Ensnared into Crime: A Preliminary Test of Moffitt's Snares Hypothesis in a National Sample of African Americans

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ABSTRACT

The purpose of the present study was to examine the relation between alcohol use and individual differences in the desistance process from criminal behavior during young adulthood. This study used Moffitt's (1993) "snares" hypothesis to posit that alcohol use would slow the desistance process of criminal behavior among African Americans. Using data from the National Longitudinal Survey of the Youth 1997, we conducted dual semiparametric group-based trajectory analysis of criminal behavior and alcohol use among African Americans from ages 16 through 22 (N = 283) using data from the National Longitudinal Survey of the Youth 1997. Results indicate that 3 trajectory groups provided the best representation for the patterns of crime over this period of life. In addition, 4 trajectory groups provided the best representation for the patterns of alcohol use. From our dual-trajectory analysis, we found that African Americans that were desisting slower from crime were using alcohol more often, thus supporting Moffitt's snares hypothesis.

Few will argue that African Americans are overrepresented in the criminal justice system. As both victims and offenders, African Americans have a presence in the criminal justice system that far surpasses their representation in society as a whole. For instance, African Americans are consistently overrepresented in arrests for murder, robbery, and aggravated assault (Gabbidon & Greene, 2008) and are also more likely to become victims of violent crime (Walker, Sphon, & DeLone, 2004). Thus, African Americans involvement in the criminal justice system is worthy of study.

African Americans have been studied in several areas for the perpetration of crime. For instance, several researchers have provided evidence that structural issues are relevant to understanding African Americans' criminal behavior (Anderson, 1999; Brezina et al., 2004; DeCoster, Heimer, & Wittrock, 2006). Others have focused more on the individual-level correlates showing that peer association (McGee, 2003), weakened social bonds, and self-control (Higgins & Ricketts, 2005; Vazsonyi & Belliston, 2007; Vazsonyi & Crosswhite, 2004) have a link with criminal activity for African Americans. Although these studies have focused on the reasons why African Americans may perpetrate criminal activity, researchers have yet to ask why African Americans may have trouble stopping their criminal activity (i.e., desisting from crime).

Desistance from crime is the process of slowing, reducing, and ultimately stopping the perpetration of criminal involvement, which has been the focus of life-course researchers for some time (see Bushway et al., 2001; Jennings & Piquero, 2009). However, prior research has not focused on African Americans. Furthermore, research has not focused on the "ensnaring" factors that may interrupt or thwart the desistance process among African Americans. Thus, a substantial amount of knowledge is missing regarding our understanding of the ensnaring factors that keep African Americans involved in crime.

The purpose of the present study is to add to our knowledge base by exploring the intersection of crime and alcohol trajectories to address Moffitt's (1993) snares hypothesis. Although a sizable literature exists concerning the trajectories of crime and alcohol use independently, less research has explored these issues in the context of Moffitt's version of snares (Hussong et al., 2004). In addition, no study has examined this connection using African Americans. Thus, this study assists in filling a gap in our understanding of the desistance process via the snares hypothesis for African Americans.

To accomplish the purpose of the present study, several areas of research need to be addressed. This study first reviews Moffitt's (1993, 2003) dual taxonomy of crime. Then, the study presents the literature concerning the desistance process that is followed by our presentation of the snares hypothesis. Next, the methods are presented, followed by our presentation of the analysis plan and results. The study closes with the discussion of the results in the context of the snares hypothesis for African Americans.

DUAL TAXONOMY OF CRIME

Moffitt's (1993) taxonomy represents one of many developmental perspectives of offending (see Gottfredson & Hirschi, 1990; Sampson & Laub, 1993; Thornberry, 1987 for additional views on developmental perspectives of offending). Moffitt (1993) argued that two types of offending trajectories are probable in data. The first offending trajectory is the life-course persistent type that would perform delinquency early and continue to offend. The life-course persistent type is a product of inherited or acquired neuropsychological variation that influences temperament and cognitive ability. This variation is a result of environmental risk including poor parenting, weakened or broken family bonds, and poverty. As the individual ages, the environmental risks grow to include strained relationships with peers and teachers that further reduce the ability to learn and acquire prosocial skills. The continued negative influences that come from the environment in conjunction with the inheritance of neuropsychological variation creates an antisocial personality that is susceptible to crime, sporadic employment, and victimization of intimate partners and children.

The second offending trajectory is the adolescent-limited type that is characterized by the onset of delinquency during adolescence, which ends by early adulthood. The adolescent-limited type usually begins offending at the onset of puberty. According to Moffitt (1993), adolescent-limited offending is the result of the "maturity gap." The maturity gap captures the disjuncture between an adolescent's biological maturity and their social maturity. The maturity gap places individuals in a position in which they may look and sound like adults, but a number of social restrictions abound that reduce their autonomy. For instance, a 14-year-old boy may look and sound like an adult due to puberty, but socially the 14-year-old does not have the right to vote or drink. The adolescent-limited individual caught in these gaps may turn to deviance or delinquency (e.g., skipping school, drinking alcohol, smoking, or criminally delinquent behavior) as a means for demonstrating autonomy from their parents and for gaining positive recognition from peers, both of which serve to fulfill certain aspects of the social maturation process. In other words, adolescents may turn to deviance and delinquency during the social maturation process as a result of the disconnect between an individual's biological and social maturity. However, once the distance between biological and social maturing decreases, social maturity affords the individual the autonomy that once resulted from engaging in deviance or delinquency.

Moffitt (2003) provides a lengthy review of the research that has examined and supported these views and a number of studies have found support for the life-course persistent type of offending (see Aguilar et al., 2000; Arseneault et al., 2002; Brame, Bushway, & Paternoster, 1999; Chung et al., 2002; Dean, Brame, & Piquero, 1996; Donnellan, Ge, & Wenk, 2000; Paternoster & Brame, 1998; Piquero, 2001; Piquero & Brezina, 2001; Roeder, Lynch, & Nagin, 1999; Tibbetts & Piquero, 1999). The adolescent-limited type of offender has been supported in the empirical literature as well (Augilar et al., 2000; Piquero & Brezina, 2001; Zebrowitz et al., 1998). Although these studies have used varying methods to collect their data (i.e., official reports or self-reports) and different statistical methods (i.e., classification rules or statistical mixture modeling), the overall findings point toward the taxonomy as being beneficial to criminologists in classifying individuals, focusing on the understanding of predictors, and serves as a timing mechanism for programming (Moffitt, 2003, 2006).

However, the research has been inconclusive about the number of groups that should be considered to understand the development of crime trajectories. For instance, Moffitt (2003) argued that a third group should be considered to explain the development of crime. Moffitt (2003) argued that these individuals would consistently commit crime at a low level and deemed these individuals as low-level chronics. To date, to our knowledge, no research has been produced on the specific nature of what places or launches an individual into this trajectory. However, Piquero's (2004) review of the use of trajectory analysis consistently shows that researchers find between three and four trajectory groups that would tentatively support Moffitt's (2003) claim and suggest that further revision to her taxonomy is necessary. For the present study, we expect Moffitt's (2003) view to be supported that three trajectory groups of crime will be present.

DESISTANCE PROCESS

Desistance from crime is the process of reducing or stopping criminal behavior (Benson, 2002). This process takes place in a systematic manner throughout individuals (Bushway et al., 2001; Laub & Sampson, 2001; Piquero et al., 2001; Sampson & Laub, 1993). The vast majority of the research on the desistance process has supported the idea of interindividual differences in intraindividual change in criminal behavior (Laub & Sampson, 2001; Moffitt, 1993, 2003). This research is problematic because it relies on research strategies and methodologies that do not take changes in crime into account. Further, this research neglects the possibility that individuals may follow similar trajectories that are distinct from one another during the desistance process (Moffitt, 1993). For instance, these studies neglect Moffitt's (1993) argument that adolescent-limited individuals are likely to desist from crime because they have found other more productive activities to pursue. The life-course persistent individual is not likely to desist from crime.

Studies of desistance have used methodologies that have not provided a clear understanding of the desistance process. For instance, previous research has relied on the use of official data (Bushway et al., 2001). The problems that arise from official data are that the decline in criminal behavior may be falsely represented by an increase in incarceration rates, an improved ability to evade official action, regime shifting from illegal to legal behaviors, or a continuation of criminal behavior that does not result in an arrest (i.e., the dark figure of crime). In this instance, self-report measures may provide an improvement of these issues by capturing behaviors that have not come to the attention of officials. This is not to say that self-report surveys do not introduce their own biases (Babbie, 1995; Huizinga & Elliot, 1986; Lauritsen, 1993); however, the biases that are associated with self-report surveys are thought to be constant over time. Thus, self-report surveys usually do not distort the longitudinal pattern of crime desistance that is commonly observed. Therefore, the use of official data creates problems that self-report surveys are able to improve, providing valuable information about desistance from crime.

In addition to using official data rather than self-report data, studies of desistance have used cross-sectional or short-term longitudinal data (i.e., two time points). These studies typically use this data to determine which covariates may influence the desistance of crime from an initial

point (e.g., see Bushway et al., 2001; Nagin, Farrington, & Moffit, 1995; Piquero et al., 2001). These studies are problematic because they do not treat desistance as a developmental process. Thus, to inform criminology about the desistance process, data and methods are collected in a way to treat it as a developmental process. The studies that have been mentioned previously do not specifically account for race.

THE SNARES HYPOTHESIS

When considering desistance from crime, criminologists focus on both protective and ensnaring factors. Protective factors are central to speeding up the desistance process (Laub & Sampson, 2001; Sampson & Laub, 1993). The protective factors generally come from the social bonding and social control theories (Sampson & Laub, 1993). Specifically, the social bonds that seem to have the most potent qualities to hasten the desistance process are good marriages and good jobs during young adulthood. Ensnaring factors slow the desistance from crime process. Ensnaring factors produce a short-term effect on crime and change the course of natural desistance from crime when present.

Protective and ensnaring factors operate differently in the desistance process. A good marriage or a good job may serve as promoters of desistance, but snares are short term and actively work to impede the desistance process. From this perspective, snares are the polar opposite of protective factors. Distinguishing between these two factors allows for understanding the different impacts on the desistance process and provides important information concerning interventions. For instance, if the issue is that alcohol use serves to ensnare individuals, then it is prudent to find ways to reduce alcohol use. In other words, the interventions should be focused on removing the ensnaring issue.

The potential for interventions places an importance on understanding how alcohol use may ensnare an individual. Alcohol use may impede an individual's natural progression to the other protective factors that include a good marriage and a good job (Blow et al., 2002; Caetano & Kaskutas, 1995; Eigenbrodt et al., 2001; Fillmore, 1987; Fillmore et al., 1991; Karlamangla et al., 2006; Mirand & Welte, 1996; Moore et al., 2005; Moos et al., 2004; Rehm, Greenfield, & Rogers, 2001). Alcohol use to an excess may create dependence in which criminal activity is necessary for dependence maintenance. Alcohol use has a connection with interrupting education, educational opportunities, and incarceration (Gerstein & Harwood, 1990). Often, alcohol use occurs in a social context that may result in more time spent with deviant and delinquent peers. Finally, alcohol use has the ability to lower an individual's inhibitions providing the proper environment for the use of poor judgment. These rationales may result in greater criminal behavior (see Dembo & Sullivan, 2009; Felson, Teasdale, & Burchfield, 2008; Fulkerson et al., 2008; Mandara & Murray, 2006; Odgers et al., 2008 for recent studies of the link between alcohol use and crime). The goal of this study is not to distinguish between these different roles but to explore whether any of these roles are plausible in the desistance process.

Regardless of the potential understanding that snares and protective factors may offer in understanding the desistance process, little research has been produced in the area of snares.

Hussong et al. (2004) used three waves of data (18, 21, and 26 years old) from Danish men (N = 461). They used a specialized process to examine the trajectory of these men; specifically, they used growth curve models (GCMs) via structural equation modeling (SEM). They used measures of antisocial behavior and substance use to test the snares hypothesis. Their results indicated variability around the initial levels and rates of change in antisocial behavior over time. Further, their results provided evidence that supported the snares hypothesis. This study made an important advance in understanding the desistance process. This was the first study directly examining the snares hypothesis. Second, the Hussong et al. (2004) study used more than two time points and a statistical methodology that was designed to examine this issue. [2]

Despite the advance that Hussong et al. (2004) has made, to our knowledge, no research has directly explored the snares hypothesis in a sample of African Americans. The scarceness may be an issue given that the snares hypothesis is a relatively recent advance in theorizing about desistance from crime. However, African Americans have strong statistical histories with alcohol use and criminal behavior. To be clear, African Americans are often viewed as one of the most criminal groups. For instance, African Americans disproportionately are involved more in crime as victims, perpetrators, or both (Mann, 1993; Walker et al., 2004).

Further, Moffitt (2003) argued that minorities (i.e., African Americans in particular) are more likely to be subjected to one of her developmental subtypes of criminal behavior. This arises because African Americans are likely to be entrenched in deplorable living conditions that are the result of poor education, poverty, and exposure to environmental issues. The entrenchment makes African Americans more susceptible to ensnaring factors that include alcohol use. Overall, this suggests that the developmental process of criminal activity of African Americans would be particularly important to understand. Thus, we expect that alcohol use will serve as an ensnaring factor to African Americans' criminal activity.

In addition to not having a large number of studies having explored the snare hypothesis, Hussong et al. (2004) did not use a statistical methodology that acknowledges the taxonomic nature of Moffitt's (1993, 2003) view on offending. That is, the use of SEM allowed them to follow the developmental trajectory of the entire group. Although informative, this is not optimal given that Moffitt (1993, 2003) hypothesizes that three clusters or groups will follow developmentally distinct pathways of criminal behavior. Thus, an advance that is necessary would be to use a methodology that allows for the possibility of multiple groups of offending.

THE PRESENT STUDY

The purpose of the present study is to fill a gap in our understanding of the desistance process. Specifically, this study explores the developmental trajectories of crime and alcohol use of African Americans. Next, this study explores Moffitt's (1993, 2003) snares hypothesis among African Americans. This study is important because it will be, to our knowledge, the first to provide an understanding of African Americans desistance from crime using the snares hypothesis. Further, this study is important because it will make use of statistical methodology

that will allow for the possibility that Moffitt's (1993) taxonomy is true. Specifically, this study will make use of semiparametric group-based mixture modeling (SPGM; Nagin, 2005).

METHODS

The National Longitudinal Survey of the Youth 1997 (NLSY 97) is a panel survey that began with 8,984 youth that were born between 1980 and 1984. The survey includes a supplemental sample of Hispanic and African American youth. This survey has been conducted annually starting in 1997. The data for the present study came from seven rounds of the survey, 1997 to 2003.

The survey was originally designed to longitudinally capture factors that influence youths' transition from school to the workplace, but the survey contains a number of demographic and lifestyle measures that are collected as part of the survey. The factors that are relevant to this study are alcohol use and criminal activity.

The primary sample for the current study focused on self-report data that came from African Americans in the data. These individuals were between the ages of 16 and 22 during 1997 to 2003. This period of life is important because it provides an opportunity for the respondents to begin to follow the age–crime curve. That is, Moffitt (1993, 2003) argued that around the age of 20 to 25 years some individuals (i.e., adolescent limited) would begin to desist from crime, but life-course persistent individuals would continue to commit crime. Thus, we believe that our sample allows us to examine the desistance process.

The NLSY 97 survey was typically carried out between February to August of 1997, but it was carried out between November and April of the following years. This may leave some overlap in individuals. That is, some individuals may appear in the sample more than once under two different ages. Only 10 individuals had this issue, and we removed them to not bias our results.

Because the methodology for this study is longitudinal, missing data are a reality (Brame & Paternoster, 2003; Brame & Piquero, 2003). To explore the extent of the missing data, we used a means test (i.e., t-test) for alcohol use and delinquency. The missing data from the alcohol portion of the analysis are much greater than crime. The t-tests shows that those that used alcohol were different from those that did not use alcohol. Thus, we considered our analysis as preliminary. [3] In the present study, the missing data for the crime variable ranged from one to two cases depending on the years. From this set of procedures, the present study was left with a sample size of 283 African Americans. Of these 283 African Americans, 59.2% are female and 40.8% are male.

MEASURES

Alcohol Use

The alcohol measure was a single item for each year (1997–2003). The respondents addressed the item: "How many days did you use alcohol in the last 30 days?" The responses ranged from 0 to 30.

Crime

Crime was an additive measure of five items. The five items were "Have you purposely destroyed property in [during the current year]?," "Have you stolen anything under 50 dollars [during the current year]?," "Have you stolen anything over 50 dollars [during the current year]?," "Have you committed a property crime [during the current year]?," and "Have you attacked to hurt someone or fight with them [during the current year]." The respondents indicated whether they had or had not, (1) yes or (0) no. The internal consistency of the scale for each of the years was acceptable between .60 and .75, but we address test–retest reliability in our results. The additive scale resulted in a range of 0 to 5 with higher scores indicating that the individual had participated in more criminal activity during the year in question.

ANALYSIS

The analysis for this study takes place in several stages. In the first stage, we present the descriptive statistics of alcohol use and crime to illustrate their general trends and describe the bivariate correlations of these measures across the different waves of data (e.g., from ages 16 to 22 years).

In the second stage, we estimate a number of developmental trajectories of alcohol use and crime using Nagin's (2005) Semi Parametric Group-based Modeling (SPGM) via PROC TRAJ. SPGM allows researchers to examine whether qualitatively distinct groups of individuals are following similar developmental trajectories. Hussong et al.'s (2004) study used SEM that only allowed for one group to be estimated (see Nagin, 2005 for a complete argument of this advance). Thus, it is not clear from Hussong et al.'s study that some groups may be following different trajectories.

To determine the proper number and shape of the trajectories (i.e., best representation of the data), researchers consult a number of statistics that SPGM produces. First, the Bayesian information criterion (BIC) allows researchers to choose the best model. According to Nagin (2005), when the BIC is maximized, the proper model to represent the data the best has been found. That is, the proper number of groups and the shapes of the trajectories have been identified. Second, the posterior probabilities serve as a measure of precision. Nagin argued that the posterior probabilities that are above .70 indicate that membership in the groups that have been found are relatively precise.

In the third stage of the analysis, we present the results of a dual-trajectory analysis. This analysis allows us to understand better the intersection between the trajectory groups of alcohol use and crime. This analysis will result in a series of probabilities that indicate the intersection between these trajectories that are graphically presented. This allows us to address our first expectations that alcohol and crime will follow distinct qualitative trajectories. Important to the present study, it allows us to better understand Moffitt's (1993, 2003) snares hypothesis, in other words addressing our second expectation. For this analysis, three panels are used to illustrate how the members of the alcohol use trajectory groups intersect with those following the crime trajectory groups. This intersection is presented in probabilities. Panel A is a presentation of probability of membership in the crime trajectories conditional on membership in each of the alcohol use trajectory groups. For panel A, each of the columns equals one, given that membership is conditional on membership in an alcohol use trajectory. Panel B reports the opposite conditional probabilities. That is, Panel B is the probability of membership in each of the alcohol use trajectories conditional on membership in the crime trajectories. For panel B, each row of probabilities equals one. Panel C is the joint probability of membership in a specific crime and alcohol use trajectory. The total probabilities for each combination equals to one.

RESULTS

Stage 1

Table 1 of the results shows the descriptive statistics and the bivariate correlations for crime and alcohol use. [4] The mean level of crime is decreasing for the entire sample, but the number of days that alcohol use is occurring is increasing.

TABLE 1 Descriptive Statistics and Bivariate Correlations for Crime and Alcohol Use

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Crime (16)	1.00													
2. Crime (17)	0.17**	1.00												
3. Crime (18)	0.34**	0.20**	1.00											
4. Crime (19)	0.36**	0.28**	0.46**	1.00										
5. Crime (20)	0.34**	0.06	0.24**	0.40**	1.00									
6. Crime (21)	0.30**	0.17**	0.13*	0.29**	0.37**	1.00								
7. Crime (22)	0.09	0.16**	0.21**	0.19**	0.29**	0.20**	1.00							
8. Alcohol Use (16)	0.26**	-0.00	-0.00	0.01	0.11	0.35**	0.01	1.00						
9. Alcohol Use (17)	0.25**	0.11	0.16	-0.05	0.04	0.02	0.34**	0.28**	1.00					
10. Alcohol Use (18)	0.18*	0.28**	-0.09	0.08	0.04	0.10	-0.07	0.13	0.19	1.00				
11. Alcohol Use (19)	0.13	0.01	-0.02	0.05	0.17*	0.13	0.06	0.46**	0.25*	0.43**	1.00			
12. Alcohol Use (20)	0.32**	0.00	0.03	0.10	0.17*	0.08	0.12	0.36**	0.19	0.43**	0.63**	1.00		
13. Alcohol Use (21)	0.22**	-0.04	0.01	0.18*	0.14	0.08	0.16*	0.26**	0.29**	0.40**	0.47**	0.59**	1.00	
14. Alcohol Use (22)	0.22**	0.02	-0.00	0.13	0.07	0.12	0.17*	0.33**	0.38**	0.06	0.28**	0.31**	0.34**	1.00
Mean	0.84	0.29	0.25	0.24	0.19	0.13	0.12	1.06	2.72	4.01	4.32	4.49	5.53	5.54
Standard Deviation	1.12	0.7	0.62	0.68	0.67	0.46	0.45	2.46	5.28	5.82	6.76	6.65	7.07	6.98

$p < .10$. $*p < .05$. $**p < .01$. $***p < .001$. $n = 283$.

Note. Data in parentheses is age in years.

Table 1 shows that relatively strong test–retest reliability occurs among the crime and alcohol measures. To be clear, the correlations range from .06 to .29 for crime, and they range from .13 to .42 for alcohol use. This indicates that the measures have proper levels of reliability for analysis.

Stage 2

Table 2 presents the BICs that were found during model search for alcohol use and crime. The BICs indicated that a four-group model best represented the alcohol use data. The BICs indicated that a three-group model best represented the data for crime. These results suggest that qualitatively distinct trajectories may materialize from these measures of alcohol use and crime.

TABLE 2 Bayesian Information Criterion (BIC) or Black Alcohol and Criminal Trajectories

Number of Groups	BIC
Alcohol Use	
2	−2744.53
3	−2715.56
4	−2706.25
5	−2709.30
Crime	
2	−1215.74
3	−1205.53
4	−1206.01

Table 3 presents the posterior probabilities for the alcohol use and crime trajectory groups. The table shows that all of the posterior probabilities are above .70. This indicates the alcohol use and crime groups, suggesting that groups have been accurately depicted in the data.

TABLE 3 Posterior Probabilities for the Alcohol Use and Crime Trajectory Groups

Number of Groups	Posterior Probabilities
Alcohol Use	
1	.95
2	.96
3	.90
4	.99
Crime	
1	.75
2	.91
3	.91

Figure 1 shows the developmental trajectories of alcohol use. Alcohol use trajectory group G1 describes 84.33% of the sample. This trajectory group follows a pathway that indicates small but increasing and steady use of alcohol from age 16 to 22 years. Alcohol use trajectory group G2 describes 5.80% of the sample. This trajectory group follows a similar pathway as trajectory group G1. Alcohol use trajectory group G3 describes 6.96% of the sample. This trajectory group follows a pathway that starts low at 16 years and seems to increase at 18 years and seems to remain steady until age 20 years before falling at 22 years. Alcohol use trajectory group G4 describes 2.90% of the sample. This trajectory group follows a pathway that begins at the highest level of all groups at age 16 years and seems to fall at age 19 years, but at age 20 years it sharply increases through 22 years. These results indicate that some research is able to show that multiple groups of alcohol use do occur.
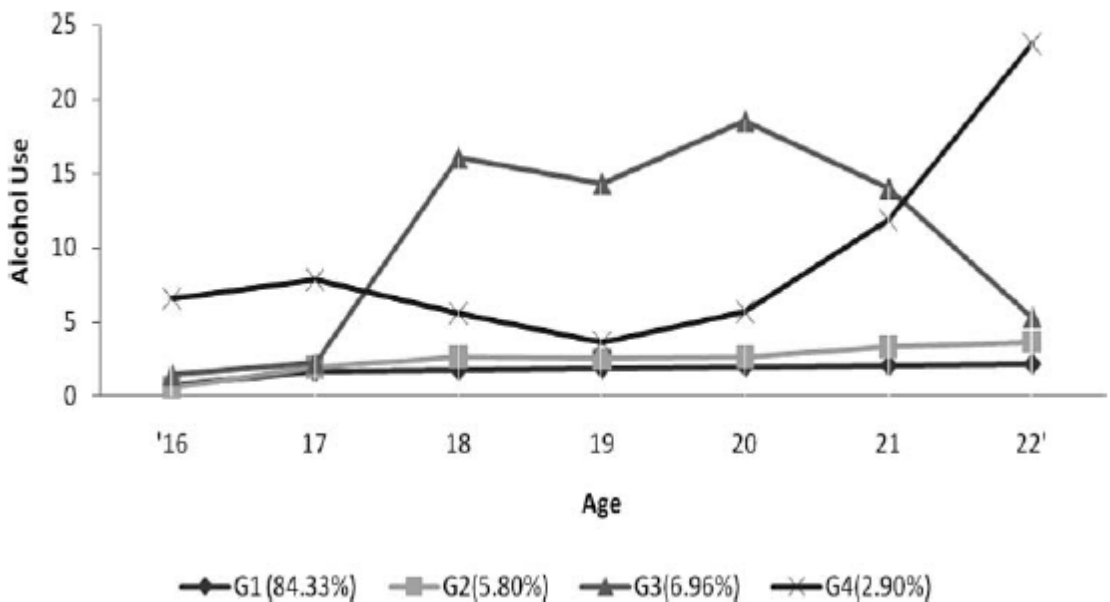

FIGURE 1 Developmental trajectories of alcohol use.

Figure 2 shows the developmental trajectories of crime from ages 16 to 22 years. Crime trajectory group G1 describes 30.21% of the sample. This group follows a pathway that does not commit any criminal acts from ages 16 to 22 years. [5] Crime trajectory group G2 describes 57.11% of the sample. Those following this pathway committed one criminal offense at age 16 years and steadily declined to no offenses by age 22 years. Crime trajectory group G3 describes 12.68% of the sample. This trajectory group follows a pathway that begins with two criminal offenses. This group increases their offending at age 19 years, but the offending begins to fall at age 22 years. This is an indication that these data are indicating some level of desistance up to age 22 years. After the age of 22 years, the offending may escalate, but this is beyond the reach of these data. Overall, the results from Tables 2 and 3, as well as Figures 1 and 2, support Moffitt's (2003) contention that three groups for crime and alcohol use should

materialize. In addition, these results suggest that multiple groups are relevant to describe the changes that take place in this behavior, and we support our first expectation.
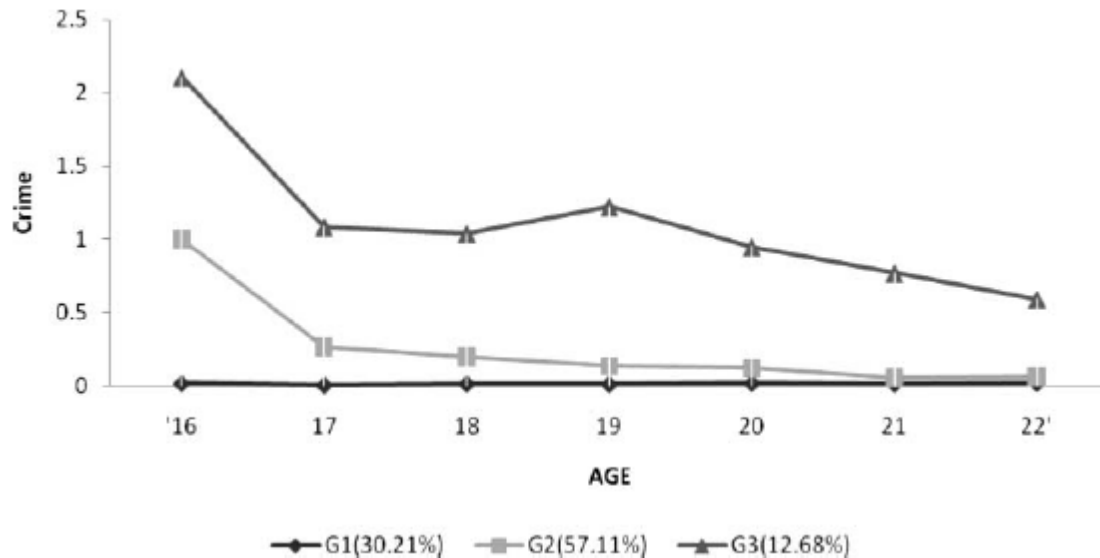

FIGURE 2 Developmental trajectories of crime.

Stage 3

Figure 3 presents the dual-trajectory analysis that addresses the view of whether the desistance from the crime process is slowed due to alcohol use. No matter the representation, the results show a relationship between the developmental trajectories for alcohol use and crime. Panel A shows that individuals that were drinking more alcohol were more likely to be engaging in criminal behavior. When considering the G3 crime trajectory, those that are more likely to commit crime are those from the alcohol G4 trajectory group. Panel B shows that those that are drinking alcohol are more likely to be involved in crime. This is highlighted as the alcohol use trajectories become more severe. For instance, alcohol use trajectories G3 and G4 indicate that criminal behavior is occurring in these groups. Panel C shows that following the crime trajectory G3 is more likely when using alcohol. Although alcohol use may not be accounting for all of the crime that is taking place, the dual-trajectory analysis is providing evidence that alcohol use is a factor that is ensnaring these individuals into a slower desistance from crime process, supporting our second contention.
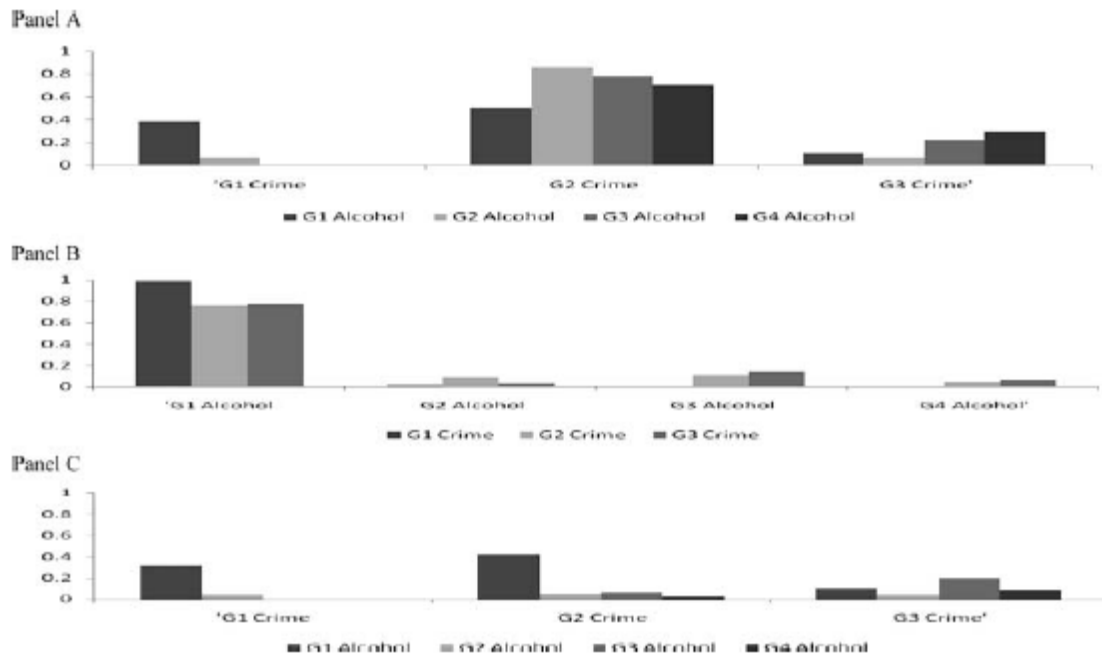
FIGURE 3 Dual-trajectory analysis of alcohol use and crime.

DISCUSSION

This study attempts to understand the desistance process in a sample of African Americans ranging in age from 16 to 22 years. The findings suggest that alcohol use slows the desistance process from crime for African Americans. Three trajectories were found to represent patterns of crime for individuals in this sample, and four trajectories provide the best representation for alcohol use in these data. Dual-trajectory analysis was performed to examine the intersection of alcohol and crime and to determine whether it slowed the process for reducing or stopping the commission of crime for individuals in this sample.

Evidence of four groups/trajectories emerged when examining patterns of alcohol use for this sample, which are displayed in Figure 1. Group 1 (84.33%) revealed a steady use of alcohol from age 16 to 22 years. Group 2 (5.8%) exposed a similar trajectory, but with slightly different results for the number of days these individuals consumed alcohol. The trajectory for Group 3 (6.96%) begins low, increases, and then returns to a lower frequency. Group 4 (2.90%) reported a high starting point and a higher finishing point, punctuated by a sharp increase in alcohol use from age 20 to 22 years.

We found evidence of three crime trajectory groups in these data. These groups support Moffitt's (2003) contention that more than two groups may be found in longitudinal data. Individuals in Group 1 (30.21%) reported zero instances of crime between ages 16 and 22 years. This may indicate either the absence of offending or, at the very least, the absence of

offending for the criminal events measured for this study. Those in Group 2 (57.11%) reported one offense at age 16 years, a slight decrease over time, and ended with zero offenses at the age of 22 years. Individuals in Group 3 (12.68%) reported two offenses at age 16 years, a slight decline in the number of offenses for the next 2 years before a slight increase at age 19 years, and then a steady decline to less than one offense at the age of 22 years.

In the dual-trajectory analysis, the findings from this study support the conception that African Americans who were desisting from crime at a slower rate were those consuming alcohol more frequently, thus providing support for Moffitt's (2003) snares hypothesis. Panel A from the dual-trajectory analysis reveals that individuals drinking more alcohol were more likely to engage in crime. In addition, those that were more likely to engage in crime were those who were drinking more alcohol over time. Panel B further reveals those individuals who drink some alcohol were more likely to engage in crime. This finding is emphasized as the alcohol trajectories become more severe. For instance, alcohol Group 3 and Group 4 show that criminal behavior is occurring in these groups. Finally, Panel C reveals that individuals were more likely to be included in the most serious crime trajectory when using alcohol. Alcohol may not account for all of the crime that occurs and the relationship between alcohol and crime may be spurious (see Felson et al., 2008). However, the dual-trajectory analysis provides evidence that alcohol use is ensnaring these individuals into a slower desistance from crime process.

According to Felson et al. (2008), alcohol use reduces an individual's cognitive capacity, creating cognitive "myopia" to a point where the individual does not consider potential consequences for his or her behavior. Obviously, the subsequent assumption is that an individual who does not consider the potential consequences of his or her behavior is more likely to engage in crime. Felson et al. further contend that "if alcohol interferes with self-awareness, intellectual functioning, or the tendency to feel anxiety about the act, or if it increases risk-taking or physiological arousal, then it should affect all types of crime and delinquency" (p. 787). Confounding this issue is the concern that individuals operating with a reduced cognitive capacity will likely experience more difficulty maintaining prosocial relationships or protective factors (e.g., marriages, jobs, earning an education), which function opposite to ensnaring factors.

Additional concerns regarding alcohol as an ensnaring factor are the social and behavioral effects of alcohol (Felson et al., 2008). In other words, if an individual begins to identify with negative stereotypes as some people have who regularly consume alcohol, then they may attribute their deviant behavior to the use of alcohol and thereby deny accepting any responsibility for their crimes. Less specific, although just as important for consideration, is the notion that alcohol consumption may encourage some to commit offenses when they would otherwise experience high levels of apprehension.

Although the results of the present study provide some information pertaining to the ensnaring process, the results should be interpreted within the confines of their limits. We used a measure of crime that is not very extensive. Although this measure has limits, little research has been performed on the snare process and thus our study provides a modest first step. In addition, our measure of alcohol use could be more in-depth, but it does provide some indication that alcohol

use was important in this study. Overall, this study should be viewed as an initial exploration, a building block with which to propel further inquiry. Additional studies are needed in order to determine additional ensnaring factors for African American given their representation in the criminal justice system. Future studies might also begin to determine whether certain ensnaring factors are more or less influential than others. Such analyses could have relevance for decisions regarding policy, programming, and overall education about alcohol use.

NOTES

1. Portions of this article were presented at the 2009 Southern Criminal Justice Association's Annual Meeting in Charleston, South Carolina.

2. We acknowledge that this group has published an additional book chapter in this area. However, in our review of the book chapter, the results are substantively the same.

3. More information about the missing data may be obtained from the first author upon request. That is, a table presenting these results is available from the first author on request.

4. It is important to note that our study has constrained the sample by two important demographics. First, the sample only comprises African Americans, so no racial variation exists. Second, the sample constrains by age. That is, we have a general group of African Americans that are 16 to 22 years. Thus, the descriptive statistics are only about the distribution of alcohol use and crime.

5. We recognize that these groups have similarities to Moffitt's (1993, 2003) groups. We refrain from using the names of the groups and refer to them as G1 to G… We do this so we do not fall prey to "reifying" the groups. Our assumption is that these groups are statistical approximations that may vary depending on the use of these or other data. Our assumption is consistent with Nagin's (2005) view on reification of groups.

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