
Model $\chi^2$	3461.	26
Random effects		
$\sqrt{oldsymbol{\psi}}$	1.516	0.072

Notes: \* p < .05; \*\* p < .01; \*\*\* p < .001

a Deviant conduct includes secular and ascetic deviance as a combined measure.

Table 4. Multilevel Mixed Effects Model of Religious Beliefs on Deviant Conduct  $^{a}$  (n = 8,901)

	Coefficient	SE
Fixed effects		
Between-subject religious beliefs	-0.216***	0.026
Within-subject religious beliefs	-0.011	0.031
Black	0.180*	0.091
Hispanic	0.001	0.094
Controls		
Gender	0.356***	0.067
Age	-0.065***	0.008
Early criminal propensity	0.250*	0.115
Early problem behaviors	0.580***	0.163
Prior religiosity	-0.143*	0.070
Family structure	-0.105	0.069
Family size	-0.057*	0.028
Parent-college graduate	0.322*	0.127
Parent-HS graduate	0.118	0.127
Poverty status	-0.178	0.092
Maternal bond	-0.227***	0.074
Urbanicity	-0.053	0.078
Neighborhood disorder	0.177	0.093
Incarceration time	0.013***	0.003
Marriage	-0.452***	0.121
Employment	-0.133*	0.064
Parenthood	-0.117	0.089
Educational attainment	-0.198**	0.059
Military service	-0.586**	0.205
Constant	0.754**	0.241
Model $\chi^2$	302.3	39
Random effects		
$\sqrt{oldsymbol{\psi}}$	1.039	0.083

Notes: \* p < .05; \*\* p < .01; \*\*\* p < .001



<sup>&</sup>lt;sup>a</sup> Deviant conduct includes secular and ascetic deviance as a combined measure.

as measures of individual difference such as early criminal propensity and participation in antisocial conduct at an early age. Consistent with the propositions of the age-graded theory, informal bonds established in childhood through maternal supervision and attachment, and those established in adulthood through marital attachment, military service, and stable employment (when significant) are associated with reductions in deviant behavior outcomes from adolescence into adulthood (Laub & Sampson, 2003; Sampson & Laub, 1993).

#### Impact of Religious Behaviors and Religious Beliefs on Deviant Behavior

Continued analyses with the full sample are presented in Tables 3 and 4 and specify the impact of religious behavior and religious beliefs, respectively, on deviant conduct (a combined measure of secular and ascetic deviance). Similar to findings reached in the main model analyses, the main effect of church attendance on within-individuals change is not significant. Furthermore, in keeping with this pattern of results, the main effect of holding religious beliefs on within-individual change from deviant conduct is also not significant. Based on these main effects findings related to the type of differing religious dimensions, support for the second and third hypotheses have not been found, but support is evident for the fourth hypothesis.

## Impact of Religious Behaviors and Religious Beliefs on Deviant Behavior Across Race/Ethnicity

The next set of analyses continues to explore the separate impact of religious behaviors from religious beliefs on the combined measure of deviant behavior, and extends the investigation to examine these relationships across racial/ethnic subgroups. In accordance with the preceding analyses, religious behavior and religious beliefs (Tables 5 and 6, respectively) are largely predictive of between-individual differences in change from deviant behavior, which as mentioned, does not preclude selection effects. Although the impact is modest, religious behavior has a significant and negative within-individual effect, which reduces the odds of



Table 5. Multilevel Mixed Effects Model of Religious Behavior on Deviant Conduct Across Race/Ethnicity  $^a$  (n = 8,901)

	Whi	te	Bla	ıck	Hispanic		
	(n = 4,	665)	(n = 2)	,335)	(n = 1,	901)	
Fixed Effects	Coefficient	SE	Coefficient	SE	Coefficient	SE	
Between-subject religious behavior	-0.351***	0.027	-0.232***	0.041	-0.325***	0.054	
Within-subject religious behavior	0.004	0.013	-0.047**	0.017	-0.006	0.024	
Controls							
Gender	0.326***	0.071	0.449***	0.117	0.382**	0.138	
Age	-0.081***	0.005	-0.062***	0.008	-0.100***	0.011	
Early criminal propensity	0.285*	0.139	0.184	0.207	0.337	0.245	
Early problem behaviors	0.631**	0.211	0.952**	0.309	0.782*	0.347	
Prior religiosity	0.000	0.080	-0.052	0.134	-0.114	0.149	
Family structure	-0.158*	0.076	-0.146	0.124	-0.139	0.146	
Family size	-0.054	0.034	0.009	0.042	-0.104	0.060	
Parent-college graduate	0.391*	0.182	0.134	0.229	0.137	0.177	
Parent-HS graduate	0.231	0.187	-0.333	0.224	0.051	0.176	
Poverty status	-0.090	0.123	-0.132	0.130	-0.134	0.165	
Maternal bond	-0.240**	0.086	-0.065	0.126	-0.395*	0.154	
Urbanicity	-0.097	0.101	-0.013	0.117	0.025	0.145	
Neighborhood disorder	0.094	0.138	0.360**	0.126	0.231	0.175	
Incarceration time	0.023***	0.004	0.009*	0.004	0.011	0.008	
Marriage	-0.347***	0.085	-0.181	0.158	-0.458**	0.173	
Employment	-0.053	0.039	0.009	0.076	-0.064	0.088	
Parenthood	-0.399***	0.073	-0.150	0.088	-0.363**	0.128	
Educational attainment	0.004	0.037	0.128	0.071	0.028	0.087	
Military service	-0.836***	0.160	-0.623	0.335	-0.429	0.281	
Constant	0.774**	0.241	0.051	0.339	1.426***	0.374	
Model $\chi^2$	2039	.58	834	834.53		483.76	
Random Effect							
$\sqrt{oldsymbol{\psi}}$	1.421	0.089	1.532	0.150	1.683	0.192	

Notes: \* p < .05; \*\* p < .01; \*\*\* p < .001

a Deviant conduct includes secular and ascetic deviance as a combined measure.



Table 6. Multilevel Mixed Effects Model of Religious Beliefs on Deviant Conduct Across Race/Ethnicity  $^{a}$  (n = 8,901)

	Whi	te	Bla	ıck	Hispanic $(n = 1,901)$		
	(n = 4,	665)	(n = 2)	,335)			
Fixed Effects	Coefficient	SE	Coefficient	SE	Coefficient	SE	
Between-subject religious beliefs	-0.240***	0.032	-0.160*	0.062	-0.213**	0.063	
Within-subject religious beliefs	-0.002	0.040	-0.084	0.064	0.022	0.081	
Controls							
Gender	0.200*	0.085	0.591***	0.140	0.511**	0.165	
Age	-0.075***	0.010	-0.055***	0.015	-0.050*	0.022	
Early criminal propensity	0.315*	0.152	0.216	0.233	0.102	0.274	
Early problem behaviors	0.598**	0.218	0.652	0.345	0.434	0.360	
Prior religiosity	-0.113	0.089	0.002	0.157	-0.273	0.165	
Family structure	-0.078	0.088	-0.080	0.142	-0.163	0.167	
Family size	-0.039	0.039	-0.007	0.050	-0.149*	0.072	
Parent-college graduate	0.547*	0.244	0.316	0.268	0.120	0.210	
Parent-HS graduate	0.511*	0.247	-0.291	0.264	0.106	0.204	
Poverty status	-0.120	0.144	-0.107	0.154	-0.336	0.197	
Maternal bond	-0.214*	0.098	-0.073	0.147	-0.443**	0.169	
Urbanicity	-0.152	0.118	0.038	0.137	0.073	0.167	
Neighborhood disorder	-0.007	0.159	0.183	0.146	0.374	0.197	
Incarceration time	0.018***	0.004	0.006	0.005	0.009	0.007	
Marriage	-0.452**	0.153	-0.143	0.270	-0.632*	0.295	
Employment	-0.122	0.078	-0.168	0.146	-0.139	0.177	
Parenthood	-0.193	0.128	-0.028	0.151	-0.034	0.220	
Educational attainment	-0.237**	0.073	-0.094	0.126	-0.206	0.167	
Military service	-0.854**	0.284	0.077	0.427	-0.541	0.446	
Constant	0.791*	0.360	0.099	0.503	1.023	0.578	
Model $\chi^2$	175.	92	89.	82	16.0	9	
Random Effect							
$\sqrt{oldsymbol{\psi}}$	0.965	0.102	1.079	0.169	0.820	0.230	

Notes: \* p < .05; \*\* p < .01; \*\*\* p < .001

a Deviant conduct includes secular and ascetic deviance as a combined measure.



involvement in deviant behavior by 5% ((exp^-.047 - 1) x 100) for Blacks (see Table 5). Such within-individual effects of religious behavior are not evident among White or Hispanic respondents. Estimates of the effect of religious beliefs on within-individual change are all non-significant (see Table 6). In light of these findings, support is therefore provided for the fifth and sixth hypotheses. However, further evaluation of religiosity/spirituality is required to fully address the seventh hypothesis. This is discussed below given additional subgroup analyses related to the differing forms of deviant behavior that includes secular and ascetic deviance.

It is important to note that with the availability of longitudinal data to decompose between- and within-individual effects, identification of factors predictive of within-individual change is critical to the evaluation of life course theories (Laub & Sampson, 2003). Despite that the transitional effect of church attendance is minimal, it differentially influences within-individual change in deviant behaviors over time for Black individuals relative to Whites and Hispanics. In line with prior findings, it appears that church attendance is an important source of social capital for Black respondents as compared to others (Chu & Sung, 2009).

#### Impact of Religious Behavior and Religious Beliefs on Secular Deviance

Examination of the impact of religious behavior apart from religious beliefs is also carried out in the next set of analyses that focuses on differing outcomes of secular and ascetic forms of deviance. Evidence of the inhibiting role of religious behavior on secular deviance are first assessed using the full sample, then parallel analyses are applied across subgroups based on race/ethnicity (Table 7). The same set of analyses are again conducted using religious beliefs as the main independent variable (Table 8).

Secular deviance includes counts of actions such as property, violent, and drug sale offenses, and results associated with this outcome show no significant effect of religious



Table 7. Multilevel Mixed Effects Model of Religious Behavior on Secular Deviance Across Race/Ethnicity (n = 8,901)

	Full San	nple	White (n =	White $(n = 4,665)$		2,335)	Hispanic $(n = 1,90)$	
Fixed Effects	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Between-subject religious behavior	-0.259***	0.027	-0.289***	0.036	-0.203***	0.052	-0.264***	0.069
Within-subject religious behavior	0.012	0.015	0.033	0.021	-0.016	0.026	-0.001	0.037
Black	0.073	0.095						
Hispanic	-0.014	0.102						
Controls								
Gender	0.682***	0.074	0.692***	0.095	0.491**	0.151	0.947***	0.182
Age	-0.163***	0.008	-0.167***	0.010	-0.143***	0.014	-0.180***	0.019
Early criminal propensity	0.370**	0.129	0.408*	0.173	0.231	0.263	0.449	0.303
Early problem behaviors	0.916***	0.187	0.757**	0.253	1.151**	0.379	0.776	0.416
Prior religiosity	-0.049	0.080	0.034	0.104	-0.075	0.170	-0.153	0.188
Family structure	-0.222**	0.077	-0.287**	0.098	-0.112	0.159	-0.168	0.185
Family size	-0.035	0.031	-0.055	0.045	0.052	0.053	-0.103	0.075
Parent-college graduate	0.004	0.129	0.083	0.224	0.035	0.288	-0.118	0.224
Parent-HS graduate	-0.203	0.130	-0.027	0.230	-0.461	0.282	-0.181	0.221
Poverty status	-0.070	0.098	0.002	0.154	-0.050	0.166	-0.144	0.208
Maternal bond	-0.300***	0.082	-0.313**	0.110	-0.047	0.162	-0.513**	0.191
Urbanicity	-0.002	0.086	-0.066	0.130	0.146	0.149	-0.041	0.185
Neighborhood disorder	0.308**	0.102	0.277	0.171	0.241	0.161	0.447*	0.217
Incarceration time	0.020***	0.003	0.028***	0.005	0.014**	0.005	0.018	0.008
Marriage	-0.517***	0.128	-0.461**	0.165	-0.185	0.258	-0.917**	0.334
Employment	-0.099	0.058	-0.112	0.071	-0.018	0.127	-0.113	0.151
Parenthood	-0.233**	0.087	-0.372**	0.131	-0.114	0.141	-0.225	0.213
Educational attainment	-0.180**	0.055	-0.258***	0.070	0.063	0.113	-0.190	0.151
Military service	-0.396*	0.183	-0.651**	0.243	-0.579	0.485	0.370	0.367
Constant	1.355***	0.232	1.478***	0.335	0.559	0.462	1.900***	0.534
Model $\chi^2$	1334.0	63	712.5	53	383.4	12	171.	17
Random effects								
$\sqrt{m{\psi}}$	1.825	0.113	1.644	0.138	1.934	0.232	1.945	0.298



Table 8. Multilevel Mixed Effects Model of Religious Beliefs on Secular Deviance Across Race/Ethnicity (n = 8,901)

	Full Sar	nple	White (n =	4,665)	Black (n =	2,335)	Hispanic (n	= 1,901)
Fixed Effects	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Between-subject religious beliefs	-0.204***	0.040	-0.215***	0.050	-0.193*	0.091	-0.205*	0.095
Within-subject religious beliefs	-0.019	0.056	-0.014	0.076	-0.125	0.109	0.059	0.129
Black	0.389**	0.138						
Hispanic	0.188	0.142						
Controls								
Gender	0.693***	0.106	0.520***	0.139	0.739***	0.208	1.041***	0.265
Age	-0.141***	0.015	-0.158***	0.022	-0.131***	0.028	-0.119**	0.037
Early criminal propensity	0.253	0.172	0.323	0.233	0.297	0.336	0.027	0.408
Early problem behaviors	0.575*	0.237	0.481	0.326	0.628	0.498	0.542	0.496
Prior religiosity	-0.132	0.108	-0.073	0.141	-0.072	0.228	-0.253	0.246
Family structure	-0.226*	0.105	-0.252	0.138	-0.115	0.209	-0.283	0.246
Family size	-0.065	0.043	-0.055	0.062	0.003	0.073	-0.184	0.108
Parent-college graduate	0.213	0.186	0.692	0.395	0.186	0.373	-0.008	0.315
Parent-HS graduate	-0.072	0.185	0.606	0.400	-0.579	0.368	-0.022	0.300
Poverty status	-0.162	0.137	-0.165	0.227	0.012	0.222	-0.330	0.291
Maternal bond	-0.294**	0.110	-0.221	0.152	-0.010	0.214	-0.713**	0.245
Urbanicity	-0.070	0.118	-0.233	0.191	0.190	0.198	-0.060	0.252
Neighborhood disorder	0.242	0.137	0.207	0.239	-0.003	0.215	0.613*	0.284
Incarceration time	0.019***	0.004	0.026***	0.005	0.010	0.007	0.015	0.009
Marriage	-0.666**	0.230	-0.743*	0.318	0.002	0.448	-1.150*	0.538
Employment	-0.282*	0.119	-0.164	0.145	-0.487	0.270	-0.440	0.307
Parenthood	0.133	0.152	-0.058	0.232	0.117	0.253	0.362	0.344
Educational attainment	-0.373***	0.104	-0.391**	0.131	-0.262	0.210	-0.596*	0.279
Military service	-0.213**	0.295	-0.590	0.425	0.182	0.634	0.096	0.587
Constant	1.266	0.407	1.143	0.634	1.052	0.796	1.639	0.938
Model $\chi^2$	64.6	0	33.8	0	21.0	8	3.7	1
Random effects								
$\sqrt{oldsymbol{\psi}}$	1.177	0.184	1.097	0.231	1.208	0.341	0.986	0.545



behavior or religious beliefs on within-individual change. In contrast, all of the between-individual estimates are significant and negative, which shows that respondents who demonstrate greater participation in church attendance and express greater agreement with religious beliefs are less likely to be involved in deviant behaviors that violate a secular standard. However, these estimated effects are not reflective of the true causal impact of religiosity/spirituality on secular deviance across subgroups, as stable personal characteristics may confound these results.

#### Impact of Religious Behavior and Religious Beliefs on Ascetic Deviance

The final set of analyses examine the role of religiosity/spirituality on anti-ascetic deviance, using religious behavior (Table 9) as a separate predictor from religious beliefs (Table 10). Analyses are first conducted with the full sample, and secondly, across subgroups based on race/ethnicity.

Results from Table 9 provide important findings, and show an overall beneficial effect of religious behavior on reduced ascetic deviance at the individual-level. Specifically, the full sample coefficient indicates that church attendance has a significant, negative within-individual impact in decreasing odds of involvement in ascetic deviance (illicit drug use) by 6% ((exp^-.064 – 1) x 100). Turning to the race- and ethnic-specific models, attending church renders significant and negative effects on ascetic deviance in each subgroup. The odds of engaging in ascetic deviance are reduced by 6% ((exp^-.061 – 1) x 100) for White respondents, by 8% ((exp ^-.082 – 1) x 100) for Black respondents, and by 5% ((exp^-.048 – 1) x 100) for Hispanic respondents.

Based on the percentage of reduced odds alone, it appears that church attendance decreases the odds of ascetic deviance to a larger degree for Blacks, although this difference is minimal, which is followed by White and then Hispanic respondents. However, additional tests



Table 9. Multilevel Mixed Effects Model of Religious Behavior on Ascetic Deviance Across Race/Ethnicity (n = 8,901)

	Full San	nple	White (n =	White $(n = 4,665)$		Black ( $n = 2,335$ )		= 1,901)
Fixed Effects	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Between-subject religious behavior	-0.393***	0.023	-0.427***	0.030	-0.295***	0.045	-0.391***	0.059
Within-subject religious behavior	-0.064***	0.009	-0.061***	0.013	-0.082***	0.019	-0.048*	0.024
Black	-0.044	0.081						
Hispanic	-0.077	0.086						
Controls								
Gender	0.205**	0.060	0.118	0.077	0.428**	0.129	0.261	0.146
Age	-0.030***	0.004	-0.036***	0.005	-0.007	0.008	-0.038***	0.009
Early criminal propensity	0.315**	0.114	0.415**	0.152	0.103	0.234	0.237	0.264
Early problem behaviors	0.751***	0.173	0.620*	0.241	0.959**	0.346	0.806*	0.376
Prior religiosity	0.042	0.068	0.030	0.087	0.194	0.151	0.025	0.160
Family structure	-0.150*	0.064	-0.114	0.083	-0.123	0.136	-0.273	0.155
Family size	-0.038	0.026	-0.040	0.037	0.027	0.046	-0.109	0.064
Parent-college graduate	0.433***	0.115	0.506*	0.206	0.500	0.265	0.317	0.184
Parent-HS graduate	0.107	0.116	0.276	0.210	-0.013	0.260	-0.028	0.188
Poverty status	-0.222*	0.086	-0.225	0.138	-0.260	0.146	-0.160	0.175
Maternal bond	-0.098	0.071	-0.156	0.095	0.054	0.141	-0.160	0.165
Urbanicity	-0.070	0.072	-0.046	0.108	-0.075	0.129	-0.079	0.154
Neighborhood disorder	0.183*	0.089	0.035	0.152	0.375**	0.140	-0.020	0.191
Incarceration time	0.013***	0.003	0.019***	0.005	0.009	0.005	0.007	0.008
Marriage	-0.404***	0.055	-0.419***	0.068	-0.277	0.148	-0.277*	0.126
Employment	-0.018	0.028	-0.010	0.034	-0.047	0.072	-0.034	0.073
Parenthood	-0.386***	0.048	-0.486***	0.068	-0.224*	0.089	-0.439***	0.112
Educational attainment	0.082**	0.028	0.703*	0.034	0.066	0.071	0.147*	0.074
Military service	-1.065***	0.139	-1.044***	0.175	-0.910**	0.312	-1.319***	0.348
Constant	-0.958***	0.177	-0.774**	0.263	-2.300***	0.389	-0.502	0.383
Model $\chi^2$	5660.0	01	3509.	37	1088.4	43	929.9	9
Random effects								
$\sqrt{oldsymbol{\psi}}$	1.952	0.092	1.856	0.113	1.998	0.199	2.060	0.232



Table 10. Multilevel Mixed Effects Model of Religious Beliefs on Ascetic Deviance Across Race/Ethnicity (n = 8,901)

	Full Sar	nple	White (n =	White $(n = 4,665)$		2,335)	Hispanic (n	= 1,901)
Fixed Effects	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Between-subject religious beliefs	-0.243***	0.024	-0.272***	0.029	-0.155**	0.057	-0.240***	0.059
Within-subject religious beliefs	-0.072*	0.029	-0.076*	0.037	-0.071	0.062	-0.074	0.069
Black	0.094	0.085						
Hispanic	-0.079	0.087						
Controls								
Gender	0.194**	0.060	0.072	0.077	0.401**	0.127	0.346*	0.149
Age	-0.035***	0.007	-0.047***	0.009	-0.019	0.014	-0.016	0.017
Early criminal propensity	0.314**	0.109	0.436**	0.144	0.016	0.231	0.219	0.260
Early problem behaviors	0.704***	0.158	0.697**	0.215	0.919**	0.315	0.456	0.355
Prior religiosity	-0.112	0.065	-0.135	0.083	0.167	0.149	-0.210	0.154
Family structure	-0.086	0.064	-0.019	0.083	-0.079	0.130	-0.229	0.153
Family size	-0.038	0.026	-0.036	0.036	0.026	0.046	-0.100	0.066
Parent-college graduate	0.322**	0.121	0.151	0.215	0.709*	0.282	0.221	0.188
Parent-HS graduate	0.125	0.122	0.089	0.218	0.177	0.281	0.058	0.190
Poverty status	-0.161	0.087	-0.087	0.137	-0.201	0.143	-0.230	0.181
Maternal bond	-0.139*	0.069	-0.163	0.093	-0.057	0.136	-0.196	0.162
Urbanicity	-0.084	0.073	-0.090	0.108	-0.054	0.127	-0.063	0.157
Neighborhood disorder	0.125	0.089	0.025	0.150	0.210	0.137	0.039	0.194
Incarceration time	0.009**	0.003	0.013**	0.004	0.006	0.005	0.005	0.008
Marriage	-0.523***	0.088	-0.554***	0.110	-0.323	0.226	-0.416*	0.204
Employment	-0.100	0.054	-0.120	0.066	-0.100	0.131	-0.042	0.139
Parenthood	-0.340***	0.077	-0.380**	0.110	-0.237	0.138	-0.415*	0.178
Educational attainment	-0.123*	0.051	-0.147*	0.063	-0.169	0.118	-0.024*	0.133
Military service	-0.944***	0.202	-0.995***	0.259	-0.500	0.387	-1.398	0.608
Constant	-0.285	0.226	0.213	0.322	-1.622**	0.513	-0.435	0.516
Model $\chi^2$	541.3	37	365.6	56	86.2	6	61.1	6
Random effects								
$\sqrt{oldsymbol{\psi}}$	0.927	0.072	0.926	0.091	0.825	0.146	0.876	0.185



for the equality of these coefficients across subgroup models find no significant differences in these estimates.

Lastly, results associated with the influence of religious beliefs on ascetic deviance are displayed in Table 10. The significant and negative estimate for the full sample reveals that a religious beliefs effect is important in reducing ascetic deviance within individuals by 7% ((exp^-.029 – 1) x 100). When this analysis extends across race/ethnicity, religious beliefs have a significant and negative within-individual effect in reducing the odds of ascetic deviance by 7% ((exp^-.076 – 1) x 100) for White respondents. Within-individual differences regarding spiritual beliefs on ascetic deviance fail to achieve significance for Black and Hispanic respondents. With consideration of results related to secular and ascetic deviance, support is found for the eighth hypothesis but not for the ninth hypothesis. As mentioned above, additional racial/ethnic subgroup analyses involving separate examination of secular deviance apart from ascetic deviance, reveals no support for the seventh hypothesis.

The pattern of findings above contributes to the limited literature that differentiates between secular and ascetic forms of deviance (e.g., Stansfield, 2017), as most studies have focused primarily on violations of the ascetic standard such as alcohol/substance use (Bakken et al., 2014; Chu, 2007; Jang, 2013; Ulmer et al., 2012). An additional study found no quantitative evidence of a religious transformation from offending behavior that included secular types of deviance (Giordano et al., 2008). Up to now, relatively little has been understood regarding the impact of religiosity/spirituality on change from alternate forms of deviant conduct. Results here suggest that an emphasis on deviance from ascetic standards may be a more suitable means to assess the impact of religiosity/spirituality on change processes, as no significant effects of within-individual differences were revealed with examinations of secular deviance.



#### **Results Summary**

In sum, analyses reflected an assessment of the generalizability of the age-graded theory of informal social control in two specific ways: through evaluation of an alternate turning point, specifically religiosity/spirituality, and through evaluation of this relationship across race/ethnicity. Further examination of the nature of the religion-desistance relationship was an additional goal of the present research. Accordingly, a multilevel mixed effects modeling strategy was undertaken to first examine the longitudinal impact of a religious turning point effect within a sample of diverse adolescents followed into adulthood. This relationship was then assessed in a number of ways, with further mixed effects analyses involving estimation of 1) the separate impact of religious behavior and religious beliefs on deviance, 2) the role of religiosity/spirituality across racial/ethnic subgroups, 3) the influence of a religious transition on various forms of deviance that includes violations of secular and ascetic standards, and given these two outcomes, 4) examination of how the religion-desistance relationship may evince differently depending upon race/ethnicity.

First, to assess patterns of religious behaviors and religious beliefs (main independent variables), as well secular and ascetic deviance (main dependent variables) across race/ethnicity, percentages of respondents reporting involvement in each behavior are plotted every year between 2000 and 2011. In line with prior evidence, large percentages of Blacks indicate greater involvement in church attendance and hold religious beliefs to a greater degree as compared to Hispanics and Whites (e.g., Pew Research Center, 2015). Aside from one year, significant racial/ethnic differences in rates of participation in secular deviance were not evinced. In contrast, rates of involvement in ascetic deviance were significantly different each year between Whites and Blacks, and between Whites and Hispanics. Trends of decreasing involvement in



both types of deviant behaviors with increasing age supports the age-crime curve and life course evidence indicating that desistance is inevitable decreasing over time (Laub & Sampson, 2003; Sampson & Laub, 1993).

Overall, mixed effects analyses show a modest impact of religiosity/spirituality with very few significant and negative estimates of within-individual effects of religiosity/spirituality on continued deviance. Main model analysis and estimation of the main effects of religious behavior separately from religious beliefs conducted with the full sample exhibit no significant estimations of within-individual change over time. In review of results up to this point, and in contrast with prior studies that demonstrate the impact of religious behavior and/or religious beliefs on desistance (e.g., Bakken et al., 2014; Chu, 2007; Chu & Sung, 2009; Stansfield, 2017), no support is found for the first, second, or third hypotheses. Support is evident for the fourth hypothesis, however.

Examination of religious behavior and religious beliefs across White, Black, and Hispanic subgroups revealed primarily significant between-individual differences. A significant and negative within-individual effect of religious behavior revealed a decrease in the odds of deviant behavior among Blacks (5% decreased odds). Important within-individual differences were not shown among Whites or Hispanics. Although minimal, this result provides support for the fifth and sixth hypotheses. Given that church can be an important source of social capital (e.g., Johnson et al. Taylor & Chatters, 1988), these demonstrated differences across racial/ethnic subgroups may point to the limited generalizability of the age-graded theory, while also highlighting church as an important institution among Blacks (e.g., Ellison & Sherkat, 1999; Frazier, 1963; Lincoln & Mayima, 1990; Pew Research Center, 2015).



Findings involving separate assessments of a religious turning point on secular and ascetic deviance show that religious behavior and religious beliefs render significant within-individual effects on ascetic deviance only. When analyses are applied across subgroups, religious behavior influences change in ascetic deviance within the full sample and across each racial/ethnic subgroup. Alternately, the influence of religious beliefs on change from ascetic deviance reveal significant within-individual differences in the full sample, and among Whites only. These findings provide support for the eighth, but not the ninth hypotheses. Because this difference is evinced within the White subgroup only, it may once again call into question the universal assumptions of the age-graded theory. This finding may also indicate that certain aspects of religiosity, whether church attendance or holding religious beliefs, and certain aspects of deviance, whether violations of a secular or ascetic nature, may hold differing importance depending upon one's race.

#### **Final Note on Results**

Given a fuller review of the findings presented, it becomes apparent that the statuses of certain hypotheses change. For example, with reference to results presented in Tables 2-4, it appears that the impact of a religious/spiritual transition on deviance (as stated in the first hypothesis) cannot be confirmed. This status changes once analyses are subsequently applied to racial/ethnic subgroups, as evidence of a turning point effect becomes somewhat clearer (see Tables 5, 9, and 10).

Additional hypotheses that are reconsidered in light of subsequent analyses includes the third and fourth hypotheses. Specifically, findings herein substantiate that significant within-individual effects of behavioral religiosity (church attendance) reduce the odds of deviance among Blacks (see Table 5). This result supports the first and third hypotheses that did not



originally have confirmation with the models presented earlier. Similarly, with reference to the fourth hypothesis, it was expected that holding religious beliefs alone would not yield a significant impact on change from deviance. However, consistent with previous, but limited evidence (e.g., Stansfield, 2017), results show that holding religious beliefs impart a significant within-individual effect in reducing the odds of ascetic deviance among Whites (see Table 10). This finding removes support for the fourth hypothesis, when originally it was given.

Finally, additional modeling strategies that include 1) negative binomial multilevel mixed effects models with the ascetic deviance outcome (see Appendix 1), 2) multilevel mixed effects models with the removal of hard drug use from the ascetic deviance outcome (see Appendix 2), and 3) employing a stepwise modeling strategy more in line with Laub and Sampson's (2003) analyses of change (see Appendix 3) are presented.

#### **CHAPTER EIGHT:**

#### DISCUSSION AND CONCLUSION

Since the introduction of the age-graded theory of informal social control in *Crime in the Making: Pathways and Turning Points* (Sampson & Laub, 1993), and with revised viewpoints specified in *Shared Beginnings, Divergent Lives: Delinquent Boys to Age 70* (Laub & Sampson, 2003), several researchers have contributed to the growing body of literature that tests the propositions of this theory (Ezell & Cohen, 2005; Laub et al., 2006; Laub, Rowan, & Sampson, in press). While subsequent evidence has provided support for key theoretical propositions, tests of the theory have also produced findings that challenge its universal assumptions.

Specifically, Sampson and Laub maintain that their life course perspective is a general theory of crime, and in so doing, take a race-neutral stance in their approach. Further theoretical specification according to a particular sociohistorical period and/or consideration of the role of sociodemographics is therefore rejected. Sampson and Laub (1993:255) argued that characteristics such as race/ethnicity are not explanations for participation in crime across the life course. Rather, structural disadvantage that leads to attenuated social ties to structural institutions of family, school, and work increase the likelihood of criminal involvement. In taking this position, it may be assumed that the underlying processes that explain continuities in offending and a redirection of these criminal pathways are the same for Whites and minorities alike.

Tests of the generalizability of the age-graded theory across race/ethnicity are few, but investigations of religion as a relevant turning point are even fewer. Drawing on Sampson and



Laub's assumption of universality, and extending the work of two prior studies that examine the inhibiting impact of religiosity on crime across racial/ethnic subgroups (Chu & Sung, 2009; Stansfield, 2017), the current research was driven by two primary objectives. The first goal involves assessment of the generalizability of the age-graded theory using a sample of adolescents transitioning into adulthood. The second goal involves examination of an alternate turning point, namely religiosity/spirituality that was not originally identified by Sampson and Laub as a means to modify offending pathways. Unpacking the nature of the religion-desistance relationship was an additional objective of this study.

Examination of the religion-desistance relationship in multiple ways fills gaps in our understanding of how religion may operate to restrict deviant behavior. In the present research, this is accomplished through evaluation of differing religious dimensions that may enact the change process, examination of the extent of a religious impact given differing forms of deviant outcomes, and identification of subgroups based on race/ethnicity for whom religiosity is most beneficial. This final chapter presents an overview of the study's main findings first, and relates these results to the generalizability of the age-graded theory. The chapter closes with presentations of the limitations of the study, directions for future research, and implications for policy.

## **Summary of Findings**

Addressing the 5 research questions and 9 hypotheses involved examination of the ongoing NLSY97 study that captures information related to religion, delinquency, and includes a host of other social characteristics from a nationally representative sample of adolescents.

Analyses consisted of a series of multilevel mixed effects models to account for the nested structure of the longitudinal data, which also permitted examination of within-individual change.



With a methodological approach that adjusts for the contribution of selection effects, any changes associated with a religious/spiritual transition are not attributed to stable characteristics such as criminal propensity or personality. With these pre-existing influences controlled, results reflect the causal effect of religiosity/spirituality on change from deviance within-individuals (Horney et al., 1995; Osgood, 2010). A discussion of the findings related to each of the research questions and associated hypothetical statements is provided below.

## Religiosity/Spirituality as a Turning Point

Fundamental to the present study, the first research question asks whether religiosity/spirituality operates as a turning point from deviant behaviors within a diverse and contemporary sample of adolescents. Although the number of studies that examine religion as a turning point are limited and evidence is mixed, it was expected that a religious/spiritual transition would decrease continued deviance over time (H1). Controlling for stable and timevarying characteristics, analyses incorporating religious behavior and religious beliefs in the main model did not yield a significant within-individual effect on change from deviance. Additionally, separate analyses of the main effects of religious behavior and religious beliefs did not produce significant effects of within-individual change. Findings from these models using the full sample initially suggest that religiosity/spirituality may not operate as an influential turning point to reduce deviant conduct. However, further analyses applied to the sample disaggregated by race/ethnicity indicate some impact of religiosity/spirituality on withinindividual change in deviant behaviors. Recall that findings point to a differential impact of religious behavior across race/ethnicity, with the strongest inhibiting effect for deviant behaviors combined as well as for ascetic deviance found among Blacks in comparison to Whites and Hispanics.



More generally, study findings highlight the nuances of the religion-desistance relationship, as the prosocial impact of a religious turning point differs across race/ethnicity, and depends upon processes that may involve attendance to church services or spiritual beliefs, and may be conditional on the type of deviance outcome examined—whether in violation of a secular or ascetic standard. In spite of the inconsistent results, evidence found in the present research offers support for the first hypothesis, albeit minimal.

Reasons for these modest findings are numerous. First, as originally suggested by the Glueck men in their narratives (Laub & Sampson, 2003), a religious turning point may hold very little importance in the change process. Although it is speculative, the traditional turning points that consist of an accumulation of social investments over time such as marriage, family, and employment may involve bonding processes of mutual commitment that run far deeper than what can be established through church attendance or holding religious beliefs.

Secondly, a lack of more robust results may be due to noted declines of religiosity in the transitional stage of young adulthood (e.g., Pew Research Center, 2012; Uecker et al., 2007). According to Uecker and colleagues (2007) explanations for this reduction in religious practices and beliefs includes, for example, the secularizing effect of higher education that exposes young adults to learning content that may challenge traditional values and viewpoints. Additionally, engagement in riskier, but normative behaviors in young adulthood, such as drinking, drug use, and sexual activity, are incompatible with religious teachings. With less social control and with identity exploration involving these types of behaviors, young adults may be inclined to disassociate from their church (Uecker et al., 2007). Another leading explanation for the decline in religiosity is attributed to a political backlash driven by young adults toward increased liberal attitudes, and away from organized religion which has been perceived to be affiliated with the



"Religious Right" (Pew Research Center, 2012:30). For example, a recent shift in attitudes towards the strengthening of civil rights regarding abortion and same-sex marriage are at odds with conservative, religious viewpoints. Such change in political ideology may be a reason for the growing negativity towards the institution of religion, and subsequent disassociation from the church.

Alternately, while some argue that the aggregate declines in religious observance are the end result of gradual detachments in young adulthood, others propose that the downward drift in religiosity may be explained by a generational effect whereby successive generations are less religious than the previous ones (Voas & Chaves, 2016). An apparent consequence of this effect may be that fewer individuals are born into religious families, with even fewer identifying with a religious denomination (Pew Research Center, 2012). Ultimately, there is less exposure to religious socialization overall (Voas & Chaves, 2016).

A final reason for the minimal and inconsistent results produced may involve issues related to measurement given the lack of consensus in conceptualization and operationalization of religiosity/spirituality (Fetzer Institute, 2003). For example, some scholars may view the construct of spirituality as a facet of religiosity, or as a distinct concept from religiosity, while some may suggest the concepts overlap (Benson, 2004; Fetzer Institute, 2003; Marler & Hardaway, 2002; Pargament, 1999). With wide variation in the measurement of religious constructs, there is little agreement on the definitions of the salient aspects of religiosity and spirituality and the associated observable behaviors that typify these constructs (Fetzer Institute, 2003). Furthermore, with little psychometric support for the available measures, identification of the true protective influence of religiosity remains unclear, as conclusions drawn from studies that examine religiosity/spirituality are potentially unreliable and invalid (Capanna, Stratta,



Collazzoni, & Rossi, 2013; Piedmont, Ciarrocchi, Dy-Liacco, & Williams 2009; Piedmont, Mapa, & Williams, 2007).

## Impact of Religious Behaviors and Religious Beliefs on Deviant Behavior

In exploring the nature of the religion-desistance relationship, the second research question asks which aspects of religiosity, a combination of religious behavior with religious beliefs, or religious behavior alone, or holding religious beliefs alone, prompt the change process. Given its multifaceted nature, some criminology scholars have called for greater clarification of the combined aspects of religiosity on desistance (Chu, 2007; Ulmer et al., 2012), as others have relied on a lone indicator, such as church attendance, to assess the influence of religiosity in predicting change (e.g., Chu & Sung, 2009; Jang, 2013).

Because studies of church attendance suggest that involvement with the church may generate supportive networks among congregants (e.g., Taylor & Chatters, 1988), it was hypothesized that the combined measure of religious behavior with religious beliefs (H2), and church attendance alone would foster change in deviant behavior over time (H3). With regards to religious beliefs alone, it was expected that endorsement of these attitudes would not operate as a sufficient catalyst to trigger the change process (H4).

Although initial findings from the main effects models suggest no evidence of a religious impact on change, subsequent analyses demonstrate the separate impact of religious behavior as well as religious beliefs owing to the significant within-individual effects rendered. However, religious behavior demonstrates greater influence given the number of significant within-individual effects found relative to religious beliefs. No significant findings are evinced for the combined measure of religious behavior and religious beliefs.



With regard to the impact of religious behavior, conceptualizations of regular church attendance are congruent with the causal mechanisms that characterize turning points from antisocial behavior (Laub & Sampson, 2003). For example, attending religious services may engender opportunities to formulate investments in social capital (Johnson et al., 2000; Smith, 2003), may encourage the development of support and connectedness through ties established with other congregants (Taylor & Chatters, 1988), may limit opportunities to engage in deviant conduct as a structured, routine activity (Chu, 2007; Jang, 2013), and with repeated sermons that include messages of forgiveness, continued church attendance may provide a means to break from a prior antisocial identity (e.g., Giordano et al., 2002; 2008).

When religiosity is framed in this fashion, and consistent with Sampson and Laub's theoretical emphases, it becomes clear how conditions related to church attendance involve stronger commitments toward change than simply holding religious beliefs. It is reasonable to conclude that attendance to religious services may limit opportunities for future engagement in deviance. Over time, and with repeated worship, religious devotion may evolve into a conforming pathway.

Alternately, the lack of consistent findings with religious beliefs may indicate that it is a poor measure of social control. For some, spiritual beliefs may reflect a personal set of attitudes that provide a framework for individuals to cope with difficult emotions throughout the change process (see Schroeder & Frana, 2009). For others, beliefs may serve as an answer to our existential existence (Fetzer Institute, 2003). Therefore, as an internal code of values, holding spiritual beliefs alone is not compatible with the external social bonding processes that enact change as proposed by Sampson and Laub.



In contrast, holding spiritual beliefs is more in line with the assumptions proposed by Giordano and colleagues (2002; 2007) in their theories of cognitive transformation and emotions and crime over the life course. For example, by drawing strength from a religious belief system, antisocial individuals transitioning from deviant behaviors may 1) rely upon strategies that assist in managing negative emotions, 2) engage the requisite cognitive processes that alter their views of involvement in deviant behaviors, and with notions of being "forgiven" and "born again," religious beliefs may 3) provide the transformation in identity necessary to sever from a sinful past and toward a more conventional pathway (see Giordano et al., 2002; 2007; Schroeder & Frana, 2009).

Prior investigations that examine religious/spiritual turning points produced mixed evidence regarding the impact of differing religious dimensions. Current findings are consistent with studies that maintain that church attendance alone is a sufficient method to encourage desistance (Chu, 2007; Chu & Sung, 2009; Jang, 2013), in addition to others that find simply holding religious beliefs prompt change (e.g., Stansfield, 2017). While some scholars attest that a combination of behavioral and attitudinal dimensions are important elements to assess a religious turning point (Bakken et al., 2014; Ulmer et al., 2012), results here suggested otherwise. Such religious factors may be intertwined, but it is possible to engage in external rituals related to worship, including prayer and attending church, without adopting a transcendent, supernatural belief system (Fetzer Institute, 2003).

# Impact of Religious Behaviors and Religious Beliefs on Deviant Behavior Across Race/Ethnicity

The third research question inquires whether a religious turning point has a differential impact across race/ethnicity. The importance of this inquiry is twofold. First, addressing this research question provides a means to assess whether desistance processes operate similarly



across race/ethnicity, as relatively few studies have evaluated turning points across subgroups. Secondly, examination of the institution of religion may contribute to our understanding of alternate transitions that are likely more salient for minority populations. Both considerations bear upon the generalizability of the age-graded theory.

Prior investigations of religion as a turning point across subgroups includes only two studies (Chu & Sung, 2009; Stansfield, 2017), but reveal the importance of further exploring religious transitions given their differential impact across race/ethnicity. Because minorities participate in religious activities and endorse spiritual beliefs to a greater degree than Whites (e.g., Pew Research Center, 2014; 2015; Wallace et al., 2016), it was hypothesized that a religious turning point would demonstrate differing degrees of salutary effects across subgroups (H5). It was further expected that this religious impact would be strongest for Blacks (H6), with weakest effects apparent among Whites (H7).

Current results accord well with previous evidence that finds a racially-specific transition from continued substance use for Blacks (Chu & Sung, 2009), and for Whites and Blacks (Stansfield, 2017). Only one study has evaluated a religious turning point effect among Hispanics with results indicating no significant impact of religiosity on change within this ethnic subgroup (Stansfield, 2017). Present findings are similar to those found in this prior investigation, as only one within-individual effect of behavioral religiosity was confirmed among Hispanic respondents. Additionally, comparison of the varying strength of a religious turning point across race/ethnicity provides both confirmation and contradiction for the hypotheses presented. As anticipated, results show a differential impact of religiosity on change from deviant behavior, with the strongest religious effects found for Blacks, which is followed by



Whites. Contrary to expectation, the weakest effects of a religious turning point were found among Hispanic respondents.

Results demonstrating group differences in the prosocial benefits of religious bonds across race/ethnicity may signal variability in the significance of the institution of church across Whites, Blacks, and Hispanics. Emerging from the slavery era, the Black church has held a unique prominence in the lives and communities of Black Americans throughout history and continues today (Frazier, 1963; Lincoln & Mayima, 1990; Pew Research Center, 2015). In fulfilling multiple roles within religious and secular sectors, the Black church serves as a key source of social control (Johnson et al., 2000) as well as a vehicle for community outreach efforts. As outgrowths of the Black religious tradition, social agencies were formulated in response to the considerable challenges faced by Black Americans in access to educational and financial assistance, and political involvement (Billingsley & Caldwell, 1991; Lincoln & Mayima, 1990). Given the significant history and long-standing networks of support, the institution of religion holds an unparalleled importance among Blacks, relative to their Hispanic and White counterparts. Blacks continue to demonstrate patterns of greater religious practice and beliefs over Hispanics and Whites, and presumably, this is related to extensive history of the church being firmly anchored within the Black community.

With rates of religious participation and spiritual beliefs comparable to, but higher than Whites (e.g., Pew Research Center, 2015), U.S. Hispanics have maintained relatively high levels of religiosity with the majority (68%) identifying as Catholic (Diaz-Stevens & Stevens-Arroyo, 1998; Pew Research Center, 2007). As such, it is unexpected that present results show only one significant within-individual effect of a religious turning point among Hispanic respondents. Although it is speculative, a reason for the lack of findings may be due to the more formalized



nature of ritual and worship in the Catholic faith, which may prevent the development of bonds and systems of support among members (Hunt & Hunt, 1978; Taylor & Chatter, 1998). This is further exemplified with nearly a fifth (18%) of Hispanics reporting religious conversion from Catholicism, and approximately a third (31%) of Hispanics reporting disaffiliation due to dissatisfaction with Catholic Mass (Pew Research Center, 2007). With consideration of these differences between denominations, it may be surmised that establishing social bonds in the Black church may be more facile as compared to Catholic Church (Hunt & Hunt, 1978; Taylor & Chatter, 1998).

# Impact of Religious Behavior and Religious Beliefs on Secular Deviance and Ascetic Deviance

A brief discussion of the results related to the fourth and fifth research questions are combined in this final subsection of the summarized findings. More specifically, to evaluate the scope of a religious transition, these questions ask whether the impact of religiosity reflects desistance from secular deviance (e.g., property and violent crime), and whether this impact extends to ascetic deviance (e.g., substance use), respectively. Further analyses of these associations are conducted across subgroups to connect the types of deviant behaviors to individuals for whom the protective influence of religiosity/spirituality is most important.

Inquiries related to differing deviant outcomes arise from early studies of the religion-delinquency relationship (e.g., Middleton & Putney, 1962) and from replications of Hirschi and Stark's (1969) "hellfire" study (e.g., Burkett & White, 1974; Albrecht et al., 1977). From this prior work emerged the anti-ascetic hypothesis which delineated outcomes according to their violation of either the secular or ascetic moral standard. Burkett and White (1974) found that a religious impact was evident for specific behaviors, such as alcohol or drug use, that were in



clear violation of religious traditions but may be ambiguously denounced within the larger, secular culture (see also Cochran, 1988).

Examinations of the religion-desistance relationship have focused extensively on behaviors that violate the ascetic standard (Bakken et al., 2014; Chu, 2007; Chu & Sung, 2009; Jang, 2013; Ulmer et al., 2012), and collectively revealed the importance of distinguishing these types of behaviors. Moreover, previous examinations of a religious turning point involving secular deviance outcomes demonstrated very little impact on change (e.g., Giordano et al., 2008; Stansfield, 2017). Based on this evidence, it was expected that a religious turning point would be evident for anti-ascetic behaviors only (H8), and when examined across subgroups, the effect would be largest for Black respondents (H9) given the high degree of religious involvement and endorsement of religious beliefs within this population.

In accordance with prior investigations, present evidence found no significant religious turning point effects for within-individual change from secular deviance alone. As expected, the prosocial impact of attending church revealed important within-individual changes in ascetic deviance. With attention to the race- and ethnic-specific models, results indicated that the largest effect of church attendance on decreases of ascetic deviance was found among Blacks relative to Hispanics and Whites. Unanticipated results from race-specific models additionally revealed a significant within-individual effect of religious beliefs on change from ascetic deviance among Whites, where none was found among Blacks or Hispanics.

With the exception of prior investigations that did not significantly predict marijuana use cessation (Bakken et al., 2014; Ulmer et al., 2012), a growing literature consistently shows that religious behaviors and religious beliefs play an important role in desistance from anti-ascetic types of behaviors. From a dynamic perspective, findings from this study support the anti-ascetic



hypothesis, and the small collection of work that documents the association of religiosity with decreases in anti-ascetic behavior over time.

Although the effectiveness of such programming remains in question (e.g., Kaskutas, 2009), the inhibiting effect of religiosity on substance use has long been recognized in drug treatment philosophies including Alcoholics Anonymous (AA) and Narcotics Anonymous (NA). The basis of these self-help approaches is the underlying assumption that abusers of alcohol and substance use are not only physically and emotionally ill, but are also suffering from spiritual sickness (Nowinski, Baker, & Carroll, 1992).

With regards to racial differences in patterns of change from ascetic deviance, once again the relevance of religiosity and especially church attendance, are evident for Black respondents. Surprisingly, the effect of religious beliefs on decreased substance use among Whites perhaps suggests that drug treatment should correspond with clients' characteristics and their preferred modality. Given individual heterogeneity, thus, effective drug treatment may be more than simply the identification of "what works," but instead should consider "what works for whom and in what setting" (Orwin & Ellis, 2000:225).

## **Generalizability of the Age-Graded Theory**

As noted at the outset, a primary objective of this research is to assess the generalizability of the age-graded theory. If key propositions of the theory 1) can be generalized to include religiosity as an alternate turning point, 2) can explain patterns of change equally across racial/ethnic subgroups, and 3) if patterns of religious change can be detected within the heterogeneous, population-based sample examined, then support for the age-graded theory is maintained. Otherwise, explanatory power for the age-graded theory is restricted.



First, present findings offer little evidence for the impact of a religious transition on change from deviant conduct, which in turn, yields minimal support for the generalizability of the age-graded theory. Results do not fully correspond with prior evidence that has characterized religiosity, and in particular church attendance, as a mechanism of social control (e.g., Johnson et al., 2000). Results are also not fully consistent with the increasing collection of work that substantiates the prosocial impact of religiosity on desistance from ascetic deviance (Bakken et al., 2014; Chu, 2007; Chu & Sung, 2009; Jang, 2013; Ulmer et al., 2012), and desistance from secular deviance despite the minimal effects found in prior research (e.g., Stansfield, 2017). Rather, present findings are suggestive of a religious transition from continued deviance and draws attention to additional factors including the type of influence (religious behavior or beliefs), the type of outcome (secular or ascetic deviance), and demographic characteristics (race/ethnicity) which may influence this association. In light of the inconsistent results presented, only modest support is found for the generalizability of the age-graded theory. Continued identification of salient adult social bonds, particularly those that may be race- and ethnic-based, is warranted.

Turning to the race- and ethnic-specific models, findings show that religious behavior decreases the odds of continued participation in ascetic deviance in each subgroup, but the effect is strongest for Black respondents. Moreover, the effect of religious beliefs promotes change from ascetic deviance for Whites, but not for Blacks or Hispanics. This evidence indicates that certain individuals are more likely to benefit from the social control that emerges from continued church attendance, and certain religious transitions may be racially-specific. Bearing in mind these differences, Whites, Blacks, and Hispanics may experience a religious/spiritual turning point differently. Although the religious impact of church attendance promotes desistance



regardless of race/ethnicity, the variation in the strength of this turning point generates only partial support for the generalizability of the age-graded theory.

Another issue relating to the generalizability of the age-graded theory involves the type of sample drawn to examine patterns of desistance. Laub and Sampson (2001:10) assert that to truly understand change in offending pathways, focus should be directed toward high-rate, serious offenders. As noted throughout this text, various developmental and life course perspectives have based their viewpoints and theoretical assumptions on the experiences serious offenders (e.g., Blumstein et al., 1986; Giordano et al., 2002; Laub & Sampson, 2003; Sampson & Laub, 1993). As a result, there may be limitations in broadly applying this knowledge, especially to those with low-levels of involvement in antisocial conduct during the adolescent years. Thus, theorized patterns of desistance may not generalize to population-based samples.

Prior studies of the religion-desistance relationship have included select samples of individuals with serious involvement in antisocial conduct (e.g., Bakken et al., 2014; Chu & Sung, 2009; Giordano et al., 2008; Stansfield, 2017), in addition to examinations using nationally representative samples (e.g., Chu, 2007; Jang, 2013; Ulmer et al., 2012). Together these findings produce a general understanding of the role of religiosity/spirituality in the process of change. The present study is no exception. Given the evidence discussed herein, support for age-graded theory is found in light of the general sampling of adolescents examined. Therefore, results from the present study can be applied to a wider range of individuals that exhibit variation in deviance, and is not limited in its explanation of religious turning points among serious offenders only.

In sum, results generated from the current study demonstrate only partial support for the universal assumptions proposed by Sampson and Laub. First, the religiosity/spirituality effects evinced are minimal, but mechanisms underlying the desistance process are generalizable to this



alternate turning point. In particular, results suggest that church attendance, rather than holding religious beliefs, characterize the type of external processes that enact change. Secondly, only partial support for theoretical generality is noted given that religious transitions are apparent across subgroups, but the strength of these associations are variable for Whites, Blacks, and Hispanics. Finally, because Sampson and Laub's propositions extend to a diverse and contemporary sample, support for the generalizability of a religious desistance processes is upheld.

## **Study Limitations**

In spite of the contribution this study makes toward greater understanding of the role of religion as a turning point, there are a number of limitations that require mention. First, this study relies upon secondary data. While use of secondary sources of data like the NLSY97 provides a number of benefits to the researcher, including data accessibility, savings in cost and time, and a vast an array of measures, the data are often limited to the objectives of the original research (Babbie, 2013). To acquire meaningful understanding of the processes involved in the development of religiosity/spirituality in concert with desistance requires a theoretically-driven, longitudinal, and large-scale study that is designed to specifically evaluate these social factors.

Second, although the use of the NLSY97 data may address the research questions presented, it does not provide optimal measures of the independent or dependent variables. For example, with regards to the domain of religious behavior, the study is limited to a single-item of church attendance. More comprehensive assessments of religious behavior may include, for example, saying grace before meals, prayer, and reading scripture (Fetzer, 2003). Similarly, the available measures of religious beliefs in the NLSY97 consist of only 5 survey items. This relatively small number of indicators does not fully capture the breadth of the cognitive



dimension of religiosity/spirituality. Although the NLSY97 contains a commonly used set of questions that tap into religiosity (see e.g. Pew Research Center, 2007; 2015; Wallace et al., 2016), to adequately capture the scope of this construct requires addition of several more survey items and assessments of reliability and dimensionality. Future research should strive to incorporate various indicators to better reflect the multidimensionality that is necessary to more precisely evaluate religiosity (Fetzer, 2003), especially as it relates to processes of persistence and desistance in offending behavior.

Another limitation related to the religiosity/spirituality measures involves the short term in which these data were collected. At the time of this writing, the NLSY97 included a total of 16 rounds of data (1997 to 2013), whereby church attendance was measured for 11 consecutive years from 2000 to 2011, while the religious beliefs items were collected on a staggered timetable during 2002, 2005, 2008, and 2011. As such, analyses were restricted to the decade in which observations were collected. It remains in question whether or not desistance from deviant behaviors was adequately captured during this relatively short observational period. Desistance processes involve a gradual accumulation of social investments that operate to facilitate eventual change toward a more conforming pathway (Laub & Sampson, 2003; Sampson & Laub, 1993). In the present study, assessment of this social phenomena is likely reflecting the initial triggering processes of *change*, as opposed to *desistance*. Measurement of desistance processes may instead require the full life course to observe gradual changes in levels offending behavior as they draw closer to a zero state (Bushway et al., 2001; Laub et al., 1998).

A third limitation is in reference to the dependent variables. It was noted in Chapter 6 that survey questions inquiring about involvement in acts of delinquency were asked of every respondent for the first 7 rounds of data collection (1997 to 2003). In the rounds that followed,



the delinquency items were only asked of respondents that reported prior official contact in addition to a small comparison group. This change in interviewing resulted in a large percentage of missing data in subsequent years. However, studies indicate that delinquency data are missing at random, that percentages of this missing data are similar across Whites, Blacks, and Hispanics, and that these percentages of missing do not differ significantly across subgroups (Landers et al., 2015; Mitchell, 2016; Mitchell & Caudy, 2017). In light of these considerations, it is possible that the missing values are not as much of a critical concern to forego data analysis. Nonetheless, it remains unknown whether or not these missing values are producing biased estimates. Another related limitation is that the percentages of missing values for the delinquency items are relatively large, and techniques such as bootstrapping or multiple imputation procedures are not ideal with this data. (Allison, 2002; Efron, 1994; Rubin, 1987).

Lastly, although Hispanics respondents in the NLSY97 study include a diverse set of individuals with varying backgrounds, they are all subsumed under the "Hispanic" ethnic category. Treatment of this group as monolithic is not uncommon given limitations regarding data quality, especially from official sources (Leiber & Peck, 2015; Walker et al., 2012). The lack of clear specification with regards to, for example, respondents' country of origin, whether respondents are native born or immigrants, ignores important cultural differences between Hispanic individuals. Acknowledging these differences may be relevant factors with regards to involvement in religiosity (Pew Research Center, 2014) as well as participation in offending behavior across the life course (Leiber & Peck, 2015).

#### **Directions for Future Research**

The findings presented in this study provide a nuanced understanding of the role of religiosity/spirituality in desistance from deviant behaviors, and there is still much more to learn.



First, future research would benefit from greater exploration of the gendered nature of a religious turning point, as prior evidence has consistently indicated that women are far more involved in religious activities as compared to men (e.g., Sherkat & Ellison, 1999; Stark, 2002). The current state of knowledge indicates that very little attention has been devoted to the identification and evaluation of turning point effects among women (but see e.g., Kreager et al., 2010; Craig & Foster, 2013; Giordano et al., 2002), thereby limiting our understanding of whether desistance processes vary according to gender. However, given the vast differences between male and female criminality, traditional turning points may not be salient for females involved in deviant behaviors.

Second, and relatedly, future research would benefit from examinations of the intersections of gender, race/ethnicity, and the religiosity-desistance relationship. A previous study of the impact of religiosity among drug-involved clients has demonstrated that Black women, in comparison to subgroups of Black men, White women, and White men, display the greatest rates of religious involvement (Chu & Sung, 2009). In combination with additional evidence (see Giordano et al., 2002), these differences point to the importance of religious social control among minority women, perhaps over and above the traditional turning points of marriage and stable employment as specified by the age-graded theory (see Giordano et al., 2002). Therefore, greater research attention should be directed towards the joint contributions of gender and race/ethnicity to investigate alternate social processes that may shape life course patterns of antisocial conduct.

Third, it is encouraged that further assessment of the religion-desistance relationship be directed toward Hispanics. Results from this study in addition to prior evidence (see Stansfield, 2017) found relatively little support for a religious turning point within this population.



Explanations are needed to clarify why so few religious effects continue to be found within this subgroup. It would appear that these findings are paradoxical in light of the higher levels of religious practice and beliefs among Hispanics in comparison to Whites, the large percentage of Hispanics who are members of the Catholic Church (33%), and the rise of evangelical Protestantism among Hispanics in the U.S. (Pew Research Center, 2014; 2015). In addition, as the fastest growing ethnic minority, Hispanics represent 19% of incarcerated individuals but comprise only 16% of the population (Sakala, 2014). However, given previous data limitations, Hispanics have been a fairly understudied group (Walker et al., 2012). Greater research attention towards this group would shed more light on the structural institutions that provide ethnic-specific social control.

Fourth, future research should take into account the theoretical components of the age-graded theory that have not received a great deal of empirical attention. Prior investigations of turning point effects have emphasized ties to age-graded structural institutions (e.g., Bouffard & Laub, 2004; Horney et al., 1995; Laub et al., 1998; Uggen, 2000), while gaps remain in our understanding of the underlying causal mechanisms that encourage the desistance process (see Bersani & DiPietro, 2014). Greater consideration of the degree to which new situations 1) "knife off" past from present circumstances, 2) promote supervision/monitoring, 3) create routine activities, and 4) foster identity transformation, would continue to strengthen the theoretical claims of social bonding and criminal desistance.

Another challenging aspect of the age-graded theory that requires further exploration is the role of human agency in the desistance process. In adopting the rather ambiguous viewpoint of "situated choice," Laub and Sampson (2003:281) maintain that social context matters. In other



words, individuals are constrained by their subjective realities, which in turn, influence decisionmaking.

Accordingly, understanding desistance involves more than observation of social bonding processes alone. Laub and Sampson (2003) propose that offenders desist without construction of personal narratives toward "making good" (Maruna, 2001). Similarly, they assert that desistance is possible without the cognitive work to produce "up-front commitments" (Giordano et al., 2002:1036). Rather, Laub and Sampson found that desistance among the Glueck men occurred as a result of the on-going interaction between structure and agency, and where decisions to go straight were not always made consciously or deliberately (Laub et al., in press; see also Sampson & Laub, 2016). Thus, the present examination may beg the question of whether religiosity creates agency, or whether agency leads to religiosity. For some, the difficult question is not in distinguishing the causal components from human agency, but for future research efforts to *predict* how decisions will be made (see Bottoms, 2006:282).

Finally, future research efforts should replicate this study with longitudinal data that would improve upon the current assessment. Such data would consist of a longer time frame to observe change, would contain both official and self-report information for data corroboration, would have diverse representation across race/ethnicity and across levels of offending behavior, and would include reliable and valid assessments of religious/spirituality measures. However, there is currently no data available that meets these criteria.

## **Policy Implications**

Although results produced in the current examination demonstrate modest evidence for a religious/spiritual turning point from deviant conduct, there are still relevant implications for policy. Although controversial, such policy is evident at the federal level, as President George



W. Bush created the Office of Faith-Based and Community Initiatives in the White House in 2001 (Black, Koopman, & Ryden, 2004). With the intent to extend "compassionate conservatism," this policy allowed allocation of government funding to overtly religious organizations to provide community social services (Executive Order, 13199).

While some balked at the idea of complicating the separation of church and state (Carlson-Thies, 2009), in the several years following this policy, substantial funding has been devoted to prisoner reentry that emphasize faith-based approaches (Petersilia, 2004). Some of these large-scale efforts include the Prisoner Reentry Initiative (PRI), the Serious and Violent Offender Reentry Initiative (SVORI), Ridge House, and Ready4Work programs that provide services such as transitional housing, case management, job training, and placement for offenders returning to the community (Willison et al., 2010). Thus, in line with the guiding philosophy of the federal policy, findings from the current study suggest that religiosity, through faith-based efforts, may provide a means to change from continued offending.

Religiosity/spirituality in the form of faith-based initiatives may also serve myriad benefits to the local community by extending services to marginalized and underserved populations, such as ex-offenders, minorities, the poor, the old, and women, all for whom accessibility to assistance has traditionally been limited (DeHaven, Hunter, Wilder, Walton, & Berry, 2004). Generally situated within neighborhoods, churches are ideally suited to reach these underserved individuals for various forms of social services (Asomugha, Derose, & Lurie, 2011). In addition to Sunday worship services, churches may offer to the community drug prevention, rehabilitation, and mental health assistance given the emotional coping benefits associated with religious participation (Chu, 2007; Schroeder & Frana, 2009). Correspondingly, findings from the present study indicate that attendance to church provides the social control that leads to



significant within-individual change from drug use (ascetic deviance). Thus, initiatives that financially sustain such community programming are encouraged.

Research findings also underscore the importance race and religiosity/spirituality. As this study suggests, religiosity continues to be an integral component within the Black community, as the highest percentages of those that attend church, the highest percentages of those that hold religious beliefs, and those that display the greatest impact of attending services on decreased drug use over time was found among Black individuals. Therefore, the future task of researchers is to explore and identify the ways in which the church, as a supportive institution, may reach and the address problems across race/ethnicity.



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## **APPENDICES**



## **Appendix 1: Application of Negative Binomial Strategy**

Table 1A. Negative Binomial Mixed Effects Model of Religious Behavior on Ascetic Deviance Across Race/Ethnicity (n = 8,901)

	Full San	nple	White (n =	4,665)	Black (n =	2,335)	Hispanic (n	= 1,901)
Fixed Effects	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Between-subject religious behavior	-0.271***	0.062	-0.319**	0.095	-0.342**	0.110	-0.222	0.127
Within-subject religious behavior	-0.027	0.032	-0.036	0.047	-0.059	0.048	-0.057	0.084
Black	-0.272	0.221						
Hispanic	-0.038	0.238						
Controls								
Gender	0.585**	0.186	0.628*	0.283	0.038	0.321	0.981**	0.365
Age	-0.184***	0.016	-0.178***	0.023	-0.143***	0.025	-0.302***	0.049
Early criminal propensity	-0.090	0.325	0.253	0.470	-0.347	0.532	-0.089	0.802
Early problem behaviors	0.349	0.593	-1.784	1.403	0.133	0.904	1.532	0.998
Prior religiosity	-0.081	0.187	0.067	0.275	-0.194	0.330	-0.054	0.392
Family structure	-0.002	0.181	-0.179	0.262	-0.003	0.330	0.247	0.377
Family size	0.003	0.069	-0.295*	0.136	0.147	0.098	0.077	0.146
Parent-college graduate	0.152	0.284	0.402	0.515	1.772*	0.814	-0.370	0.450
Parent-HS graduate	0.065	0.278	0.156	0.511	1.423	0.779	-0.207	0.445
Poverty status	-0.326	0.219	-1.121	0.439	0.257	0.315	-0.227	0.413
Maternal bond	-0.662**	0.198	-0.444	0.294	-0.366	0.350	-0.905*	0.411
Urbanicity	-0.094	0.208	-0.460	0.393	-0.320	0.327	0.291	0.386
Neighborhood disorder	0.187	0.224	0.550	0.417	-0.017	0.329	-0.150	0.465
Incarceration time	0.020	0.014	0.037	0.024	0.036	0.021	0.093	0.102
Marriage	-0.220	0.193	-0.746*	0.312	0.399	0.303	-0.292	0.401
Employment	-0.822**	0.237	-0.999*	0.386	-0.827*	0.380	-0.480	0.502
Parenthood	0.444	0.297	0.924*	0.415	-0.813	0.530	0.345	0.671
Educational attainment	-0.106	0.190	-0.369	0.294	0.219	0.314	0.081	0.386
Military service	0.178	0.263	0.313	0.363	0.099	0.548	0.305	0.519
Constant	2.193**	0.630	2.857**	0.962	0.942	1.205	3.867**	1.454
Model $\chi^2$	284.3	37	124.5	57	82.02	2	22.5	7
Random effects								
$\sqrt{oldsymbol{\psi}}$	2.043	0.281	1.917	0.400	1.998	0.199	1.440	0.508



Table 1B. Negative Binomial Mixed Effects Model of Religious Beliefs on Ascetic Deviance Across Race/Ethnicity (n = 8,901)

	Full San	nple	White $(n =$	4,665)	Black (n =	2,335)	Hispanic (n	= 1,901)
Fixed Effects	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Between-subject religious behavior	-0.323***	0.080	-0.291**	0.096	-0.301	0.170	-0.533*	0.230
Within-subject religious behavior	-0.140	0.101	-0.077	0.142	-0.263	0.187	-0.140	0.239
Black	0.583*	0.246						
Hispanic	-0.157	0.273						
Controls								
Gender	0.507**	0.192	0.134	0.255	0.722	0.321	1.154**	0.497
Age	-0.159***	0.027	-0.170***	0.038	-0.126	0.044	-0.283**	0.095
Early criminal propensity	-0.240	0.342	-0.287	0.494	0.370	0.547	-1.551	1.103
Early problem behaviors	0.906	0.484	0.245	0.786	0.867	0.823	2.077	1.150
Prior religiosity	-0.239	0.209	0.090	0.261	0.107	0.411	0.766	0.575
Family structure	-0.140	0.190	-0.281	0.247	0.307	0.357	-0.621	0.493
Family size	-0.023	0.075	-0.005	0.113	0.091	0.120	-0.192	0.208
Parent-college graduate	0.249	0.357	0.916	0.761	1.194	0.850	-0.473	0.609
Parent-HS graduate	-0.035	0.346	0.863	0.757	0.632	0.823	-1.001	0.625
Poverty status	-0.319	0.257	-1.121*	0.487	0.120	0.381	0.068	0.590
Maternal bond	-0.417*	0.205	-0.242	0.270	-0.226	0.383	-0.492	0.520
Urbanicity	-0.087	0.228	-0.307	0.389	-0.064	0.367	0.025	0.534
Neighborhood disorder	-0.139	0.253	0.187	0.416	-0.720	0.396	0.259	0.565
Incarceration time	0.016	0.016	0.019	0.028	0.018	0.023	0.202	0.106
Marriage	-0.198	0.198	-0.493	0.266	-0.145	0.356	0.336	0.520
Employment	-0.532	0.280	-0.931*	0.390	-0.253	0.487	-0.057	0.719
Parenthood	0.374	0.288	0.329	0.328	0.292	0.581	1.001	0.123
Educational attainment	-0.573**	0.198	-0.774**	0.267	-0.019	0.349	-0.433	0.483
Military service	0.223	0.332	0.372	0.409	-0.591	0.836	0.471	0.729
Constant	2.198**	0.808	2.756*	1.223	0.214	1.598	3.743	2.396
Model $\chi^2$	18.98	3	4.10	)	2.88	}	0.73	3
Random effects								
$\sqrt{oldsymbol{\psi}}$	1.198	0.339	0.703	0.402	0.951	0.600	1.022	1.146



Initial modeling of ascetic deviance outcome utilized a multilevel Poisson approach based on comparison of the conditional variance to the conditional mean. It was then assumed that, based on this single-level information, the correct strategy to examine counts of ascetic deviance would be Poisson. In so doing, the original significant findings from this analysis generated erroneous conclusions.

To remedy this issue, multilevel negative binomial estimation was applied instead.

Results from these analyses are presented in Tables 1A and 1B, which indicate the impact of religious behavior on change from ascetic deviance, and the impact of religious beliefs on change from ascetic deviance, respectively. Given the lack of significant within-individual effects across models, the findings above correspond to the overall results that suggest religiosity is not a potent factor in enacting change. Importantly, initial analyses provided significant within-individual effects (see Tables 9 and 10), which should be viewed with caution.

Nonetheless, application of the most appropriate modeling strategy to the question asked can be a complex process, but is necessary in order to avoid potentially faulty evidence.



## **Appendix 2: Focus on Ascetic Deviance**

Table 2A. Multilevel Mixed Effects Model of Religious Behavior on Deviant Conduct (n = 8,901)

Table 2A. Muttilevel Mixed Effects	Coefficient	SE
Fixed effects		
Between-subject religiosity	-0.294***	0.020
Within-subject religiosity	-0.011	0.009
Black	-0.034	0.072
Hispanic	-0.050	0.076
Gender	0.395***	0.054
Age	-0.083***	0.004
Early criminal propensity	0.260**	0.099
Early problem behaviors	0.750***	0.147
Prior religiosity	-0.049	0.060
Family structure	-0.154*	0.060
Family size	-0.043*	0.023
Parent-college graduate	0.246*	0.099
Parent-HS graduate	0.009	0.100
Poverty status	-0.137	0.075
Maternal bond	-0.206***	0.062
Urbanicity	-0.052	0.064
Neighborhood disorder	0.215**	0.077
Incarceration time	0.014***	0.003
Marriage	-0.369***	0.071
Employment	-0.056	0.032
Parenthood	-0.241***	0.052
Educational attainment	0.006	0.032
Military service	-0.697***	0.128
Constant	0.799***	0.164
Model $\chi^2$	3102	2.77
Random effects		
$\sqrt{\psi}$	1.353	0.066



Table 2B. Multilevel Mixed Effects Model of Religious Beliefs on Deviant Conduct (n = 8,901)

	Coefficient	SE
Fixed effects		
Between-subject religiosity	-0.203***	0.025
Within-subject religiosity	-0.019	0.031
Black	0.257**	0.089
Hispanic	0.056	0.091
Gender	0.404***	0.065
Age	-0.068***	0.008
Early criminal propensity	0.228*	0.112
Early problem behaviors	0.547***	0.156
Prior religiosity	-0.131*	0.069
Family structure	-0.116	0.067
Family size	-0.055*	0.027
Parent-college graduate	0.305*	0.123
Parent-HS graduate	0.099	0.123
Poverty status	-0.178	0.092
Maternal bond	-0.198***	0.071
Urbanicity	-0.061	0.076
Neighborhood disorder	0.147	0.090
Incarceration time	0.012***	0.002
Marriage	-0.472***	0.124
Employment	-0.149*	0.064
Parenthood	-0.071	0.088
Educational attainment	-0.206**	0.059
Military service	-0.550**	0.201
Constant	0.673**	0.237
Model $\chi^2$	275.	.46
Random effects		
$\sqrt{oldsymbol{\psi}}$	0.900	0.075



Table 2C. Multilevel Mixed Effects Model of Religious Behavior on Deviant Conduct Across Race/Ethnicity (n = 8,901)

	Whi	ite	Blac	Black Hispan		
	(n = 4,	665)	(n = 2,	335)	(n = 1,	901)
Fixed Effects	Coefficient	SE	Coefficient	SE	Coefficient	SE
Between-subject behavior	-0.326***	0.027	-0.225***	0.041	-0.325***	0.054
Within-subject behavior	0.006	0.013	-0.041*	0.017	-0.006	0.024
Gender	0.355***	0.068	0.471***	0.116	0.382**	0.138
Age	-0.084***	0.005	-0.068***	0.008	-0.100***	0.011
Early criminal propensity	0.288*	0.131	0.160	0.205	0.337	0.245
Early problem behaviors	0.606**	0.198	0.940**	0.304	0.782*	0.347
Prior religiosity	-0.018	0.076	-0.049	0.132	-0.114	0.149
Family structure	-0.158*	0.076	-0.169	0.123	-0.139	0.146
Family size	-0.054	0.034	0.009	0.041	-0.104	0.060
Parent-college graduate	0.366*	0.174	0.139	0.227	0.137	0.177
Parent-HS graduate	0.207	0.178	-0.307	0.222	0.051	0.176
Poverty status	-0.121	0.116	-0.161	0.129	-0.134	0.165
Maternal bond	-0.203**	0.082	-0.073	0.125	-0.395*	0.154
Urbanicity	-0.095	0.096	-0.026	0.116	0.025	0.145
Neighborhood disorder	0.074	0.131	0.342**	0.125	0.231	0.175
Incarceration time	0.021***	0.003	0.009*	0.004	0.011	0.008
Marriage	-0.347***	0.090	-0.190	0.160	-0.458**	0.173
Employment	-0.075	0.041	0.013	0.076	-0.064	0.088
Parenthood	-0.338***	0.076	-0.115	0.088	-0.363**	0.128
Educational attainment	-0.028	0.039	0.138	0.070	0.028	0.087
Military service	-0.817***	0.164	-0.636	0.338	-0.429	0.281
Constant	0.774**	0.241	0.109	0.337	1.426***	0.374
Model $\chi^2$	1753	.90	801.	51	483.	76
Random Effect						
$\sqrt{oldsymbol{\psi}}$	1.206	0.079	1.532	0.150	1.683	0.192



Table 2D. Multilevel Mixed Effects Model of Religious Beliefs on Deviant Conduct Across Race/Ethnicity (n = 8,901)

	Whi		Blac		Hispa	
	(n = 4,	,	(n = 2, 3)		(n = 1, 0)	
Fixed Effects	Coefficient	SE	Coefficient	SE	Coefficient	SE
Between-subject behavior	-0.223***	0.030	-0.160*	0.062	-0.213**	0.063
Within-subject behavior	-0.010	0.041	-0.084	0.064	0.022	0.081
Gender	0.262*	0.082	0.591***	0.140	0.511**	0.165
Age	-0.076***	0.011	-0.055***	0.015	-0.050*	0.022
Early criminal propensity	0.308*	0.145	0.216	0.233	0.102	0.274
Early problem behaviors	0.544**	0.204	0.652	0.345	0.434	0.360
Prior religiosity	-0.112	0.085	0.002	0.157	-0.273	0.165
Family structure	-0.066	0.084	-0.080	0.142	-0.163	0.167
Family size	-0.034	0.037	-0.007	0.050	-0.149*	0.072
Parent-college graduate	0.597*	0.239	0.316	0.268	0.120	0.210
Parent-HS graduate	0.555*	0.242	-0.291	0.264	0.106	0.204
Poverty status	-0.130	0.139	-0.107	0.154	-0.336	0.197
Maternal bond	-0.158	0.094	-0.073	0.147	-0.443**	0.169
Urbanicity	-0.146	0.114	0.038	0.137	0.073	0.167
Neighborhood disorder	-0.008	0.153	0.183	0.146	0.374	0.197
Incarceration time	0.016***	0.004	0.006	0.005	0.009	0.007
Marriage	-0.426**	0.156	-0.143	0.270	-0.632*	0.295
Employment	-0.124	0.078	-0.168	0.146	-0.139	0.177
Parenthood	-0.163	0.128	-0.028	0.151	-0.034	0.220
Educational attainment	-0.241**	0.073	-0.094	0.126	-0.206	0.167
Military service	-0.854**	0.284	0.077	0.427	-0.541	0.446
Constant	0.575	0.358	0.099	0.503	1.023	0.578
Model $\chi^2$	145.	39	89.8	32	16.0	19
Random Effect						
$\sqrt{oldsymbol{\psi}}$	0.748	0.083	1.079	0.169	0.820	0.230



According to Middleton and Putney (1962), studies have been unable to draw clear relationships regarding the impact of religiosity on behavior due to the failure of discerning two types of ethical standards, the ascetic and the social (or *secular* as termed in the present study). Specifically, Middleton and Putney argue that behavior in violation of ascetic norms are those characterized by "sensual indulgences," (p. 142-143) and are typically proscribed to a greater degree among those who are religiously devout. Such behaviors can include, for example, gambling, premarital sex, and tobacco use (see Albrect et al., 1977; Cochran, 1988; Middleton & Putney, 1962), and for which condemnation against such conduct may not be as strong in the secular realm. Alternately, behavior in violation of secular standards are widely disapproved. Distinguishing types of behavior in accordance with these standards may improve the predictive power of the impact of religiosity.

With these considerations in mind, it may be important to remove hard drug use, which captures respondent use of drugs such as crack or cocaine, from the deviance outcome measure. This type of behavior may better characterize violations of secular norms. Following the removal of the counts of hard drug use, negative multilevel models were estimated to once again assess the separate impact of religious behavior and religious beliefs on the combined measure of deviant conduct (Tables 2A and 2B), and to further evaluate these relationships across race and ethnicity (Tables 2C and 2D).

Results from these analyses indicate that removal of hard drug use from the deviance outcome measure indicates virtually no difference from the initial findings (see Tables 3-6 and discussion of these results above). As before, the influence of both religious behavior and religious beliefs remain unimportant given the absence of significant within-individual change (Tables 2A and 2B, respectively). Similar to the initial findings across race and ethnicity, the



only significant within individual effect of religious beliefs on deviant behavior in these secondary analyses holds albeit to slightly lesser degree. Specifically, religious behavior reduces the odds of involvement in deviant conduct by 4% over time ((exp^-.047 - 1) x 100) for Black individuals. No within-individual effects are found among Whites or Hispanics.

Although the secondary results provided here do not deviate much from the original findings, it is still important to continue to differentiate behaviors in accordance with ascetic and secular standards to assess the impact of religion on deviance.



## Appendix 3: Modeling Based on Laub and Sampson's Analysis of Change

Table 3A. Multilevel Mixed Effects Modeling of Drug Use and Delinquent Acts (n = 8,901)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Fixed Effects	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
Тілей Ејјесіѕ	(SE)	(SE)	(SE)	(SE)	(SE)	(SE)	(SE)
Λαο	-0.116***	-0.099***	-0.067***	-0.069***	-0.057***	-0.056***	-0.057***
Age	(0.002)	(0.002)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)
$Age^2$	0.001*	0.001	-0.001	-0.002***	-0.002***	-0.001***	-0.002***
Age	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Within-Individual		-0.187***	-0.161***	-0.0158***	-0.154***	-0.154***	-0.156***
Religiosity		(0.007)	(0.008)	(0.009)	(0.009)	(0.009)	(0.009)
Between-Individual			-0.037***	-0.039**	-0.039**	-0.039**	-0.039**
Religiosity			(0.010)	(0.011)	(0.011)	(0.011)	(0.012)
Early Problems				0.991***	0.981***	0.972***	0.945***
Larry Froblems				(0.092)	(0.092)	(0.092)	(0.096)
Marriage					-0.584***	-0.599***	-0.571***
Mainage					(0.076)	(0.077)	(0.079)
Employment					-	-0.103***	-0.112*
Employment						(0.170)	(0.047)
Military							-0.666***
•							(0.154)
Model $\chi^2$	12924.12	11567.98	863.39	694.21	663.30	663.47	605.38
Random Effects							
$\sqrt{oldsymbol{\psi}}$	2.154	1.890	1.152	1.155	1.112	1.112	1.107
$\sqrt{oldsymbol{\psi}}$	(0.063)	(0.057)	(0.057)	(0.064)	(0.063)	(0.063)	(0.064)



Table 3A Continued. Multilevel Mixed Effects Modeling of Drug Use and Delinquent Acts Continued (n = 8,901)

	Model 8	Model 9
Eine I Efferte	Coef.	Coef.
Fixed Effects	(SE)	(SE)
A ~~	-0.052***	-0.057***
Age	(0.006)	(0.006)
A ==2	-0.002***	-0.002***
$Age^2$	(0.000)	(0.000)
Within-Individual	-0.154***	-0.156***
Religiosity	(0.009)	(0.009)
Between-Individual	-0.039**	-0.039**
Religiosity	(0.012)	(0.012)
	0.954***	0.945***
Early Problems	(0.096)	(0.096)
Mamiaga	-0.492***	-0.571***
Marriage	(0.081)	(0.079)
Employment	-0.120*	-0.112*
Employment	(0.047)	(0.047)
Military	-0.692***	-0.666***
Military	(0.154)	(0.154)
Parenthood	-0.230***	-0.230***
raientilood	(0.059)	(0.059)
Higher Education		-0.175***
Higher Education		(0.044)
Model $\chi^2$	602.16	591.00
Random Effects		
/ <u>əl</u> ;	1.099	1.084
$\sqrt{\psi}$	(0.064)	(0.063)



While Laub and Sampson focus on the impact of age on criminal desistance, they account for additional explanatory variables such as time-stable IQ, childhood risk, as well as time-varying controls including marriage, unemployment, and military service. Additionally, with consideration of the length of their observation window, they incorporate both a linear and quadratic function of age. Although a measure of respondent IQ was not included in the secondary analysis here, proxy controls similar to those used by Laub and Sampson were included into the model. Measures consist of linear and quadratic terms for age, time-varying predictors of religiosity, military service, employment, and a time-stable measure of early problem behaviors in childhood. For ease of interpretations, each of the coefficients is exponentiated to evaluate percentages in change in criminal behavior associated with change in the adult social bonding measures.

Following the age variables, entering each control sequentially, as done by Laub and Sampson, evaluates the strength of the relationship between age and criminal behavior. In the present analysis, the relationship between age and criminal activity does not attenuate across models (see Table C1). In Model 1, the terms for age provides estimates that indicate the average rate of change as well as its curvature or acceleration of that change. Given the decade of observation (2000-2011) with the NLSY97 sample, the average rate of change from offending declines by 12% ((exp^-.047 - 1) x 100) with age among those that participate in criminal activity as compared to those who are not involved.

With a focus on results relating to the impact of religiosity over time, a significant within-individual effect indicates a 15% ((exp^-.16 - 1) x 100) decrease in the odds of offending over time. When between individual controls are entered individually, this relationship holds. However, as noted with previous analysis in the current study, when additional theoretically-



driven factors are included in the model, the influence of religiosity on within-individual change no longer becomes relevant. Therefore, more traditional social bonding processes such as marriage, military, and employment may be better predictors of change from offending during the transition into adulthood.

