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Romantic Partners' Influence on Men's Likelihood of Arrest in Early Adulthood

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Abstract

Female romantic partners' influence on official crime occurrence for men across a 12-year period in early adulthood was examined within a comprehensive dynamic prediction model including both social learning and social control predictors. We hypothesized that relationship stability, rather than attachment to partner, would be associated with reduced likelihood of crime, whereas women's antisocial behavior would be a risk factor, along with deviant peer association. Models were tested on a sample of at-risk men [the Oregon Youth Study (OYS)] using zero-inflated Poisson (ZIP) modeling predicting to 1) arrest persistence (class and count) and 2) arrest onset class. Findings indicated that women's antisocial behavior was predictive of both onset and persistence of arrests for men, and deviant peer association was predictive of persistence. Relationship stability was protective against persistence.

Keywords

adult onset; crime in early adulthood; desistance; partner influence; persistence; deviant peer association; attachment to partner

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¹An alternative model for count data with excess zeros could be provided by using the zero-inflated negative binomial (ZINB) distribution. To check whether an underlying ZINB distribution would provide a better fit to the modeled data than the analyses, assuming an underlying ZIP distribution, the final model containing predictors to class and count was examined within R (R Development Core Team, 2006) using a ZINB distributional assumption. The deviance statistic for the ZINB model was 538.8, compared with the ZIP model with 1 degree of freedom. The resulting difference (chi-square 3.2, 1 d.f.) was not significant at the .05 level, which indicates that the neither the ZIP nor the ZINB model provided a significantly better fit to the data. As an additional test of whether the two-class ZIP model provided an adequate fit to modeling the excess zeros in the Poisson distribution, a parametric bootstrapped likelihood ratio test (McLachlan and Peel, 2000) was conducted to compare the estimated two-class model, with a model with one less class (single class). A low *p* value indicates that the model with one less class is rejected in favor of the estimated model (Muthén and Muthén, 1998–2006). The resulting *p* value of < .001 indicated that the two-class model fit the data much better than a single-class model.

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Romantic Partners' Influence on Men's Likelihood of Arrest in Early Adulthood

Understanding the occurrence of crime in early adulthood, including persistence, desistance, and adult onset of arrest, is of critical importance to policy and criminal justice decision making. As observed by Steffensmeier and Allan (2000), one of the oldest and most widely accepted findings in criminology is that overall involvement in crime diminishes with age, and consequently, much interest exists in predicting crime desistance in early adulthood. Findings from longitudinal studies involving self-reports of crime involvement or arrest data indicate that even subgroups that seem to follow the highest and most chronic career paths show decreases in criminal activity across early adulthood (Laub and Sampson, 2003; Thornberry, 2005; Wiesner and Capaldi, 2003; Wiesner, Capaldi, and Kim, in press). Furthermore, as Thornberry (2005) points out, the movement toward desistance seems to start for many people at a relatively early age, before marriage, work, and family, which have been hypothesized as key to desistance. Desistance may be related to neurological maturity, with most brain development, including myelination, being completed by early adulthood (Casey et al., 2005; Giedd et al., 1999), which results in the maturity of inhibitory control systems (Welsh, Pennington, and Groisser, 1991). Perhaps, rather than predicting desistance, the more compelling task is to explain why some prior offenders persist in crime, rather than following the usual developmental pathway of desistance.

Questions concerning persistence and desistance are not the only ones of interest with regard to crime in early adulthood. As reviewed by Blumstein et al. (1986), early studies indicate that, despite the overall desistance trend, close to 20 percent of men are arrested for the first time in adulthood. Moffitt et al. (2002) identified a group of men who had not been very delinquent as adolescents but who emerged as low level chronic offenders at age 26 years. According to Farrington, Lambert, and West's (1998) study on men across ages 8 to 40 years, of those individuals convicted, 26 percent showed onset of crime at ages 17 to 20 years and an additional 21 percent showed onset between ages 21 and 40 years; the rest showed onset before age 17 years. For the Oregon Youth Study (OYS) sample we have found that 17 percent of the men were first arrested as early adults, or by around age 27 years (Wiesner, Capaldi, and Kim, 2007). Understanding factors related to adult onset of crime, in addition to persistence, is therefore of critical importance to understanding crime in adulthood as a whole.

Attachment versus Stability in Romantic Relationships

A most notable feature of the early adult period is the establishment of relatively stable romantic relationships, and social control theorists have emphasized the role of such conventional social bonds in crime desistance. Thus, it has been theorized that marriage is a turning point in the life course of criminally involved men (Sampson and Laub, 1990). Marriage has been found to have a main effect on crime, and in one study it was associated with a 35

percent average reduction in the probability of crime. Furthermore, intraindividual analyses over time indicated that the same man commits less crime when married than when not (Sampson and Laub, 2005). Sampson and Laub (1990) posit that attachment or bonding to a partner is the key social control mechanism of marriage (Sampson and Laub, 1990, 2005), and they view men's attachments to their partners, involving relationship satisfaction, as the mechanism by which they become invested both in fulfilling normative adult roles and in shedding criminal associations and activities. In support of this position, they found that men who showed higher attachment to their spouses were less likely to be arrested across ages 17 to 32 years, controlling for prior levels of criminal involvement (Sampson and Laub, 1990).

Implicit in this theorized role of attachment in crime desistance is the conventional wisdom that because of their prosocial tendency and family-oriented behavior, women are a reforming influence on men; therefore, attachment to women has a beneficial influence on antisocial men. However, it may be that, rather than attachment, relationship stability and thus cumulative investment on the men's part in this adult relationship role and its related role implications (e.g., sharing household obligations, including financial provision) are more important than how happy and satisfied men are with the relationship. An individual may stay with his partner for several reasons other than higher levels of satisfaction with the relationship, such as a lack of better alternatives or financial dependency. It is possible that couples of lower socioeconomic status and with higher levels of risk behavior may show lower levels of relationship satisfaction, although they stay together. As pointed out by Giordano, Deines, and Cernkovich (2006), very few of the prior offenders in the Ohio Serious Offender Study achieved the "respectability package" examined in the Sampson and Laub studies. In fact, at an average of age 29 years, only 8 percent to 9 percent were married, had above average levels of attachment, and had a job above the poverty line. Therefore, the possible effects of relationship stability and of attachment or relationship satisfaction need to be considered separately. Overall, the degree to which relationship stability and attachment are protective against persistence of crime has been tested in very few longitudinal samples; thus, more evidence of their respective roles is needed. These alternative hypotheses regarding social control mechanisms protective against crime persistence will be tested in the current study.

We posit that to test theories of partner influence on crime, the relationships considered should not be limited to marriage. Marriage is less common than in the past among early adults and cohabitation is more common (Seltzer, 2000; U.S. Bureau of the Census, 1998), and partners may influence each other in dating relationships that do not lead to either marriage or cohabitation. Some key studies that have addressed crime desistance in early adulthood have examined earlier cohorts. For example, the cohort on which Sampson and Laub tested their hypotheses consisted of individuals born between 1924 and 1935. At the first study follow-up at age 25 years, somewhat over one half of the sample was married. Couples from more deprived and risky backgrounds are now especially less likely to marry (White and Rogers, 2000). A focus on the institution of marriage itself, therefore, seems less relevant for contemporary theorizing regarding persistence and desistance of crime. Therefore, in the current study, relationship stability was defined by an indicator of relationship longevity, regardless of relationship status.

Social Learning Mechanisms in Early Adulthood

Notwithstanding broad recognition of the importance of social learning mechanisms in the development of antisocial behavior (Dishion and Patterson, 2006), including the central role of association with deviant peers (Matsueda and Anderson, 1998), relatively few studies have examined the direct social influence of romantic partners' deviant or criminal behavior on men's involvement in crime. We have argued for the critical importance of considering specific influences of romantic partner characteristics on several aspects of men's behavior, and we

have found evidence in two areas that women can be considerably more agentic, including in a negative fashion, on men's behavior than has been supposed previously. First, evidence shows that women's antisocial behavior predicts their own physical violence toward their partners, which in turn is found to be predictive of men's violence toward them (Capaldi, Kim, and Shortt, 2007; Kim and Capaldi, 2004). Second, in a prospective study that involves influence across three generations, it was found that the men's poor and harsh discipline practices were predicted both by their partners' problem behavior (substance use and antisocial behavior) and by their negative discipline practices, taking into account the poor discipline experienced by the men in their families of origin and the men's own problem behavior (Capaldi et al., 2008). Several mechanisms may account for such partner influence, and these are likely to vary depending on the men's behavior under consideration. Thus, women's influences on men's harsh discipline may be more often direct – for example through encouraging spanking as an approach, than women's influences on men's crime. Women's specific influence on men's crime persistence and onset in adulthood is posited to occur because of several possible processes. Women who are higher in antisocial behavior may be involved in a more criminal network (e.g., relatives and friends) that, in turn, influences their partner; they may be more accepting of men's criminal behavior (i.e., not actively discouraging it); and finally, in some cases, they may actually encourage it (e.g., encouraging their partner to commit fraud to provide extra money).

Some evidence reveals the significant influence of women's antisocial behavior on men's crime involvement. West (1982) found evidence for the parents in the Cambridge Study sample that men who married convicted women were more likely to persist in offending, although such evidence was not replicated for the youth generation (Farrington and West, 1995). Woodward, Fergusson, and Horwood (2002) found that deviant partners influenced offending risk at age 21 years for both men and women. Furthermore, in a study of crime in school age adolescents, using the National Longitudinal Study of Adolescent Health (Add Health), Haynie et al. (2005) found that romantic partners' delinquency exerted a unique effect on respondent's delinquency, controlling for friend's delinquency and control variables. Sampson, Laub, and Wimer (2006) also reported an association between spouse deviance and men's crime. However, as discussed in Rhule-Louie and McMahon's (2007) review, despite extensive findings of significant associations, reliance on retrospective reporting of problem behavior and cross-sectional analyses have limited the conclusions that can be made about the direction of influence or the mechanisms underlying partner similarity and desistance in problem behavior. In addition, some of the conflicting findings may exist partly because of measurement limitations, in particular, limited measurement of women's antisocial behavior.

Differential association patterns with prosocial or antisocial peers have been hypothesized and found to be a key social learning influence on the level of antisocial involvement (Elliott, Huizinga, and Ageton, 1985; Sutherland and Cressey, 1955). This work mainly has been elaborated in examining the influence of deviant peer association on delinquent behavior at adolescence, especially for young men. Delinquent peer association has been identified repeatedly as strongly associated with delinquent behavior at adolescence (e.g., Dishion et al., 1996). In a study using the National Youth Survey (NYS) data, Matsueda and Anderson (1998) found evidence across 2-year intervals for a reciprocal association between delinquency and deviant peer association. The main theoretical predictions of crime desistance from Social Learning Theory involve disengagement from deviant peer associations, with the corollary that persistence involves continued associations. The theory, however, has been less applied to adult crime persistence and adult onset of crime than to adolescent delinquency.

The contributions of social control and social learning mechanisms to crime in early adulthood have been examined in some prior studies. Warr (1998) argued that peer influences have received inadequate attention in tests of social control explanations of desistance from crime

in adulthood. Using data again from the NYS through age 24 years, Warr demonstrated that the transition to marriage was accompanied by a dramatic decline in time spent with friends and reduced exposure to delinquent peers, and that these factors largely accounted for the association between marital status and criminal behavior. However, Simons et al. (2002) found evidence that romantic partners' antisocial behavior predicted young men's adult criminal behavior, over and above the contribution of deviant peer association. Thus, the Simons et al. (2002) study provides evidence that the effects of romantic partners' antisocial behavior on men's criminal involvement in adulthood is not entirely because of an increased association with deviant peers. Furthermore, the study indicated support for social learning versus attachment mechanisms in that the quality of romantic relationship was not found to show direct prediction of criminal behavior.

Substance Use and Depressive Symptoms

Whereas the role of women's antisocial behavior on men's involvement in crime has received some attention, the possible roles of women's (and men's own) substance involvement and depressive symptoms have received less attention. As both of these behaviors are associated with antisocial behavior for both men and women, testing whether effects on crime are from antisocial behavior or from these accompanying problems would provide a stronger test of the social learning hypotheses. Men's substance use has been found to be associated with their crime involvement in early adulthood, controlling for prior risk factors (Wiesner, Kim, and Capaldi, 2005), and it tends to hinder desistance in offending behavior (Hussong et al., 2004; Roisman et al., 2004). Examining predictors of crime persistence for a predominantly African-American sample with extensive arrest histories, Uggen and Kruttschnitt (1998) found that, for men, recidivists tended to have more extensive histories of crime and drug use. In a study of variations in crime, Horney, Osgood, and Marshall (1995) found that living with a girlfriend tended to reduce crime whereas illegal drug use tended to increase it. The study, however, relied on retrospective reporting. Evidence for negative outcomes in early adulthood because of depressive symptoms also suggested the need to consider the role of each partner's depressive symptoms as putative risk factors for crime in early adulthood. Depression is associated with cumulative life failures (Capaldi and Stoolmiller, 1999) and has been found to affect offending behavior for men (Ostrowsky and Messner, 2005). It also may be that these co-occurring factors account for any association of women's antisocial behavior and men's persistence in crime.

Goals of the Current Study

The main goal of the current study was to clarify the role of romantic relationships with women in men's crime engagement (indexed by arrests) in early adulthood, using the OYS sample. Specifically, comprehensive dynamic models were tested to evaluate 1) crime persistence and 2) crime onset that included both the social control (relationship stability and attachment to partner) and the social learning (deviant partner behavior) aspects of the romantic relationship. The contributions of men's developmental stage (assessed by age), prior criminal history, and deviant peer association also were examined in the model, along with additional indicators of the men's and partners' concurrent risk behaviors, namely substance use and depressive symptoms. The model was dynamic in that men's romantic relationships were sampled every 2 to 3 years across a 12-year period (from approximately late adolescence to the age of late 20s), and time-varying covariates were used to predict to arrests within a 1-year window after these assessments. Thus, the model was fully prospective, criminal behavior was sampled close in time to the hypothesized predictors, and a comprehensive set of competing hypothesized predictors and control variables was examined. Models were tested for at-risk men, who had been involved in a longitudinal study of delinquency since they were ages 9 to 10 years (OYS)

and for their female romantic partners across a 12-year period in early adulthood (Couples Study).

Hypotheses

In summary, we predicted that controlling for expected effects of both deviant peer associations and the men's criminal histories, the women's problem and risk behaviors, particularly antisocial behavior, would predict men's arrests in the subsequent year. We also expected an independent effect of relationship longevity and did not expect attachment to partner to be predictive in the presence of relationship longevity. The current study sought to extend contributions of prior studies that examined social learning and social control models by 1) including both social learning and social control predictors and clarifying definitions of social control mechanisms (i.e., relationship stability and attachment), 2) using fully prospective longitudinal data spanning a 12-year period in early adulthood, 3) examining persistence and onset of crime for an at-risk community sample, and 4) employing strong measurements of both the predictor and the outcome variables, including comprehensive coverage of arrest records.

METHOD

PARTICIPANTS

Participants for the current study were from the OYS, a community based sample of 206 young men at risk for delinquency, and from the Couples Study, a study of the OYS men's romantic relationships. The OYS is an ongoing multiagent, multimethod longitudinal study in which participants were recruited through fourth-grade classes (ages 9–10 years) in higher crime areas of a medium size metropolitan region in the Pacific Northwest in 1984–1985. The young men have been assessed annually, and the retention rate of the living participants ($N = 203$) was 94.6 percent in year 20 of data collection. The sample was predominantly white and lower or working class, according to the Hollingshead index (1975). The Couples Study is a companion longitudinal study in which the men in the OYS and their partners were assessed five times, namely, ages 17–20 years, ages 20–23 years, ages 23–25 years, ages 25–27 years, and ages 27–29 years. For the current study, data from all five Couples assessments were used. Couples Study Times 1 and 2 (T1 and T2) were each collected over 3-year periods (T1 during years 9, 10, or 11 of the OYS and T2 during years 12, 13, or 14 of the OYS, depending on the OYS men's relationship status) to allow higher rates of participation. Times 3 through 5 (T3, T4, and T5) were each collected over 2-year periods, because more men were in a relationship at these ages. The study design is summarized in figure 1. Demographic information and participation rates at each Couples Study time period are presented in table 1. A total of 191 men and their partners participated in the Couples Study at least once over the years.

The predominant reason for nonparticipation in the Couples Study assessment at any time period was that the men were not in a relationship at the time or in a very new one. For example, at ages 26 to 27 years (T4), 22 percent of the study participants reported that they were not in a steady romantic relationship at the time. As shown in table 1, the proportion of men who were married increased considerably across the 10-year period, whereas the proportion of dating decreased.

PROCEDURES

Assessments for the OYS included in depth interviews of the young men and their parents, questionnaires, interviewer ratings, and court/Department of Motor Vehicles records data. Assessments for the Couples Study included a separate interview and questionnaire for the

young men and their partners, a series of videotaped problem-solving discussions, and coder/interviewer ratings.

MEASURES

Dependent Variable

Men's Arrests in Early Adulthood: The OYS men were asked yearly across the relevant study period to list all the places they had lived since the prior interview, and official court data were obtained from all these jurisdictions. To provide a strong test of the hypotheses by creating a clear and proximal window of prediction from partner's influence to the man's ensuing arrests, the dependent variable was defined as a count of arrests in the 365 days after participation in each Couples Study assessment. Thus, the arrests included in the analysis are a subset of the total arrests the men experienced across the period. In the year after Couples Study T1 (1991–1995), 15 percent of the men experienced one or more arrests, and by T5 (2001–2003) the proportion of men who experienced one or more arrests during the period had decreased slightly to 12 percent of those participating.

To ensure that partners' influence on the men's arrests are not due to domestic violence incidents, the analyses were repeated excluding domestic violence arrests. Regarding possible effects of reduced risk for arrest due to being incarcerated, only four of the men involved in the analyses had been incarcerated for 28 weeks or more in total across the approximately 10 years of the study period, thus representing a limited amount of time out of risk compared to the length of the windows. Of these men, two experienced multiple arrests across the period. Because of these factors and the fact that, in the police records, incarceration times were poorly recorded, making it very difficult to create an adequate time varying covariate, incarceration time was not controlled in the analyses.

Time Varying Covariates—Men's covariates first were calculated within each OYS wave and then were matched into the corresponding Couples Study participation point. The partners' scores were gathered at the time of their participation in the Couples Study.

Men's Deviant Peer Association: Deviant peer association was calculated at each time point as the mean of self- and parent-report indicators. The self-report indicator was formed by taking the mean of a 13- to 19-item scale from the interview (standardized alpha ranged from .90 to .92, with a mean of .91) and a single item ("I hang around with others who get in trouble.") from the Young Adult Self-Report (Achenbach 1993a). For 7 of the 12 OYS years (years 11, 12, 13, 15, 16, 17, and 19), the parent-report indicators were calculated as the mean of a five item scale (alpha from .81 to .88; mean = .85) from the Young Adult Adjustment Questionnaire (Capaldi, King, and Wilson, 1992) and a single item from the Young Adult Behavior Checklist (Achenbach, 1993b). At OYS year 9, parent report was made by way of two items ($r = .67$) from the Peers Questionnaire (Dishion and Capaldi, 1985). Correlations between two parent indicators (Young Adult Adjustment Scale and Young Adult Behavior Checklist) averaged .72, ranging from .67 to .80. Associations between self-report and parent indicators in all cases were significant at the .05 level, with correlations averaging $r = .44$ and ranging from $r = .37$ to $r = .54$.

Men's Substance Use: The men's substance use frequency predictor was developed from the yearly OYS interview. Self-report frequencies in raw counts of use during the previous year were used. Indicators first were formed by each substance. Alcohol frequency was assessed by asking three separate questions: How many times in the past year had they used 1) beer, 2) wine, and 3) liquor (mean alpha = .50; range = .41 to .62); then, the frequencies were summed. Marijuana use frequency was assessed similarly. Other drug-use frequency was determined by a single global question at OYS years 9 through 11 and then by eight questions assessing

specific types of drugs (with all responses summed) during OYS years 12 to 20 (average standardized alpha = .50; range = .38 to .73). These counts of alcohol, marijuana, and other drug use were recoded into nine categories (“no use” through “two to three times per day”) to reduce the influence of skewness and outliers. Scores for alcohol, marijuana, and other drug use separately were averaged within the OYS time periods to arrive at the measure for global substance use and then were matched into the Couples Study at the appropriate time. Reliabilities for the three indicators of substance use frequency (alcohol, marijuana, and other drugs) were .57 on average, ranging from .45 to .62.

Men’s Depressive Symptoms: Depressive symptoms for the men were calculated at each OYS time period as the mean of three indicators: self-report, parent report, and interviewer impression. Self-reports consisted of a 20 item scale from the Center for Epidemiologic Studies Depression (CES-D) scale (Radloff, 1977; e.g., “During the past week I had crying spells.”), and alphas were .87 or greater across the waves. A parent indicator was formed as the mean of a seven item scale (e.g., “He complains of loneliness.”) from the Child/Young Adult Behavior Checklist (Achenbach, 1993b; Achenbach and Edelbrock, 1983), which showed strong reliabilities (alphas = .75 to .86), and a two-item indicator (e.g., “Your son seems depressed.”) from the Young Adult Adjustment Scale (Capaldi, King, and Wilson, 1992), with significant item correlations ranging from .53 to .77. A final indicator was provided by one interviewer rating item (“Participant seemed depressed, sad, or down.”). The three aggregated agent indicators showed moderate associations within OYS time periods, with scale alphas ranging from .40 to .70 and a mean reliability of .54.

Women’s Antisocial Behavior: The construct for women’s antisocial behavior was formed at each Couples Study time period as the mean of three indicators: self-report delinquency, official arrests, and interviewer/coder ratings. The official-records indicator was the woman’s arrest history at that time, calculated as the total sum of arrests. The self-report delinquency scale was derived from 13 Elliot Behavior Checklist (Elliott, 1983) items. Open-ended items were recoded into nine categories before summation. Scale reliabilities ranged from .76 to .82. The final indicator was formed from interviewer and observational-coder ratings. Three items from the interviewer ratings (e.g., “Partner seemed antisocial or delinquent.”) showed strong within-time period reliability (ranging from .65 to .84). The observational-coder ratings also contained an item (e.g., “Partner talked about antisocial topics.”) that was significantly associated with the interviewer rating scale at all time periods at the $p < .05$ level.

Convergence of the three indicators for women’s antisocial behavior was acceptable at most time periods (Cronbach’s alpha = $\geq .60$), with the exception of T2 and T3, with alphas of .48 and .34, respectively. Low alphas were from the relatively low number of scale items in some scales, along with the fact that women engage in relatively low levels of criminal behavior. Therefore, all three available indicators were retained at each time point.

Women’s Substance Use: As with the OYS man, substance use frequency was assessed through self-report items from the interviews. Three questions assessed the frequency of alcohol, marijuana, and other drug use separately, with the exception that for T2 through T4 other drug use was assessed using eight questions about frequency of use for specific drug categories. Reliabilities for the expanded drug-specific scales were generally good, with alphas ranging from .51 to .75. As with the OYS man, the open-ended questions were recoded into nine categories ranging from “zero use” to “used two to three times per day.” With the exception of T5, which had a Cronbach’s alpha of .49, all reliabilities for the three substance-use indicators showed alphas greater than .60.

Women’s Depressive Symptoms: Three indicators were used to measure the women’s depressive symptoms, including one item (e.g., “Woman seemed sad or depressed.”) from the

interviewer ratings and one item (e.g., “How often is she so depressed that it interferes with normal activities?”) from the Adjustment with Partner Questionnaire (Kessler, 1990). Women’s self-report of depressive symptoms was measured using 20 items from the CES-D (Radloff, 1977), and standardized alphas for the scale ranged from .62 to .92. The three indicators exhibited modest agreement across the Couples Study time periods (standardized Cronbach’s alphas from .40 to .63). However, their mean was taken to represent the observed time-specific predictors for the women’s depressive symptoms to provide comparable measurement at each time point. Alphas tend to be low with only three items, and the inclusion of differing reporting agents was comparable to the men’s depressed-mood predictors.

Men’s Attachment to Partner: Within each Couples Study time period, the men’s attachment to partner was assessed using scales from two self-report instruments: 9 items from the Adjustment with Partner Measure (Kessler, 1990; e.g., “How often can you be yourself around her?”) and 10 items from the Dyadic Adjustment Scale (Spanier, 1976; e.g., “Do you confide in your partner?”). Both scales showed strong reliability (alpha ranged from .85 to .89 for the Adjustment with Partner Scale and from .81 to .87 for the Dyadic Adjustment Scale). Within time periods, the two scales were significantly related at the $p < .001$ level, and correlations ranged from .75 to .82. The mean of these two scales represented the observed measurement of the men’s attachment at each time period.

Relationship Stability: The indicator for relationship stability was participation with the same partner as the prior time period, which was coded as one to indicate a continuing relationship (i.e., the same partner over time); otherwise, it was coded as zero. For all cases participating in T1, the same partner indicator was set to zero.

Control Variables

Prior Arrests: The number of arrests before first participation in the Couples Study (i.e., full arrest history) was used as a time-invariant predictor in the crime persistence model to control for the effects of prior arrest history on the occurrence of crime in early adulthood.

ANALYSIS PLAN

Design—The most fruitful approach to examining persistence or desistance of crime across a prolonged time period is to view it as an ongoing change process (Bushway et al., 2001; Wiesner and Capaldi, 2003); thus, the model had to accommodate the dynamics of the early adult period, including both repeated arrests across time and changes in men’s relationships as well as in the predictor variables. The young men might be with the same partner across any number of time periods or might be with a new partner. To reflect the ecology of partner influence in early adulthood, this situation was accommodated in the model by including all partners assessed (however, some men had additional partners between assessment occasions who therefore were not included in the study). As the outcome of interest was a count variable (number of arrests) with a many zeros at each time point, zero-inflated Poisson (ZIP modeling) (Lambert, 1992) was conducted using the Mplus program (Muthén and Muthén, 1998–2006) to examine the associations between the predictors and the outcome. Both the number of waves in which the men participated in the Couples Study assessment and the total number of partners with whom they participated varied across the study period. Including all these assessments resulted in a stacked data set with a case for each wave of participation for each man and time-varying predictors assessed across the study period. As the person-period data file contained nonindependent observations, the complex samples feature of the Mplus program was used to account for the clustered nature of the data by modifying the parameter standard errors using a sandwich estimator.

ZIP modeling on the stacked data set offered a very strong approach to examining the effect of a time-fluctuating factor (i.e., partner influence) on an ensuing outcome and showed differential timing across individuals (i.e., adult arrest). Furthermore, it accommodated the fact that men first participated in an assessment with a partner at different ages and time periods of the study, depending on when they were first in a relationship. Within both the persistence and onset samples, the variance was larger than the mean, which indicates overdispersion in relation to the Poisson distribution (Agresti, 1996). The presence of overdispersion was addressed via use of ZIP modeling and checked against an alternative underlying binomial distribution.

ZIP regressions are mixture models that predict 1) the likelihood of membership in the class that inflates the zero count above what would be expected under a Poisson distribution at each observed time point (i.e., essentially men with no arrests in the period) and 2) the Poisson distribution for the *count of arrests* in that period (Lambert, 1992). Predictors can be used to predict class membership, number of arrests, or both. In the case of the onset group, so few men had multiple arrests within the current study windows that only class membership was modeled.

Time-varying predictor variables from the OYS data set were taken from the same time point as the Couple Study assessment (i.e., before the ensuing year in which the arrest occasion occurred). Thus, the time between measurement of the independent variables and the outcome was within 1 year for all study participants.

Missing Data: The participation patterns for the Couples Study are shown in figure 2. The total number of men participating in a Couples Study assessment was relatively high at time points 2 through 5 (e.g., at T5 83 percent of the 191 men involved in the analyses participated). Because the predictor variables for the men were taken from the OYS assessment, which involved yearly assessments and had very high participation rates over the years (95 percent or higher), minimal data were missing for the men. OYS year 18 (age 26–27 years) was a minimal wave, with little measurement of the domains in the analysis. Therefore, component indicators were averaged from years 17 and 19 to serve as indicators in year 18. Parents also did not participate in OYS year 14 (age 22–23 years); therefore, the means of bracketed scores (figure 2) were used to estimate parent indicators at that time point. The analyses included only those time points in which the man participated with a partner and no effort was made to impute data for hypothetical nonparticipating partners because assumptions for the multiple imputation were not met in this case.

Model Tests—Two complete sets of model tests were performed: one for the men who were at risk for persistence (i.e., had at least one arrest before participation in the Couples Study) and one for the men who were at risk for onset (i.e., had no prior arrest). First, each predictor's relation to 1) arrest-count inflation class membership and 2) arrest count for the persistence model was examined in univariate ZIP modeling. A baseline model with no predictors was estimated first. Next, multivariate models were tested in which predictors to the inflation class were entered in three blocks: 1) men's characteristics including age, substance use, depressive symptoms, and prior arrests for the persistence model only; 2) women's characteristics, including antisocial behavior, substance use, and depressive symptoms, as well as relationship measures, including relationship stability and the men's attachment to partner; and 3) the men's deviant peer association. The saturated model of predictors to the nonoffending class was examined, and nonsignificant predictors were eliminated in an iterative fashion to arrive at a model that contains only significant predictors to class. For the persistence model, once the prediction model to class was established, the same procedure was followed (while maintaining the derived class-prediction model) by blocking predictors to arrest count in the same order as was done for the class model.

RESULTS

I. PREDICTION TO CRIME PERSISTENCE ACROSS EARLY ADULthood

The ZIP analysis predicting persistence of crime in adulthood involved those who had a criminal record before their first Couples Study assessment ($N = 110$). Of those 110 men with prior arrests records, 56 had an arrest at some point during the year after at least one assessment with their romantic partners. Of those 56 men, 28 (50 percent) had experienced 1 arrest during the total examined time frame, 14 (25 percent) had 2 arrests, and another 14 (25 percent) had 3 or more arrests, with 1 case involving 10 arrests. The maximum number of arrests within 1 study year was 6. Within the stacked dataset of 433 observations, the mean number of arrests was .30 with a variance of .53, which exhibits evidence of overdispersion.

Univariate Analyses—The results of univariate predictions of arrest class are shown in the first column of panel I in table 2. The number of prior arrests, level of men's depressive symptoms, partner's antisocial behavior, and the men's association with deviant peers were each significantly predictive of lower odds for being in the inflation class. Having the same partner as during their previous participation was significantly predictive of increased odds for being in the inflation class. Among univariate predictors of count, prior arrests, partner's antisocial behavior, partner's depressive symptoms, and the men's association with deviant peers all predicted to a higher number of arrests. Men's age, participating with the same partner as previously, and attachment were all significantly predictive of a reduction in the likelihood of arrests.

Multivariate Analyses for Persistence of Arrest

Prediction of Arrest Class: Multivariate analyses blocking predictors of class are shown next in panel I of table 2. The block of men's characteristics (model 1) was entered first, and only the men's prior arrests were significantly predictive of reduced odds of being in the inflation class. When the partner influence and relationship characteristic variables were entered (model 2), men's prior arrests remained significant in predicting lower odds for being in the inflation class and women's antisocial behavior was similarly predictive, whereas relationship stability predicted increased odds of being in the inflation class. Finally, the man's deviant peer association was entered into the model and was significantly predictive of reduced odds for being in the inflation class, whereas the only other remaining significant predictor was relationship stability. After iterative trimming of nonsignificant predictors (trimming lowest z predictors first), the men's deviant peer association and relationship stability were retained in the final class-prediction model.

Prediction of Arrest Count: Models (5–8) that predict arrest count are also shown in table 2 in panel II and include the final class-prediction model (not shown) in the estimation of each model. The block of men's characteristics (model 5) contained no significant predictors of the count of arrests. Of the women's characteristics (model 6), only women's antisocial behavior was significantly predictive of the count of arrests. When men's deviant peer association was added (model 7), it provided no significant prediction of arrest count over and above its prediction of inflation class. After nonsignificant predictors were trimmed in a stepwise fashion, the final model (model 8) indicated, similar to the final prediction model for class only, that relationship stability and deviant peer association were predictive of higher and lower odds respectively of being in the inflation class (the class model is not shown). A man's age (which had not previously reached significance) was predictive of lower arrest counts, whereas a woman's antisocial behavior and depressive symptoms were significantly predictive of men's higher arrest counts.

Regarding model fit, the final class prediction model [baseline impedance change (BIC) 567.20] reduced the BIC of the baseline (no predictor model; BIC 598.12) by 30.92, an amount classified as very strong by Raftery (1995). Similarly, the BIC of the final trimmed model (BIC 562.31) reduced the BIC of the class-only model by 4.89, a “positive” (Raftery, 1995) reduction in deviance. When examining change in deviance statistics (calculated using the scaling correction factor for using the robust maximum likelihood estimator; Muthén and Muthén, 1998–2006), model comparisons are similar. The difference in deviance between the baseline and the trimmed class model was significant ($\chi^2 = 36.72$, $df = 2$ $p < .001$), as was the difference between the trimmed class model and the final trimmed model including class and count predictors ($\chi^2 = 13.58$, $df = 3$ $p < .05$). For a discussion of findings with the ZIP model versus a zero-inflated negative binomial distributions, see footnote 1.

Analyses were repeated after removing all arrests for domestic violence. The results were highly similar to the models, including domestic violence arrests, although the t value for the prediction from relationship stability to class membership was lower (1.76) and thus nonsignificant.

II. PREDICTION OF CRIME ONSET IN EARLY ADULTHOOD

The models predicting to onset of crime in adulthood involved those men who had no criminal record before their first Couples Study assessment ($N = 81$). Aggregated across participations, 10 of those men experienced an arrest in at least 1 year after assessment with a romantic partner. Of these 10 men, 7 (8.6 percent) experienced 1 arrest, 2 (2.5 percent) had 2 arrests, and 1 experienced 6 arrests. Within the person-period data set of 309 participations, the number-of-arrests mean was .06, with a variance of .11. Because of the low number of multiple arrests in the adult onset group, only prediction of inflation class was performed, while fixing count prediction at zero.

Univariate Analyses—Examining the univariate predictors of inflation-class membership within the group at risk for onset (table 3), the men’s substance use and the women’s antisocial behavior lowered the odds for being in the inflation class, whereas men’s relationship attachment raised the odds for being in the nonoffending class.

Multivariate Analyses for Onset of Arrest

Prediction of Arrest Class: Blocks of variables (men’s behaviors, women’s influence and relationship characteristics, and men’s deviant peer association) predicting class membership were entered in the same manner as for the persistence prediction model to arrive at a final saturated model, which was then trimmed of nonsignificant predictors (table 3).

When the young men’s characteristics were entered, their substance use was associated with lower odds of being in the inflation class (model 1). When partner influence and dyadic variables were entered (model 2), no significant predictors occurred for class membership, as was the case for the final saturated model when men’s deviant peer association was entered. However, after the final trimming of the model through an iterative process in which the weakest predictors were eliminated one at a time, women’s antisocial behavior became the sole significant predictor, which reduced the odds of being in the inflation class.

The final trimmed model predicting inflation class (BIC 130.57) reduced the BIC of the baseline model (136.65) by 6.08, an effect that could be classified as strong (Raftery, 1995). The difference in deviance between the baseline model and the trim model was significant ($\chi^2 = 8.65$, $df = 1$ $p < .05$). Interestingly, the difference in deviance between the potential fitted and trimmed full model with class and count predictors exhibited only a borderline nonsignificant change in deviance over the trimmed class only-model ($\chi^2 = 9.48$, $df = 4$ $p = .$

05), which provides more evidence that predicting to count within the onset model did not add to explanation of onset. The parametric bootstrapped likelihood ratio test that compares the two-class model to a single-class model was once again highly significant ($p < .001$), which indicates a two-class model fits better than a one class model. Again, analyses were repeated after removing domestic violence predictors, and the findings were not altered substantively.

DISCUSSION

This study focused on specifying the influence of romantic partners on men's likelihood of arrest in adulthood within the context of a dynamic model, including predictors based in Social Learning Theory and integrating predictors based in Social Control Theory. It was hypothesized that both partner antisocial behavior and relationship stability would relate, positively and negatively respectively, to men's criminal engagement, and that men's attachment to partner would not be predictive in multivariate models accounting for each of these factors and the control factors. Using ZIP modeling, models were examined for the persistence and onset of crime in early adulthood (from ages 17–18 to 28–29 years) for men, with predictions of arrest class (interpretable as any arrest versus no arrest) for both onset and persistence of crime and also of arrest count for the group that shows persistent crime in adulthood.

Overall, findings confirmed the hypotheses that predictors based in Social Learning (and differential association) Theory, namely romantic partners' antisocial behavior and deviant peer association, would be associated with men's involvement in crime in adulthood. Also, as predicted, relationship stability was the key social control factor related to desistance, whereas attachment to partner was not predictive in the full multivariate models. A key contribution of the study is that social learning and social control influences operating in romantic relationships in general, rather than limited to marital relationships, were found to affect men's criminal involvement in early adulthood. Furthermore, findings were consistent with those of Simons et al. (2002) in showing prediction from both deviant peer association and romantic partners' antisocial behavior to men's criminal involvement in early adulthood. Partner and peer influences on men's persistence in crime were influential over prior arrest history, an indicator of crime propensity. Thus, in contrast to the General Theory of Crime (Gottfredson and Hirschi, 1990) that posits that prior propensity explains criminal behavior, deviant social influences were found to have an effect even in early adulthood.

Women's antisocial behavior was predictive of both persistence and onset of men's crime in early adulthood. Indeed, for crime onset, women's antisocial behavior was the only predictor that emerged as significant in the final trimmed model. These findings confirm that women's antisocial behavior may be a much more powerful influence on men's crime involvement in early adulthood than had previously been thought. The finding for the persistence and onset models indicate that the effects of romantic relationships on men's crime involvement are not uniformly positive but are more complex, depending on the women's risk characteristics. These findings are consistent with other recent studies on the association of partner deviant behavior with offending risk for both young men and women (Haynie et al., 2005; Simons et al., 2002; Woodward, Fergusson, and Horwood, 2002).

One possible explanation of both the protective effect against men's early adult crime involvement of relationship stability and the risk effect of women's antisocial behavior is that both factors relate to changes in deviant peer association, for example, to decreases and increases in such associations respectively. Indeed, deviant peer association was predictive of crime persistence, which indicates that such influence on criminal involvement in men is not confined to adolescence and, thus, confirming the contention of Warr (1998) that such associations are critical to understanding men's crime involvement in adulthood. However, the

protective and risk influences of romantic relationships were associated with crime persistence in the multivariate model, which indicates that the effects of being in a stable relationship on desistance and the effects of women's antisocial behavior on persistence were not entirely mediated through differential associations with deviant peers. Similarly, the effects of risk from women's antisocial behavior on men's early adult onset of crime were not accounted for by deviant peer association.

Substance use and depressive symptoms showed little prediction of adult arrests in the multivariate models, although in the final trimmed model that predicts to arrest count for persistence, women's depressive symptoms were predictive. It was surprising that women's depressive symptoms were predictive of the men's persistence in crime, whereas the men's own depressive symptoms were not. However, this finding is in keeping with that of Kim and Capaldi (2004) that women's depressive symptoms were predictive over time of men's aggressive behavior toward them. In the latter case, it may well be that the irritability and negative affect that are symptomatic of depression is partly the cause of the association. In the case of men's crime persistence, the reason for the association is less clear, other than indicating a generally more negative romantic relationship for the man and likely associated higher stress levels. Regarding substance use, it seemed that other related factors, such as deviant peer association and romantic partners' antisocial behavior, were more important predictors of men's engagement in crime in adulthood. It is possible that if illicit drug use only had been assessed that stronger prediction would have been found (Wiesner, Kim, and Capaldi, 2005). The role of substance use in men's crime involvement warrants more investigation.

Findings from the current study shed light on a little considered or understood issue, namely, the possible causes of onset of crime for men in early adulthood. Men with no prior official criminal involvement seem to have been vulnerable to negative effects of their romantic partners' antisocial behavior and, thus, to the negative influence of social learning mechanisms even in early adulthood. Social learning mechanisms originated as theoretical explanations of behavioral development in childhood and adolescence, but it seems that such influences extend into adulthood. We do not interpret this finding as caused by an extended period of development for more recent cohorts or the concept of emerging adulthood (Arnett, 2000), which has much greater relevance to middle-class youth who now spend a longer time in education and tend to have children later than in prior cohorts. The OYS men were lower and working class, ended their education very early, and also became fathers at a young age (Pears et al., 2005) compared with more normative samples (Jaffee et al., 2001). Thus, it seems that social learning mechanisms operate in early adulthood and in prior developmental periods.

Somewhat surprisingly, social learning influences in the form of deviant peer association were not associated with adult onset of arrest. The men who had no juvenile history of arrest may have been little involved with deviant peers in adolescence and may have remained uninvolved in early adulthood. Another, although seemingly less likely, possibility is that such associations had little influence on their behavior in early adulthood. Relationship stability was not protective against arrest onset for men in the study. The men were not candidates for being "reformed" by a stable relationship – they had not previously engaged in crime, at least in crime that had resulted in an arrest. The current study was relatively underpowered to test models of onset, given the small proportion (12 percent) of men that experienced an arrest within the subsample at risk for onset and the time windows examined. This situation may have contributed to lack of prediction from these factors. Despite the low power, however, the association of women's antisocial behavior reached significance in predicting to onset, which indicates the possible importance of this factor.

Arrest seemed to be likely to be an isolated incident for the adult-onset men engaged in romantic relationships, with very few being arrested more than once. Although adult-onset men may

have a low likelihood of engaging in patterned crime careers, such arrests may have a substantial negative impact for themselves and for their families. For example, adult arrests can affect employment opportunities. The relatively high prevalence of onset of arrest in early adulthood overall for the men in the OYS (in relation to the fact that adult onset of crime has been relatively neglected both theoretically and empirically), along with evidence of the significant influences of women's antisocial behavior on that onset, warrants more research focused on understanding this issue.

The current study represents the most rigorous test to date of the effect of romantic relationships on crime in adulthood. It is particularly notable that the study extended prior theoretical and empirical work regarding the effects of marriage on men's crime persistence both to the effects of romantic relationships more broadly (including cohabiting and dating relationships) and to questions of crime onset. The study findings indicate that the effects of romantic partner influences on men's crime are substantive and are not limited to marital relationships and questions of persistence only. The study involved tracking arrests across a 12-year period and the use of time-varying predictors of both men's and partners' behavior in models that allowed for an exceptionally strong test of partners' dynamic influence over time. Whereas evidence that supports a protective effect of a steady relationship was found, evidence for an association of the men's perceived relationship attachment with desistance was not found. The protective effect of relationship stability, however, indicates support for social control mechanisms similar to the "marriage effect," but women's influence also depends on the level of their problem behavior. The protective effect from the romantic relationship may come from the demands on the men's time, including engagement in family activities and supporting the household, rather than through attachment to partner. It is also possible that involvement with and commitment to children is a key mechanism in desistance, and that should be examined in future work.

The current findings are in keeping with the increased recognition that antisocial behavior in girls and women, although significantly lower overall than in men, is a behavior with important consequences for the women themselves (Giordano, Cernkovich, and Lowery, 2004; Silverthorn and Frick, 1999), for their peers (Pepler et al., 2004), and for their children (Serbin et al., 2004), and with the increased recognition that antisocial behavior in women is not only because of passive victimhood but to more active behavior on their part (Putallaz and Bierman, 2004). It seems that a gender fallacy that biases our thinking: If a significant mean difference exists in the behavior of men versus women (or girls versus boys), or if that behavior is not part of the common gender conception, then we tend to trivialize both its importance for the gender in which it shows the lower level and its impact on others. Thus, antisocial behavior has been a much greater research and prevention target for men than for women, and depression has generated similar interest for women compared with men. It seems that these biases may have led us to overlook the fact that despite lower levels relatively, such behaviors may be of major importance for the etiology and life histories of psychopathology and crime.

Findings of the current study are also consistent with our earlier findings that women's problem behaviors and aggression are influential in affecting men's violence toward a partner, over and above the men's antisocial behavior (Kim and Capaldi, 2004). Some arrests in the current study involved partner assault, as this is a frequent crime in early adulthood and a frequent cause of arrest in the current sample. However, retesting the prediction models for both persistence and onset, eliminating arrests for domestic violence incidents did not substantively affect the findings. Therefore, domestic violence does not seem to explain the findings of the current study regarding the influence of women's deviance on men's overall arrest risk in early adulthood.

Some limitations of the model tests should be noted. Although unusually comprehensive and dynamic longitudinal models were tested, the sample sizes were relatively low (particularly for the onset model, as previously discussed). Therefore, we did not specifically test interaction effects between the men's and the women's problem behaviors, and this issue warrants more study. Second, to test models with clear and rather conservative designs regarding the time frame of predictors and arrest outcomes, not all arrests were included in the analyses. Third, the OYS sample was predominantly white; therefore, examination of the theoretical model within other cultural groups is needed.

In sum, although women show lower levels of antisocial behavior and lower crime involvement than men, the findings of the current study indicated that individual differences among women in these behaviors can affect their partners' likelihood of either persistence or onset of crime in adulthood, as indexed by arrests. The finding of prediction of *both* persistence and onset indicates that this affect may be a substantive and important mechanism in men's adult crime. Stability of a romantic relationship also had a main effect on men's likelihood of desistance. The findings indicate that both social learning and social control factors are key aspects to understanding men's crime in early adulthood. Findings were also in keeping with a dynamic developmental systems conceptualization of the interplay between prior developmental risk and social influence within key dyads across the life span in influencing antisocial behaviors (Capaldi et al., 2008). Findings were not supportive of the view that the men's prior criminal and antisocial propensity alone determine their risk of persisting in criminal involvement and thus that any association of the deviant behavior of female partners with men's arrest risk must be because of assortative partnering, or with the view that attachment to partner is a key social control mechanism over and above the effect of relationship stability. Because of the possible damaging effects of social influence dynamics in romantic relationships on men's criminal behavior, more attention should be paid to such dynamics within romantic dyads in early adulthood, and preventive and treatment interventions should seriously consider whether and how to intervene to reduce negative effects.

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Figure 1.
Study Design

Figure 2.
Participation in Couples Study

Table 1

Demographic Information for Each Time Period

	T1 (n = 119)	T2 (n = 158)	T3 (n = 148)	T4 (n = 161)	T5 (n = 158)
Age in Years					
OYS men	18.7	21.3	24.1	26.1	28.1
Partners	18.1	20.8	23.1	24.9	26.4
Length of relationship (in weeks)	48.5	82.9	148.4	180.6	
Relationship Status (%)					
Dating	70	45	28	20	21
Cohabiting	26	37	37	38	33
Married	4	18	35	42	46

Table 2

ZIP Modeling to Crime Persistence for Men

Panel I														
Persist <i>N</i> = 433, 110 Clusters														
	Univariate predictors to class			Univariate predictors to count			Baseline Model		Class Model 1		Class Model 2		Class Model 3	
	Estimate	Estimate/SE		Estimate	Estimate/SE		Estimate	Estimate/SE	Estimate	Estimate/SE	Estimate	Estimate/SE	Estimate	Estimate/SE
<i>Men's Characteristics:</i>														
Prior Arrest	-0.08	-2.94		0.04	2.41		--	-0.08	-2.53	-0.06	-2.35	-0.05	-1.75	
Age	0.05	1.21		-0.06	-2.53		--	0.04	0.87	0.01	0.14	--	0.07	
Substance Use	-0.37	-1.70		0.19	1.37		--	-0.33	-1.46	-0.31	-1.08	0.02	0.06	
Depressive Symptoms	-0.40	-2.04		0.18	1.37		--	-0.36	-1.75	-0.14	-0.64	-0.04	-0.14	
<i>Partners' and Dyadic Characteristics:</i>														
Relationship Stability	1.04	3.06		-0.75	-2.49		--	--	--	0.91	2.41	0.90	2.23	
Antisocial Behavior	-0.89	-3.20		0.22	4.13		--	--	--	-0.74	-2.43	-0.63	-1.78	
Substance Use	-0.20	-1.44		0.15	1.41		--	--	--	0.30	1.32	0.32	1.36	
Depressive Symptoms	-0.38	-1.92		0.32	2.56		--	--	--	-0.08	-0.30	-0.04	-0.14	
Men's Attachment to Partner	0.28	1.84		-0.23	-2.58		--	--	--	0.08	0.37	0.04	0.18	
<i>Men's Characteristics:</i>														
Deviant Peer Association	-0.84	-4.17		0.40	4.06		--	-287.18	--	--	--	-0.68	-3.03	
Log Likelihood							-296.16			-277.25		-271.46		
BIC*							598.12			586.37		577.69		
Deviance (-2LL)							592.33			554.50		542.92		
							17.97 ^d				19.86 ^d		11.58 ^d	
Panel II														
	Class Model 4			Count Model 5			Count Model 6		Count Model 7		Count Model 8			
	Estimate	Estimate/SE		Estimate	Estimate/SE		Estimate	Estimate/SE	Estimate	Estimate/SE	Estimate	Estimate/SE	Estimate/SE	
<i>Men's Characteristics:</i>														
Prior Arrest	--	--		0.03	1.50		0.02	1.24	0.02	1.23	--	--	--	
Age	--	--		-0.04	-1.14		-0.06	-1.68	-0.06	-1.68	-0.07	-2.38	--	
Substance Use	--	--		-0.04	-0.31		--	--	-0.05	-0.28	--	--	--	
Depressive Symptoms	--	--		0.02	0.11		-0.06	-0.35	-0.04	-0.25	--	--	--	
<i>Partners' and Dyadic Characteristics:</i>														
Relationship Stability	0.95	2.61		--	--		0.03	0.08	0.05	0.14	--	--	--	
Antisocial Behavior	--	--		--	--		0.27	3.36	0.25	2.87	0.21	5.03	--	
Substance Use	--	--		--	--		-0.17	-1.18	-0.17	-1.21	--	--	--	
Depressive Symptoms	--	--		--	--		0.27	1.52	0.28	1.62	0.31	2.16	--	
Men's Attachment to Partner	--	--		--	--		-0.02	-0.14	-0.02	-0.16	--	--	--	
<i>Men's Characteristics:</i>														
Deviant Peer Association	-0.83	-3.51		--	--		--	--	0.14	1.03	--	--	--	
Log Likelihood	-277.81			-274.96			-268.65		-268.09		-271.01			
BIC*	567.20			573.09			574.97		576.74		562.31			
Deviance (-2LL)	555.61	-12.69 ^d		549.91	-6.99 ^d		537.30		536.18		542.03			
							1.12 ^d							-5.85 ^d

* Sample size adjusted BIC.

^d Change in deviance from previous model.

NOTE: Numbers in italics, $p \leq .10$. Numbers in bold, $p = .05$. Dashes indicate values < 0.005 .

Table 3

Modeling to Crime Onset for Men

Onset N = 309,81 clusters	Univariate Predictors to Class		Baseline Model		Class Model 1		Class Model 2		Class Model 3		Class Model 4	
	Estimate	Estimate/SE	Estimate	Estimate/SE	Estimate	Estimate/SE	Estimate	Estimate/SE	Estimate	Estimate/SE	Estimate	Estimate/SE
<i>Men's Characteristics:</i>												
Age	0.05	0.66	--		0.06	0.76	0.08	0.80	0.08	0.84	--	--
Substance Use	-1.18	-2.39	--		-1.18	-2.24	-0.67	-1.54	-0.89	-1.49	--	--
Depressive Symptoms	-0.35	-1.12	--		-0.19	-0.49	0.01	0.02	-0.04	-0.08	--	--
<i>Partners' and Dyadic Characteristics:</i>												
Relationship Stability	0.35	0.73	--		--	--	-0.07	-0.12	-0.02	-0.03	--	--
Antisocial Behavior	-1.34	-2.58	--		--	--	-0.88	-1.32	-0.95	-1.36	-1.34	-2.58
Substance Use	-0.63	-1.93	--		--	--	-0.15	-0.32	-0.23	-0.49	--	--
Depressive Symptoms	-0.53	-1.06	--		--	--	0.05	0.08	-0.03	-0.04	--	--
Men's Attachment to Partner	0.47	2.51	--		--	--	0.46	1.34	0.46	1.28	--	--
<i>Men's Characteristics:</i>												
Deviant Peer Association	-0.39	-0.85	--		--	--	--	--	0.54	0.92	--	--
Log Likelihood			-65.76		-61.93		-59.33		-58.78		-61.44	
BIC*			136.65		136.67		144.27		145.75		130.57	
Deviance (-2LL)			131.53		123.86	7.67 ^d	118.65	5.21 ^d	117.57	1.08 ^d	122.88	-5.31 ^d

Sample size adjusted BIC.

^dChange in deviance from previous model.

NOTE: Numbers in italics, $p \leq .10$. Numbers in bold, $p = .05$. Dashes indicate values < 0.005 .