

**On the reinforcing nature of crime and punishment:
An exploration of inmates' self-reported likelihood of reoffending**

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Abstract

Despite the intuitive appeal of deterrence theory, recent scholarship has acknowledged the unfortunate reality that criminal justice involvement may actually promote increased crime commission. The present study theorizes that two specific processes will influence recidivism: If offending alleviates the strain of status frustration, or if criminal justice sanctions normalize deviance and instigate an identity transformation that supports pro-crime values, then inmates will be more likely to report an increased likelihood of reoffending upon release. Based on self-report data from a sample of prison inmates, results indicate that a lack of certain life achievements and greater exposure to the criminal justice system discourages a commitment to desistance. Further, the psychosocial reinforcements provided by offending are positively associated with self-reported recidivism estimates. These relationships operate differently for offenders of different socioeconomic statuses, providing implications for future desistance research and correctional interventions.

Keywords

Recidivism, desistance, positive punishment, strain, criminal identity

Introduction

The birth of the penitentiary evidenced the widely held dictum that offenders could be “corrected,” as progressives concluded that positivism could be capitalized upon for the betterment of society (Cullen & Jonson, 2012; Rothman, 1980). Specifically, if the cause of criminality could be accurately identified, a simple reversal of the calculus would diminish antisocial tendencies. Unfortunately, after centuries of efforts to encourage desistance, surprisingly little is known about the process by which this successfully occurs (Kazemian, 2007; Laub & Sampson, 2001; Serin & Lloyd, 2009). In addition, despite our reliance on incarceration, research investigating the role of the prison experience in the reduction of recidivism has been slow to come (Gendreau, Goggin, & Cullen, 1999).

Historically, the implicit theories of correctional practice have varied. Regardless, the prevailing goal insists that *prison ought to prevent future offending*. Yet, irrespective of correctional theory, reoffending upon release often remains unaltered. One systematic review conveyed that “the great majority of studies point to a null or criminogenic effect of the prison experience on subsequent offending” (Nagin, Cullen, & Johnson, 2009: 178). Yet despite this finding, deterrence theory has received mainstay in criminal justice given its inherently intuitive appeal. Simply, offenders act upon cost-benefit calculations of the outcomes associated with crime. When the estimated rewards are expected to outweigh the perceived risks, criminal commission becomes likely. The Bureau of Justice Statistics reports that 67.8% of offenders are rearrested within three years of their release from prison, and 76.6% within five years (Durose, Cooper, & Snyder, 2014), and unofficial estimates of reoffending are often presumed to be higher (Spohn & Holleran, 2002). Though it is generally hypothesized that prison is a noxious experience that will extinguish intentions to recidivate, these figures might suggest otherwise (Blevins, Listwan, Cullen, & Jonson, 2010; May & Wood, 2005; Mears, Cochran, & Bales, 2012; Petersilia & Deschenes, 1994).

As a result of this observed relationship, researchers have proposed various hypotheses for why prison may actually *encourage* future offending (Paternoster & Piquero, 1995; Piquero & Pogarsky, 2002). However, it remains unclear which mechanism is responsible for the positive relationship observed between imprisonment and crime, although several theories have been forwarded. First, an emboldening effect may be produced, whereby prison is viewed as a “crime school” in which antisocial propensities are hardened (Camp & Gaes, 2004; Wood, 2007). Similarly, a gambler’s fallacy or resetting bias may become activated, such that the offender’s perceived sanction risk is returned to a minimum, leaving them free to safely reoffend without fear of immediate detection (Horney & Marshall, 1992; Nieuwbeerta, Nagin, & Blokland, 2009; Pogarsky, 2007; Pogarsky & Piquero, 2003; Sitren & Applegate, 2006). Next, rehabilitation advocates argue that a failure to directly alter known criminogenic factors will lead to continued criminal behavior (Andrews, 1995; Cullen, 2002; Cullen & Gendreau, 2000; Gendreau, 1996; Lipsey, 1999). As is commonly referenced, structural barriers to successful reentry may also encourage recidivism (Immerwahr & Johnson, 2002; Petersilia, 2003; Travis, 2005). Finally, some research suggests that prison relieves status frustration and is psychosocially reinforcing, thereby making desistance improbable (Wood, 2007; Wood, Gove, Wilson, & Cochran, 1997).

Although these different perspectives are interrelated in some ways, this last theoretical framework is unique in that it reasons that offenders may actually *want* to continue committing crime after release from prison. Rather than recidivism “happening to them,” reoffending may be an informed choice. Perhaps contrary to deterrence theory, offenders may make the rational choice that the benefits of crime outweigh the cost of imprisonment. Or, intentions to continue committing crime may actually be evidence that rational choice and deterrence theories are indeed effective explanations if there is evidence that prison is somehow a “benefit” in some ways rather than a “cost” (Brezina & Topalli,

2012; Crank & Brezina, 2013; Laub & Sampson, 2001; Pezzin, 1995; Shover & Thompson, 1992). Indeed, if committing a crime can be a rational choice, then it may be time for researchers to explore how expectations of reoffending may be rooted in similar rational choice calculations (Little, 1990). The goal then, may be to uncover *why* an offender would expect to recidivate upon release from prison.

That the effects of punishment on reoffending are contingent upon numerous factors demonstrates the need for a more dynamic correctional philosophy, reflective of individual differences (Sherman, 1993). With more than 7.3 million offenders incarcerated (one in every one hundred Americans), we indeed seem to be “addicted” to incarceration (Pratt, 2009). Yet more than half a million offenders are returned to their communities annually, with little understanding regarding the processes that instigate recidivism (Petersilia, 2003). Further complicating this matter is that many offenders indicate a desire to “go straight,” but have difficulty translating prosocial values into desisting behaviors (Shapland & Bottoms, 2011). Utilizing secondary self-report survey data from a sample of prison inmates, the present study examines the influences that may increase an offenders’ estimated likelihood of future criminality. In particular, I hypothesize that two groups of variables may encourage higher expectations for reoffending. First, for those who lack traditional life achievements, status frustration will emerge, requiring an identity transformation. Second, for those whose cultural values or past experiences are in alignment with the normalization of deviance, offending will be psychosocially reinforced. Each of these states may instigate a positive interpretation of criminal behavior, such that self-reported likelihoods of reoffending will be increased.

Theoretical Framework

Desistance can be best understood and achieved when the underlying causes of crime are accurately identified (Cullen & Gendreau, 2001). The present study explores the

relevance of two criminogenic processes through which reoffending might be encouraged. Specifically, 1) a lack of legitimate life achievements and 2) the interpretation of imprisonment as culturally valued or as normative may each serve to foster a criminal identity. As a result, offenders will be less likely to refrain from crime once released from custody in each of these instances. Rather than employing a behavioral outcome measure, the present study pursues Farrington's (2007) urging to conduct research exploring the cognitive transformation offenders undergo in deciding to desist. Studies conducted by the Urban Institute demonstrate that the majority of prison inmates intend to desist. Most inmates reported that it would be easy to stay out of prison (84%) or avoid a technical violation of supervision conditions (81%), even if they knew they could commit additional crimes without being caught (87%; La Vigne & Kachnowski, 2005). As Shapland and Bottoms (2011) likewise uncover, wishing to desist may not be enough to achieve behavioral change, but is certainly associated with prosocial life choices. However, provided that the preponderance of offenders recidivate, increased understanding and realism surrounding the expectations of offenders is necessary (Farrington, 2007). There is a disconnect between what offenders experience while imprisoned and their pre-release attitudes about their likely post-release outcomes (Visher & O'Connell, 2012). The inquiries explored here partly address this research gap, hypothesizing that status frustration and criminal values and experiences encourage heightened self-estimates of the likelihood of reoffending.

Within the first framework, I speculate that criminality is produced through strain in an individual's self-concept. According to Cohen, individuals who are "denied status in the respectable society because they cannot meet the criteria of the respectable status system" experience status frustration (1955: 121). The criminal subculture eases said discomfort, by providing access to standards of behavior that are within reach (Little, 1990). Moreover, we see that adaptation to criminal identities is one coping strategy used by prison inmates to

adjust to life behind walls (Walters, 2003). Comparable to this strain perspective, Wilson (1996) likewise observed that when access to legitimate successes is constrained, participation in the “ghetto subculture” becomes necessary for social survival. After time, these scripts for social action become so deeply engrained in the individual’s persona management, that conformity to prosocial ways of life may threaten their belonging (Castano, Yzerbyt, Paladino, & Sacchi, 2002; Topalli, 2005). Therefore to relieve the status frustration brought about by a lack of standard life achievements (typified by the “American Dream”), underprivileged youths may feel obligated to live, perhaps even die, by the code of criminal conduct established by their communities (Anderson, 1999). Though an unfortunate realization, criminality is for some individuals a rite of passage by which they may achieve cultural relevance (Rose & Clear, 1998). Thus, for those individuals who have difficulty achieving traditional success, crime may provide an attainable substitute pathway to obtaining a similar end (Little, 1990).

Within the present study, this process is assumed to occur through three interrelated processes. First, individuals may interpret themselves as failing, according to the measuring rod of success typically applied to all (Merton, 1938; Messner & Rosenfeld, 2001). Although the goal of achievement remains, those who lack the means to achieve such (e.g., poor education, unemployment, lower income) may suffer from status frustration. Second, as the individual fails to receive reinforcement for their efforts at prosocial activities, this will create a condition that necessitates them locating an alternative outlet by which they can achieve a similar goal (Paternoster & Bushway, 2009). Thus, for those who lack standard achievements (such as positive school performance), the recognition that criminality serves as a sufficient substitute may develop. Third, the individual’s felt strain, resolved through criminal reinforcement, can result in the adoption of a criminal identity (Blevins, Listwan, Cullen, & Jonson, 2010; Cohen, 1955). Specifically, for those who experience an inability to feel

needed or powerful in traditional relationships (such as through marriage or parenting), the development of alternative associations to meet this desire will be encouraged. Even if the relationships are criminal, a desirable social position is created for the individual, providing them a sense of importance. Summarily, a lack of standard life successes is hypothesized to lead to status frustration; an individual may come to recognize that reinforcement can alternatively be achieved through criminality, prompting a willful identity transformation as a coping mechanism and less inclination to desist (Blevins, Listwan, Cullen, & Jonson, 2010; Little, 1990). It is also worth noting that the absence of many of these life milestones have been empirically verified as criminogenic needs (Andrews & Bonta, 2010), that if left unaddressed, often result in continued criminality (Andrews, 1995; Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990; Cullen, 2002; Gendreau, Smith, & French, 2006).

The second framework examined here is that recidivism may be expected if offenders value their participation in crime or if experiences with the criminal justice system seem to normalize deviance. Thus, positive punishment (imprisonment *increasing* reoffending) occurs when the offender's value system interprets criminality as psychosocially reinforcing. Traditional deterrence theories speculate that "stakes in conformity" will discourage crime commission (Hirschi, 1969; Toby, 1957). Indeed, Bentham notes that a restraining motive is "love of reputation" (1970, as cited in Gottfredson & Hirschi, 1990: 85). The possibility exists, though, that recent shifts in cultural values would cause some individuals to interpret being criminal as a desirable status (Maruna & Mann, 2006), or that repeated interactions with the criminal justice system encourage the adoption of a pro-crime identity (Brezina & Topalli, 2012; Little, 1990; Shover, 1996). Anderson notes that "[Respect] often forms the core of the person's self esteem, particularly when alternative avenues of self-expression are closed or sensed to be" (1999: 66). As several studies of offending observe, aggressive, antisocial behavior is the way in which an individual gains said respect (Gadd & Farrall,

2004; Miller, 2008). For some communities, having values that counter the dominant legal system is the standard (Topalli, 2005), and having experienced incarceration is boasted about (Horowitz, 1983; Rose & Clear, 1998). In fact, when ex-convicts are released back into their communities, the socialization they received while incarcerated permeates their neighborhoods, serving to normalize criminality for prospective offenders (Clear, 2009).

Further, criminal specialization could provide individuals with a unique identity, one that is relevant to the behavioral landscapes common to these communities (Paternoster & Bushway, 2009). For those offenders that gain status through their deviant role, this intangible reinforcement may outweigh the costs of offending (Haigh, 2009). From this perspective, a chosen criminal identity is symbolically significant, “for it defines who one is and sets one apart from conventional society” (Wood, Gove, Wilson, & Cochran, 1997: 343). It appears then, that there are powerful psychosocial incentives for criminal behavior. In particular, deviance may be a rational choice, in that it provides clear psychological reinforcements for membership in a criminal reference group (Fleisher & Decker, 2001). Offenders often will seek to maintain their lifestyle even when their safety or freedom may be jeopardized or external incentives are minimal (Anderson, 1999). Criminological research has explored the seductive allure of risky or illegal behavior (Katz, 1990; Lyng, 2005), and in some ways, criminality appears to parallel addiction (Hodge, McMurrin, & Hollin, 1997). Behaviors can be conditioned in such a way as to provide an inescapable magnetism between deviance and the internal rewards it provides (Marks, 1990). Indeed, a large body of empirical evidence demonstrates that support of criminal attitudes and values are predictive of crime (Andrews & Bonta, 2010).

To summarize, the present study hypothesizes that positive punishment could encourage expectations for post-prison reoffending through two adaptive processes. First, if offending alleviates the strain of status frustration, then inmates may be more likely to report

an increased likelihood of recidivism upon release; that is, when fewer legitimate life achievements are attained, criminal behavior may offer an attractive identity substitution. Second, if criminality is reported to be psychosocially reinforcing, desistance may be an unattractive choice; that is, when offending feels good and provides rewards, the offender may expect to continue committing crime after release. Both of these frameworks – a lack of lauded life milestones and the acceptance of criminal values – represent well-known criminogenic needs (Andrews & Bonta, 2010). In each of these instances, an identity transformation may be concreted by the prison experience, and prisoners may have no desire to “go straight” following release (Brezina & Topalli, 2012; Crank & Brezina, 2013; Little, 1990). It is also possible that these two processes may be somewhat interactive, as positive punishment may only apply to those offenders who already have low stakes in conformity (Sherman, Smith, Schmidt, & Rogan, 1992). Thus, I anticipate that the impact of strain and criminal cultures on reoffending estimates may be exacerbated by lower socioeconomic statuses (as legitimate opportunities may be blocked or criminal values may be differentially acclimated). The final stage of analysis will therefore examine whether the two frameworks – status frustration and positive punishment – are more influential for those offenders of lower socioeconomic status.

Methods

The present study explores the predictors of prison inmates’ self-reported likelihoods of reoffending. Provided the theoretical framework discussed above, three specific hypotheses are examined. First: *Self-reported likelihoods of recidivating will be higher for those individuals who have experienced a lack of standard or legitimate life achievements.* Specifically, I hypothesize that lower incomes, unemployment, lack of a high school diploma, poor school performance, not being married, and having no children will all be associated

with higher estimates of reoffending probabilities. Second: *Self-reported likelihoods of recidivating will be higher for those individuals who perceive imprisonment as culturally reinforcing.* Here I speculate that higher levels of positive affect, higher levels of respect earned from crime, higher numbers of family members who have been incarcerated, higher numbers of criminal justice sanctions incurred, and having experienced juvenile incarceration will all be associated with higher estimates of reoffending. And third: *These relationships will be stronger for those individuals of low socioeconomic status.* In particular, I expect that status frustration and the normalization of deviance will be higher for this subsample, thereby producing greater expectations of reoffending likelihoods.

Sample

The data for this study come from a sample of prison inmates at a large prison in the American south. The facility holds both male and female inmates and offenders of all classification levels. Consequently, the inmates represent a diverse array of background, personal, and offending characteristics. The prison population is therefore ideal for exploratory criminological research given the variety of offender experiences observed.

Prior to official data collection, researchers frequented the prison to conduct focus groups with inmates. Trained facilitators questioned offenders of varying demographics and criminal histories about criminogenic risks, and criminal persistence versus desistance. The information obtained was utilized to create a nearly 300-item survey that explored the causes and consequences of offending from the prisoners' perspectives, which was pretested among groups of inmates prior to full implementation (for further information on the construction, validity, and administration of this survey, see Wood, 2007). To collect the data, volunteers from eligible prison pods were solicited. Some inmates were denied the opportunity to participate (due to security restrictions), while others were not interested in participating; it is

unclear how many inmates were actually eligible to participate, but a conservative estimate of the survey's response rate is around 24% (726 surveyed inmates of the prison's capacity for 3,000 inmates). It does not appear that there were systematic biases in participation or refusal, although the nature of this volunteer sample and its impact on the findings here is discussed in the limitation section of this paper.

Of those prisoners who volunteered, large groups of inmates from a single unit of the facility were escorted to the cafeteria, where informed consent was obtained and instructions were provided. In an effort to promote honesty, study participants were advised that the survey was anonymous, that the information they provided would be kept confidential, and that they were free to skip any questions which made them feel uncomfortable. Additionally, the correctional officers were asked to allow the inmates reasonable privacy while they completed their surveys. Research staff were available to answer any questions or provide reading/writing assistance to those inmates in need. When the entire group had completed the survey, the inmates were debriefed, and guards escorted them back to their respective unit.

Data

The study yielded 726 usable surveys. The final sample included an even number of male and female participants (females were intentionally oversampled). The majority of offenders were African American or Black (61.3%), and the mean age was 32.54 ($SD = 8.84$). Approximately 41% of the sample was incarcerated for a personal offense, and nearly 37% for non-violent, drug-related offenses. The average current sentence length was approximately 5 ½ years ($M = 5.66$, $SD = 5.29$), and the average offender had served nearly two years of their sentence ($M = 1.89$, $SD = 2.47$).

Measures

The dependent variable to be used in all analyses is the inmate's *self-reported likelihood of reoffending*. The survey asked respondents to estimate, were they to be released from prison that day, how likely it would be that they would commit another crime within three years. Responses ranged from 0 (not at all likely) to 10 (extremely likely). Approximately 50% of the sample indicated that it was very unlikely that they would commit another crime upon release (that is, they circled a zero). Given the high degree of skew present ($M = 2.39$, $SD = 3.15$), the variable was dichotomized to facilitate a binary logistic regression. However, the cut of the dependent variable here has a specific theoretical justification, as well: Because a desire to change is a necessary requisite for desistance, the present study assumes that lower values (responses ranging from zero to three) can be treated as a homogenous group in which offenders estimate their own reoffending as being highly unlikely; contrarily, higher values (those ranging between four and ten) represent, at minimum, a moderate expectation that reoffending may occur. The spread of responses across this latter category (values between four and ten) was fairly evenly distributed with a low level of skew present ($S = .430$).

The use of this outcome variable provides an interesting test of the predictors of inmates' subjective estimates of reoffending likelihood rather than objective measurements of risk or relapse. Developments in the desistance literature have speculated that an internal transformation must precede behavioral change (Giordano, Cernkovich, & Rudolph, 2002; Maruna, 2001; see also Prochaska, DiClemente, & Norcross, 1992). As the adage goes, one cannot fix what they do not acknowledge. Although this variable does not measure actual recidivism (and longitudinal behavioral measures are unavailable for this sample), it is the use of this item – an offender's subjective state of mind about recidivism prospects – that makes this study somewhat unique. Unfortunately, while we are starting to understand how cognitive transformations are important for lifestyle transformations, less is known about the

predictors of that decision to “go straight.” Indeed, there is sufficient research evidence that expectations about community reentry influence the way offenders arrange their social circumstances (e.g., family and friend associations, how leisure time is spent, whether employment is pursued or maintained), which in turn impacts desistance outcomes (LeBel, Burnett, Maruna, & Bushway, 2008; Maruna & Roy, 2007; Porporino, 2011).

The first hypothesis estimates that a lack of legitimate life achievements will produce status frustration, which in turn will create an identity transformation resulting in an increased likelihood to reoffend. Six independent variables are employed to measure the degree of standard successes experienced by the offender. *Income*, measured to the nearest single dollar, represents the offender’s income from *all* sources in the year prior to the arrest leading to their incarceration. Most offenders rounded to the nearest one-hundred dollars, with incomes ranging from zero to \$360,000 ($M = \$26,732$, $SD = \$40,323$). *Employment* reflects the inmate’s work status in the year prior to arrest. Categories were collapsed into stable employment history (coded as zero; 49.16%) and unstable employment history (coded as one; 50.84%). *Educational attainment* refers to the highest level of schooling the offender had received. Approximately 44% of the sample had not received a high school (or equivalent) degree. This category was coded as one, while inmates who had obtained a high school degree or higher received a zero. *Educational achievement* reflects the average grades the offender made while in school. The categories were collapsed into the estimated reinforcement received for their performance, and recoded as zero (mostly A’s and B’s; 56.17%) and one (mostly C’s, D’s, and F’s; 43.83%). *Marital status* measures whether the offender was married (coded as zero; 34.91%) or unmarried (coded as one; 65.09%) at the time of the survey. *Parenting status* refers to whether the offender has children, and if so, whether they were an active participant in their lives. Inmates who reported having children

and being influential were coded with a zero (66.85%), while those having no children or not being involved were coded with a one (33.15%).

The second hypothesis conjectures that, when offending and its associated sanctions are culturally valued, positive punishment will occur. This will create psychosocial reinforcements for criminal behavior, birthing greater intentions to recidivate. Five independent variables are used to examine the degree of positive punishment experienced by the inmate. *Positive affect* is a composite measure, summing the responses from ten related items. The survey asked inmates how frequently they experienced a list of emotions or sensations while engaging in criminal activity (such as powerful, unique, and important). Responses ranged from never (coded as one) to very often (coded as four). A confirmatory factor analysis affirmed that the ten items selected (that were expected to be related theoretically) held together well, $\alpha = .901$ (initial Eigenvalue = 6.061 with factor loadings all above .70). Total scores ranged from 10 to 40, with a mean positive affect score of 25.17 ($SD = 10.61$). *Respect* is a similar measure, reflecting the degree to which the inmate felt that offending earned them respect. The four items selected were strongly related, $\alpha = .899$ ($E = 3.130$), with sums ranging from 4 to 16 ($M = 9.89$, $SD = 1.60$). *Family incarceration* represents the number of the inmate's family members that had ever been incarcerated. Because the item was heavily skewed, responses were dichotomized, where zero represents having no family members imprisoned (33.79%), and one indicates that the inmate identified one or more of their family members having been incarcerated (66.21%). *Sanction participation* measures how many alternative criminal justice sanctions the offender had experienced (such as ISP, day fines, house arrest, etc.). As the distribution was skewed, responses were categorized as having participated in zero or one additional sanction (coded as zero; 46.90%), or two or more (coded as one; 53.10%). *Juvenile history* represents whether the offender had served time in a juvenile facility (zero = no, 20.44%; one = yes, 79.56%).

Finally, the third hypothesis speculates that the relationships found in the first two hypotheses will be stronger for offenders of lower socioeconomic status. Simply stated, a lack of opportunities and cultural values that encourage criminality (or at least condone imprisonment) will be greater for those offenders identifying as belonging to a low social class. This is expected to produce higher expectations to reoffend. For this final stage of the analysis, the sample was partitioned into two groups. *Socioeconomic status* reflects the inmate's perceived social class (offenders were asked to report what social class they felt their family belonged to for most of their life), ranging from lower class to upper class. The categories of this item were collapsed, whereby lower class and lower-middle class responses were coded as zero (31.5%), and middle, upper-middle and upper class responses were coded as one (68.5%). On its own, self-reported socioeconomic status does not predict an inmate's estimated likelihood of recidivism ($\chi^2 = 1.729, p = .189$), yet the literature described above suggests that the selected explanatory frameworks of status frustration and positive punishment may predict reoffending expectations in different ways.

Statistical Analysis

To begin, bivariate correlations were obtained for continuous variables to rule out the possibility of collinearity; in particular, the variables of positive affect and respect were not highly correlated ($r = .088, p < .05$) and were not internally consistent as a single group ($\alpha = .05$). In addition, means comparisons and chi-squared hypothesis tests were computed on the binary variables in order to confirm the independent significance of each predictor variable in estimating the inmate's self-reported likelihood of recidivating. Multicollinearity was not evident (there were no standard errors for predictors larger than .3 and no variables were removed from the model matrix using the SWEEP algorithm at the $1\epsilon^{-5}$ criterion level), therefore all of the selected independent variables could be placed into the models

simultaneously. Generally, the sample did not suffer from excessive missing data; where information was missing, data replacement was unfeasible (as many of the variables were single-item, binary measures), and a listwise deletion was performed, resulting in the final sample of 726 prisoners. Next, interestingly, demographic variables that are commonly influential were not significantly different among the two categories of the response variable. Specifically, race ($\chi^2 = 2.556, p = .110$), age ($t = 1.750, p = .081$), and gender ($t = 1.665, p = .096$) failed to predict category membership for reoffending likelihoods. This may suggest that the outcome variable selected here is somewhat “unpredictable,” seeing as how many typically important variables are nonsignificant. As a consequence, additional variables that predict expectations for criminal relapse are important to explore.

The dependent variable is a binary measure reflecting minimal versus moderate likelihoods of reoffending. The dichotomous outcome makes binary logistic regression the most suitable approach to the multivariate analyses. The first set of tests compares the predictive validity of the first two hypotheses. That is, whether a lack of achievement or positive punishment is more influential in promoting recidivism. A full model is also estimated, as positive punishment may occur only for those offenders who have fewer stakes in conformity (Sherman, Smith, Schmidt, & Rogan, 1992). The second group of tests employs all eleven independent variables in predicting reoffending estimates, partitioning the sample according to the socioeconomic status of the inmates. At minimum, it is expected that different variables will be significant predictors for each of the subsamples. It is further hypothesized that the relationships observed will be of greater magnitude for offenders of low social class.

Results

Initial analyses compared the relative influence of two potential theoretical mechanisms (see Table 1). The first hypothesis estimated that due to status frustration, those

offenders with fewer life achievements would be at greater risk of reoffending. Three predictors reached significance. First, educational attainment operated in the hypothesized direction: For those offenders without a high school degree (or equivalent), the odds ratio for reporting a moderate likelihood of recidivating increased by .75, compared to those inmates with a higher level of education. Next, marital status was influential, whereby the odds ratio for indicating a moderate to high estimate of reoffending increased by .76 for those offenders who reported being unmarried at the time of the survey. Finally, parenting status was also significant, demonstrating that for those offenders who had no children (or were not influential in their children's lives), the odds ratio for reporting a higher likelihood of reoffending increased by .55, compared to offenders who reported being actively involved with their children. The remaining three predictors (income, employment, and educational achievement) failed to reach statistical significance.

The second hypothesis examines positive punishment, which theorizes that the normalization of criminal justice sanctions would lead to greater reinforcement for crime, producing greater expectations of reoffending. Three variables were statistically significant. First, positive affect was significant, signifying that for each one-unit increase in the pleasurable sensations experienced during crime commission, the odds ratio for reporting a moderate to high likelihood of recidivating increase by 3.5%. Next, family incarceration was influential in the predicted direction. Specifically, for those offenders who had at least one family member that had also been incarcerated, the odds ratio for indicating an increased estimate of reoffending was 60%. Third, the measure reflecting sanction participation significantly predicted recidivism expectations. Inmates who reported being subjected to two or more alternative sanctions demonstrated an increase of .86 in the odds ratio for indicating a moderate likelihood of reoffending. The two remaining variables (respect and juvenile

history) failed to reach statistical significance, though both operated in the predicted direction.

The third model produced a binary logistic regression equation with three significant predictors (two others, parenting status and sanction participation, approached significance). Educational attainment remained significant, producing an increase in the odds ratio of .97 for reporting a moderate likelihood of recidivating for those offenders with less than a high school degree. Similarly, unmarried inmates demonstrated an increase in their odds ratio of estimating a moderate likelihood to reoffend by .95. Finally, the odds ratio for reporting the higher expectation of recidivating increased by .034 for each one unit increase in positive affect that the inmate perceived. This final model incorporating all eleven independent variables achieved a moderate level of predictive utility (Nagelkerke $R^2 = .133$), particularly considering that self-report data gained from prisoners was used.

To estimate the composite influence of these predictors, an effects analysis was computed (Fox, 2008). The nonsignificant variables were set to their means, while the multiplier for the three significant variables was replaced with the value of interest (each dummy variable was multiplied by one, while the metric variable was multiplied by the value corresponding with the 75th percentile). The cumulative impact of educational attainment, marital status, and positive affect, controlling the other variables at their mean values, is .47. Net of all other predictors in the model, this indicates that, for an inmate who has no high school degree, is unmarried, and exhibited a positive affect score of 34 (the 75th percentile), the probability of scoring a one on the dependent variable (that is, reporting a moderate likelihood of reoffending), is .47.

The second stage of analysis explored the hypothesis that the two processes thought to impact intentions to reoffend (status frustration and positive punishment) would be more impactful for those offenders of low socioeconomic status (see Table 2). All eleven

independent variables were placed into the models at once to determine their aggregate influence. For those inmates who reported being of lower socioeconomic status, four variables reached statistical significance. First, educational attainment produced an odds ratio of 2.46, indicating that the odds of reporting a moderate likelihood of reoffending were nearly 1 ½ times greater for those offenders who did not have a high school degree. Next, for those offenders who were unmarried, the odds ratio for indicating a higher expectation to recidivate increased by .96. Similarly, the odds ratio for reporting a greater likelihood of reoffending increased by .90 for those inmates who indicated that they had no children, or were not influential parents. Finally, the odds ratio for reporting a moderate reoffending estimate increased by .042 for each one unit increase in positive affect. To examine the combined influence of these variables, an effects analysis isolated the impact of these four significant variables (the binary measures were multiplied by one, while positive affect was multiplied by the score at the 75th percentile (33)). The remaining variables were multiplied by their mean values. The regression equation produced a probability of .64. This indicates that, net of all other predictors, an inmate that has less than a high school degree, is unmarried, has no children, and has a reasonably high positive affect score, the probability of scoring a one of the dependent variable (that is, of indicating a moderate to high estimate of recidivating) is .64.

For the second model, the same analysis was applied for those inmates who considered themselves of medium or high socioeconomic status. Only one predictor reached statistical significance. Specifically, the variable of respect demonstrates that the odds ratio for reporting a moderate likelihood of reoffending increased by .37 for each one unit increase in the level of respect the inmate reported receiving due to their criminal status. Though the coefficient for juvenile history was of reasonable magnitude, it only approached significance ($b = .977, p = .068$). If the variable were to be treated as statistically significant, its influence is notable. For those offenders that served time in a correctional facility as a juvenile, their odds of indicating

a moderate expectation to reoffend upon release increased by 165% as compared to those inmates without such a juvenile record. To isolate the effects of these two variables, the other values in the regression were held at their means. Computing the regression equation for the two variables of interest (juvenile history was multiplied by one, while respect was multiplied by ten, which is the value at the 75th percentile), the product is .27. This conveys that, controlling for the other variables in the model, an offender who was incarcerated as a juvenile, and perceives themselves as receiving respect for their offending, the probability of scoring a one for the outcome (a moderate to high likelihood of reoffending upon release) is .27.

A keen observer will note that several of the variables for the second model in Table 2 were of large enough in magnitude to achieve statistical significance. Unfortunately however, only one variable did so. Relatedly, this second subsample demonstrated a lower overall model fit, though explained a greater proportion of the variation. There are two potential explanations that warrant consideration. First, the variability in the independent variables was greater among this group (that is, the low socioeconomic status offenders were a more homogenous subsample). Therefore the possibility exists that with greater heterogeneity comes an improvement in prediction, however artificial this may be. Second, it appears as though the predictor variables may be competing with one another for explanatory power, ultimately lowering their significance. Even within these subsample analyses, however, collinearity is not at any level worthy of concern. In addition, various diagnostics failed to indicate that any regression assumptions had been violated. Performing stepwise procedures and examining the relative influence of groups of variables did not remedy this problem. The quandary exhibited by the second subsample's model may need to be revisited, though doing so is beyond the boundaries of the present paper. Despite there being sufficient variability in the dependent variable for both social class subsamples, there were not as many significant predictors between subgroups as I had anticipated.

Consequently, to determine whether the values obtained by each of these models (in Table 2) are significantly different from one another, an equality of coefficients test was performed (Clogg, Petkova, & Haritou, 1995; Paternoster, Brame, Mazerolle, & Piquero, 1998). Despite finding that different variables were significant for each of the subsamples, the coefficients significantly differed for only one of the measures. The variable of respect was significantly larger for the medium/high socioeconomic status subsample ($z = -2.332, p < .05$). Interestingly, however, the effects analysis for the low socioeconomic status subsample demonstrated a much higher probability of criminal persistence. Yet, the four variables that were significant for the low socioeconomic group of offenders were not shown to be statistically different than those same nonsignificant variables in the opposing subsample.

Discussion

Studies of desistance have long suffered from methodological obstacles and theoretical inconsistencies (Brame, Bushway, & Paternoster, 2003; Paternoster & Bushway, 2009). The present study utilized secondary data from a sample of prison inmates, exploring the processes that contribute to an offender's expectations of recidivating upon release. Although not an observed outcome (such as traditional measures like rearrest or new convictions), the argument presented here is that a cognitive transformation must precede behavioral change (Maruna, 2001; Paternoster & Bushway, 2009), but that relatively little is known regarding how this occurs (Serin & Lloyd, 2009; Shapland & Bottoms, 2011). Contemporary research has begun to qualify this position, evidencing that the dynamic pathways by which offenders determine that they will desist are of greater predictive power than hard-and-fast recidivism variables (Bushway, Thornberry, & Krohn, 2003; Farrington, 2007). The hypotheses explored here sought to examine some of the cognitive transformations that inmates may undergo in evaluating their prospects for committing further

crimes after reentry. Specifically, I looked at two groups of variables that may predict the offenders' self-reported likelihood of reoffending.

First, it was estimated that status frustration (experienced due to a lack of legitimate or standard life achievements) would lead to the adoption of a criminal identity, thereby making desistance less likely. This hypothesis was partially supported, demonstrating that the odds of reporting a higher likelihood of reoffending upon release were increased for those with limited education, who were unmarried, and had no children. These findings may be the result of a pathways perspective, in which prosocial life events serve as turning points in a criminal's offending trajectory; these are also confirmed criminogenic needs (Andrews & Bonta, 2010). The stance assumed here is that, while the influence of social bonds cannot be overlooked, theories of desistance demonstrate the importance of criminals altering the ways in which they evaluate offending (Byrne & Trew, 2008; LeBel, Burnett, Maruna, & Bushway, 2008). In fact, the progression may be opposite than what is traditionally specified in life-course research (Moffitt, 1993; Sampson & Laub, 1993); perhaps only after an individual's assumed identity is altered will they initiate prosocial turning points, which would then solidify the desistance process (Giordano, Cernkovich, & Holland, 2003; Kazemian, 2007). These findings may suggest that offenders have a "working self" (Paternoster & Bushway, 2009), whereby desistance becomes possible (and the decision to desist becomes attractive) only when opportunities consistent with a prosocial identity become available.

Similarly, the second hypothesis speculated that for those offenders whose values or life experiences sponsor or solidify a criminal lifestyle, offending may become psychosocially reinforcing. This was expected to support the positive punishment hypothesis, in which imprisonment will increase intentions to recidivate. A labeling process derived from the looking glass self appears to be at play (Maruna, LeBel, Mitchell, & Naples, 2004),

whereby an offender's self-concept for the future is largely derived from the definition of self the criminal justice system ascribes to them (Little, 1990). Specifically, when the offender's family had also experienced incarceration, when the inmate had partaken in additional criminal justice sanctions, and with increases in the positive sensations experienced while offending, the odds of the inmate reporting a moderate to substantial likelihood of recidivating were largely increased. This positive affect proved to be a very significant contribution, as those offenders with the highest possible value increased their odds of reporting a heightened likelihood of recidivating by 290%. Those who estimated a higher likelihood of reoffending exhibited a much larger mean positive affect score ($t = -4.602, p < .001$). This finding suggests that the psychosocial reinforcements received through offending provide meaning to their lives (Gadd & Farrall, 2004), which many inmates may not desire to dismiss by going straight (Brezina & Topalli, 2012; Crank & Brezina, 2013). The adoption of criminal values and attitudes is one of the strongest predictors of criminogenic risk (Andrews & Bonta, 2010).

The final model, incorporating all eleven predictor variables for the full sample, demonstrated that educational attainment and marital status were negatively associated with expectations to reoffend, while positive affect increased the inmate's self-reported likelihood of recidivating. The combination of these variables suggests that criminality may be a defense or coping mechanism, spurred by the anxiety that is produced by being rejected by the normal status system (Blevins, Listwan, Cullen, & Jonson, 2010; Cohen, 1966; Little, 1990). That is, for those individuals who lack traditional achievements (such as educational attainment and marriage), a substitute is required by which they may define themselves. Particularly when offending proves to be psychosocially reinforcing (Hodge, McMurrin, & Hollin, 1997), perhaps offenders are simply "doing crime," and desistance could occur only once it is no

longer interpreted as a desirable role to play (Haigh, 2009). These findings support the cumulative continuity hypothesis proposed by Sampson and Laub (1995).

Yet, interestingly, the offender's income consistently failed to predict their self-reported likelihood of reoffending. This is somewhat counterintuitive; however, the data used for the present study suggest that income may have a differential effect for different kinds of offenders. Surprisingly, there were no significant differences in income between employment status history ($t = .535, p = .593$). Indeed, non-employed drug offenders reported earning significantly more money than their legitimately employed counterparts ($t = 2.16, p < .05$), suggesting that when the benefits of offending are substantial, inmates may be less prepared to step away from the lifestyle that they view as prosperous (Pezzin, 1995). It is important to note though, that offenders may exaggerate the income they receive from illegal activity (Wilson & Abrahamse, 1992). However, the correlation between the offender's positive affect and income was moderate for self-report data ($r = .174, p < .001$), indicating that the tangible rewards offered by offending may influence their interpretation of crime as a worthy endeavor (Laub & Sampson, 2001; Pezzin, 1995).

The second group of analyses explored the relative influence of status frustration and positive punishment on expectations to reoffend for offenders of different socioeconomic status. Because access to life opportunities may be blocked more so in lower social classes, and because the labels and reinforcements of criminality may be more beneficial in lower social classes, I regressed both groups of variables onto the recidivism estimates for two subsamples of socioeconomic status to explore whether the strength of predictors was altered. The first model, applied with inmates of low self-reported social status, conveyed that lower levels of education, being unmarried, having no children, and reporting higher levels of positive affect were related to increases in the odds of indicating a moderate likelihood of recidivating. Contrarily, for inmates who indicated that they were of medium or high

socioeconomic status, only one variable reached significance; respect was positively related to reoffending estimates. For offenders who reported that they were highly influenced in their crime commission by the respect they expected to receive afterward, their odds ratio for indicating a moderate likelihood to reoffend increased by nearly 600%. Anderson's (1999) influential work conveys the pervasive drive to earn respect for individuals in socially disadvantaged neighborhoods. The findings presented here, however, suggest that individuals may find themselves pursuing criminality to identify with the cultural definition ascribed to them (Gadd & Farrall, 2004). This indicates that expectations about criminal trajectories are influenced by socioeconomic status (Giordano, Cernkovich, & Holland, 2003).

Finally, it is important to note the nature of the dependent variable observed here. Specifically, although the majority of inmates in the present sample estimated that they were unlikely to commit another crime upon release (70%), the fact remains that most offenders do indeed recidivate (Durose, Cooper, & Snyder, 2014). This finding begs the question of the degree to which environmental characteristics and personal experiences impact the offender's determination to desist from crime (Shapland & Bottoms, 2011; Webster, MacDonald, & Simpson, 2006). Even though offenders may hold a passionate desire to "go straight," the landscapes that encourage crime in disadvantaged communities may make this improbable (Anderson, 1999; Webster, MacDonald, & Simpson, 2006; Wilson, 1987). Further, offenders may simply be lacking a sense of realism surrounding the difficulties they are bound to face upon release. Furlough and home visit programs, which allow offenders to venture into their communities for short periods prior to their full release from prison, have been shown to substantially reduce recidivism rates (Baumer, O'Donnell, & Hughes, 2009). This may be additional evidence that offenders are often psychologically ill-prepared for reintegration. Correctional staff must consider this barrier to treatment in efforts to reduce an inmate's criminogenic risk.

Conclusions

Overall, the analyses conducted here demonstrate that both a lack of traditional life achievements and positive punishment increase prisoners' estimations that they will reoffend upon release. Further, the trajectories involved in desistance appear to affect offenders of varying socioeconomic statuses differently. This may suggest that desistance can be achieved only when the offender's belief systems grow incongruent with their previously dominant pro-crime attitudes (Andrews & Bonta, 2010; Walters, 2002) or when an opportunity for an alternate and prosocial identity is supplied (Little, 1990; Paternoster & Bushway, 2009). For offending to lose favor, however, it must lose its rewards, both psychosocial and material; antisocial values must be substituted (Latessa, 2011). Maruna (2001) conveys that the decision to desist must be accompanied by the reinterpretation of one's identity. Though the qualitative accounts of some offenders demonstrate how condemnation scripts may encourage recidivism, the findings here suggest that the *positive* reinforcement achieved through offending (particularly in combination with a lack of other achievements) will lead to a decreased willingness to desist from crime (see also Brezina & Topalli, 2012).

Though the present study offers several intriguing findings, the research is not without limitations. First, it must be reiterated that the current analyses provide no behavioral outcome measuring actual reoffending. This may be considered as an advantage, however. A study by LeBel and colleagues reveals the intricate development of desistance. Their analyses displayed that expectations prior to release were directly related to recidivism, but that indirect effects were influential, as well, as cognitive motivations served to shape the offender's social circumstances (LeBel, Burnett, Maruna, & Bushway, 2008; see also Porporino, 2011; Shapland & Bottoms, 2011). Clearly, then, greater information on the psychological preparation for release from prison is needed to better predict and prevent

actual recidivism (Baumer, O'Donnell, & Hughes, 2009). However, it is also worth noting that the researchers asked offenders to estimate what their reoffending likelihood would be if they got out of prison immediately, despite the fact that offenders were, on average, a few years away from release; certainly, expectations about desistance may change as offenders get closer to their release date (and planning for reentry comes underway). Next, it is possible that the results found here may not generalize to other parts of the US or the world; given support for the southern subculture of violence thesis (Ellison, 1991), the observed relationships may not be found in non-southern locales. And perhaps most importantly, the data employed here is self-reported among a sample of volunteer prisoners, offering no official measures of the independent variables or factors associated with offending. Though the research team attempted to control for dishonesty or coercion, the desire of inmates to exaggerate their experiences or provide prosocial responses is possible. The information provided by inmates (such as level of education, income, marital status, and so forth) were not corroborated by official files or outside accounts. Further, these data additionally suffer from recall biases, as retrospective recollections can be liable to misinterpretation. Finally, while the sample did not seem to be systematically biased in any way, because survey participants were volunteers, it is possible that those offenders who took part were different in some way than those who refused to participate.

It is also worth noting that the variables selected here are not perfect representations of the theoretical frameworks selected, as is the case with much research that utilizes secondary data. Similarly, there are several theories that could be used to explain why some of the significant independent variables lead to increases in self-reported reoffending likelihoods (including many of the same criminogenic needs identified by the principles of effective correctional intervention; see Andrews & Bonta, 2010). Yet the subjective estimation of desistance may predict objective desistance outcomes (LeBel, Burnett, Maruna,

& Bushway, 2008), therefore it is important that future research investigate the factors that influence this determination made by offenders. The tests performed here do not explicitly examine a causal process or any mediating variables, which again highlights the importance of future longitudinal studies that quantitatively examine the transformative *process* of desistance (Paternoster & Bushway, 2009). Although the analyses in this paper do not directly test the outcome of transformation, several possible theoretical mechanisms related to this adaptive response have been proposed that help frame the findings; this paper is unique in that it helps to stimulate discussion about offenders' ideas and expectations about criminality post-release. If crime is a rational choice, then the decision to reoffend may be a rational choice, as well (Crank & Brezina, 2013). An inmate's expectations for future offending may be the result of willful changes in self-concept, which is facilitated by a lack of expected life milestones, experiences with the criminal justice system that may normalize criminality, and the psychosocially reinforcements (such as positive affect and respect) that offending can provide. Indeed, as discovered by Brezina and Topalli (2012), offenders who reported feeling self-efficacious in their criminality had reduced intentions to desist.

Important as these contributions may be, future research ought to address the methodological shortcomings of this paper and continue to flesh-out these hypotheses. First, there is some evidence to suggest that the dynamics of desistance are nonlinear, making prediction cumbersome (Walters, 2002). In particular, desistance trajectories may be highly individualized, whereby the factors that initiate or maintain prosocial behavior dramatically differ between offenders. A promising outlet for later research agendas would include the use of longitudinal data to examine the psychological development of desistance decision-making. Further studies ought to work toward exploring the desistance *process*, including the *resolution* to change, rather than the simple correlates of eventual desistance. Unfortunately, there is virtually no research that links intentions to desist among prisoners with reoffending

outcomes upon release. One exception is a study that has shown that intentions to “go straight” do not align with recidivism outcomes unless other behavioral changes are made (Shapland & Bottoms, 2011), while another project demonstrates that self-efficacy about the ability to change is necessarily related to reoffending (LeBel, Burnett, Maruna, & Bushway, 2008); given these results, scholars urge further inquiry into offenders’ decisions to change and how this shapes reentry outcomes, even when indirectly (Kazemian, 2007; McNeill, 2006).

Though perhaps an unwelcome reality, the evidence is mounting that imprisonment stimulates (rather than deters) reoffending (Nagin, Cullen, & Jonson, 2009; Wood, 2007), and there are some findings demonstrating that the valuation of a criminal lifestyle are not deterred by prison (Crank & Brezina, 2013). Uncovering the psychosocial reinforcements that maintain criminality should be explored. Simply stated, criminal justice sanctions do not have a homogeneous impact on recidivism (Sherman, 1993). Future research must therefore explore the specific conditions which encourage desistance, from the initial decision to change (Prochaska, DiClemente, & Norcross, 1992) to the lifestyle circumstances that support prosociality through actual behavioral changes (LeBel, Burnett, Maruna, & Bushway, 2008; Shapland & Bottoms, 2011).

The conclusions discussed here are, though somewhat limited, promising in their implications for criminal justice policy. Directions for correctional treatment are of particular interest here, suggesting that rehabilitative efforts must encourage offenders to redefine their future (Maruna & Mann, 2006), rather than relying on justifications of their past. Specifically, in working toward desistance, offenders must establish that their past identity does not have to dictate their future life script (Maruna & Roy, 2007). Additionally, desistance from crime may require the adoption of a prosocial identity and a rejection of antisocial values and lifestyles (Andrews & Bonta, 2010; Crank & Brezina, 2013). This

hurdle becomes problematic, however, when the offender feels as though they will continue to be viewed as a criminal (Aresti, Eatough, & Brooks-Gordon, 2010). Therefore, policies desiring successful reintegration for ex-offenders must engage the entire community to which they will return, ensuring that unreasonable stigmatizations will not haunt their future life chances (Kurlychek, Brame, & Bushway, 2006). Indeed, the cognitive transformations inmates undergo may be futile should opportunities not be made available that would correspond with their “new self” upon release (Giordano, Cernkovich, & Rudolph, 2002). That is, reentry programs ought to ensure that the role adopted by the offender to adapt to the prison environment does not become incorporated into their self-concept beyond prison walls (Little, 1990; Sykes, 1958). The sample here (comparable to the findings of La Vigne & Kachnowski, 2005, and Shapland & Bottoms, 2011) demonstrates that inmates are not lacking in their *desire* to change. It would be unfortunate if conditions outside their own agency contributed to their return to crime (Petersilia, 2003).

Deterrence theorists distill criminal justice sanctions down to a direct “cost.” But imprisonment is an all-consuming social experience, which some offenders may value (Crank & Brezina, 2013). Indeed, some individuals may willfully transform their self-concept, behaving in a way consistent with the label the sanction has applied to them. This may ring particularly true for offenders desiring an alternative way to define themselves, provided that their prosocial life experiences are of minimal reinforcement. Thus, encouraging desistance may not be as simple as applying an official punishment; incarceration may serve as an additional disadvantage, or may encourage the rational choice to reoffend. In order to cope with the lowered life chances that often accompany imprisonment, inmates may interpret their criminal behavior as rewarding. For recidivism to become less probable, then, offenders must be provided with opportunities by which they can achieve similar positive affect and respect that are in alignment with prosocial identities (see, for example, Toch, 2000). Using

strengths-based reentry approaches, the goal is to “provide opportunities for such individuals to develop pro-social self-concepts” (Burnett & Maruna, 2006, p. 84), whereby offenders can redefine themselves not by a label alone (e.g., ‘ex-offender’) but by actions and feelings that accompany a new lifestyle (Maruna & LeBel, 2003; Paternoster & Bushway, 2009; Porporino, 2011). Several rehabilitation theories and programs have accomplished this task (Andrews & Bonta, 2010; Ward & Brown, 2004), although to encourage prosociality among offenders, further information regarding the valuation of criminality and expectations for reoffending are needed.

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Table 1: Logistic Regression Predicting Self-Reported Likelihood of Reoffending

	Model 1	Model 2	Model 3
Income	.000 (.000)		.000 (.000)
Employment	-.093 (.207)		-.306 (.250)
Educational attainment	.560 (.210) **		.677 (.252) **
Educational achievement	.315 (.209)		.078 (.256)
Marital status	.564 (.223) *		.668 (.268) *
Parenting status	.439 (.210) *		.426 (.247) †
Positive affect		.034 (.009) ***	.033 (.012) **
Respect		.052 (.063)	.060 (.075)
Family incarceration		.471 (.225) *	.249 (.259)
Sanction participation		.622 (.209) **	.454 (.247) †
Juvenile history		.383 (.238)	.366 (.294)
Constant	-1.831 (.255) ***	-3.057 (.690) ***	-3.768 (.848)
Model χ^2	23.485 ***	37.515 ***	38.592 ***
Nagelkerke R ²	.065	.098	.133

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Note: The values reported are the regression logits. Standard errors are in parentheses.

Table 2: Logistic Regression Predicting Self-Reported Likelihood of Reoffending for Subsamples

	Low SES	Medium/High SES	z-test
Income	.000 (.000)	.000 (.000)	-0.576
Employment	-.465 (.310)	.103 (.475)	-1.001
Educational attainment	.902 (.317) **	.346 (.479)	0.968
Educational achievement	-.115 (.315)	.606 (.495)	-1.229
Marital status	.671 (.336) *	.702 (.496)	-0.052
Parenting status	.643 (.307) *	.026 (.490)	1.067
Positive affect	.042 (.015) **	.021 (.021)	0.814
Respect	-.105 (.099)	.318 (.152) *	-2.332 *
Family incarceration	.095 (.324)	.583 (.477)	-0.846
Sanction participation	.428 (.309)	.178 (.463)	0.449
Juvenile history	.083 (.378)	.977 (.535) †	-1.365
Constant	-2.350 (1.087) *	-6.075 (1.643) ***	1.891 †
Model χ^2	30.766 ***	22.843 *	
Nagelkerke R ²	.154	.246	

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Note: The values reported are the regression logits. Standard errors are in parentheses.