American Sociological Review

Love, Sex, and Crime: Adolescent Romantic Relationships and Offending

Additional services and information for *American Sociological Review* can be found at:

Email Alerts: http://asr.sagepub.com/cgi/alerts

Subscriptions: http://asr.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Citations: http://asr.sagepub.com/content/73/6/944.refs.html

Love, Sex, and Crime: Adolescent Romantic Relationships and Offending

Bill McCarthy
University of California-Davis

Teresa Casey
University of California-Davis

Scholars are often pessimistic about adolescent dating, linking it to increases in depression, interpersonal violence, conflict with parents, school failure, associations with delinquents, substance use, and offending. Yet, the various dimensions of dating may have opposing consequences. The closeness offered by adolescent romantic love may fill an important void found between the weakening of bonds with parents and the onset of adult attachments, and it may discourage an array of negative outcomes, including involvement in crime. Adolescent sexual activity, in contrast, may increase offending, in part by augmenting the strain created by relationships. When coupled with a romantic relationship, however, sex is likely less stressful and consequential for crime. In this article, we analyze patterns of romance, sexual behavior, and adolescent crime with panel data from the nationally representative Adolescent Health Survey. Findings support our expectations regarding differential effects of romance and sex. We conclude by discussing the implications of these results for understanding adolescent delinquency, social attachments, and development.

Many teenagers date, fall in love, and have sex, and most parents worry that these experiences will have short- and long-term negative consequences. Indeed, Thompson (1995:143) contends that parents fear the harmful effects of dating, "as they fear nothing else."

Many parents thus impose restrictions on when and whom their children can date (Miller et al. 1986) and go to considerable lengths to discourage their daughters and sons from engaging in the sexual activities that dating often initiates. As Luker (2006:234) notes in her comparison of liberal and conservative approaches to sex education in the United States, even sexual liberals "now reluctantly concede that abstinence is the best choice for teenagers."

Sociologists often take a similar view. They emphasize the detriments of dating—and the sexual activity it often engenders—for self-esteem, depression, relationships with parents and others, and academic achievement. This stance is also common in criminology; several studies report positive associations between crime and dating (e.g., Joyner and Udry 2000; Piquero, Brezina, and Turner 2005; Wong 2005; cf. Rebellon and Manasse 2004) and crime and sexual intercourse (e.g., Elliott and Morse 1989; Little and Rankin 2001; Wilder and Watt 2002).

Most adolescents in the United States (and many other nations) nevertheless date, and many have sex. Survey research from the 1970s through the 1990s indicates that the majority of adolescents start dating by 8th grade (Bachman,

Johnston, and O'Malley, 1976–2004) or have some romantic involvement before they turn 14 (Carver, Joyner, and Udry 2003; Joyner and Udry 2000). Meanwhile, one-quarter to one-half of youth surveyed said they were sexually active during their high school years (Levine 2001; Welsh, Grello, and Harper 2003). Yet the proportion of U.S. youth who report involvement in illegal behavior, depression, or other negative outcomes is far smaller, suggesting that the consequences of dating and sexual activity are not straightforward.[1]

In this article, we use two analytical approaches to improve our understanding of the connections between adolescent romance and crime. First, drawing on Giordano (2003), we argue for shifting the focus on dating to a consideration of various *characteristics of adolescent romantic relationships.* Concentrating on dating conflates the consequences of romantic relationship attributes for crime. We hypothesize that two prominent relationship attributes—romantic love and sexual activity—have opposite effects on offending. Second, we suggest that context moderates the effects of relationship features. For example, the relationship context in which sexual activity originates likely influences its effects. We predict that sexual activity in emotionally-close relationships will be of limited consequence for criminal involvement, as opposed to sex that occurs within the context of emotionally-distant relationships.

ROMANTIC RELATIONSHIPS, LOVE, AND THE SOCIAL BOND

Romantic relationships are part of a transitional experience that helps demarcate childhood and adolescence. During the teenage years, many individuals begin to recognize their romantic and sexual interest in others (Furman and Shaffer 2003). Teenagers fantasize and talk about romantic relationships, develop a romantic self-concept, and initiate activities commonly included under the rubric of "dating" (from awkward conversations and group dates

to physical and intimate contact). For many people, adolescence is the time when they first experience romantic love.

Teenage romances share many features with adult relationships. As Schwartz (2006:54) notes, "Teenagers have been 'wired' to have exactly the same strength of desire, love, and attachment that older men and women do." Regardless of age, the majority of adolescents in romantic relationships describe feelings, thoughts, and actions associated with adult perceptions of "being in love" (Carver et al. 2003; Collins 2003; Crouter and Booth 2006; Florsheim 2003; Furman, Brown, and Feiring 1999). While there is no clear consensus on how to define or measure romantic love (see Felmlee and Sprecher 2006), we use the term to refer to a set of emotions, cognitions, behaviors, and identifications that people—including adolescents—interpret as signifiers of being in love.

We hypothesize that adolescent romantic love operates in ways similar to other attachments in discouraging crime. Several theories argue for—and a good body of research demonstrates—the positive effects of attachment (Cassidy and Shaver 1999; Ryff and Keyes 1995). Most criminology research draws on Hirschi's (1969) specification of attachment as the cornerstone of a strong social bond.[2] Attachment includes cognitive, affective, and behavioral components that reflect sensitivity to others, particularly parents, but also other family members, teachers, and peers. This attentiveness discourages crime by reminding people to consider the reactions of those to whom they are attached when contemplating a crime. As Hirschi (1969:91) notes, "Affectional identification, love or respect is taken as the crucial element of the bond." Sampson and Laub (1993) extend Hirschi's

---

[1] For example, in the Adolescent Health Survey, fewer than 10 percent of adolescents surveyed in the in-home first survey report using hard drugs, committing a serious theft, selling drugs, or being depressed.

[2] Hirschi's use of attachment overlaps somewhat with Bowlby and Ainsworth's attachment theory (Cassidy and Shaver 1999) but differs in important ways. Hirschi argues that attachment varies in strength and originates with parental behaviors, and that weak attachment enables the pursuit of self-interest (attachment theory assumes that children are inherently motivated to develop an attachment system even when parents are neglectful, that attachment varies in type and degree of penetration in one's life, and that insecure attachments lead to anxious or evasive attachment styles).

ideas in their age-graded theory of social control. They propose that "a good marriage" acts in ways that parallel the childhood bond with parents (see also Laub, Nagin, and Sampson 1998). Sampson and Laub (2005; Laub and Sampson 2003) discuss several pathways through which a good marriage discourages crime, but they emphasize that attachment is a key component of desistance.

We argue that adolescent romantic relationships should operate in ways similar to other relationships. Unfortunately, Hirschi considers adolescent dating only as a diversion from age-appropriate, conventional pastimes, while Sampson and Laub focus on adult relationships. These approaches bypass the possibility that adolescent romantic relationships represent a novel dyadic context that can strengthen the social bond. We believe that teenage romances can create opportunities for youth to develop a type of attachment with which they have had little or no prior experience: romantic love. Adolescent romantic partners can provide the security that encourages the exploration of new ideas and initiatives for change (Giordano, Longmore, and Manning 2006a). This security can inspire new emotions, thoughts, and behaviors, including desistance from crime.

In addition, social bonds may grow as romantic love intensifies. Relationships distinguished by high levels of love—and thus strong attachment—should discourage offending, whereas those weak in romantic attachment should have little or no influence on crime.[3] Indeed, adolescent romantic love can strengthen the social bond during the teenage years and may substitute for subsiding attachment to parents and other adults. Moreover, the intensity of attachment in romantic relationships may make them a more powerful deterrent than the close friendships highlighted in much research on adolescent crime (Hirschi 1969; McCarthy, Felmlee, and Hagan 2004).

Studies from several disciplines document the value of attachment. For example, Keyes (2006) reports that depression, conduct disorder, and drug and alcohol use decrease as adolescents' attachment to others increases (see also Giordano 2003). Despite these results, there is no comprehensive assessment of the relationship between adolescent romantic love and crime. Simons and colleagues (2002) report a direct negative association between romantic relationship quality and crime for females and an indirect connection for males; however, they focus on young adults rather than adolescents. Haynie and colleagues (2005) examine the association between romantic involvement and illegal behavior for adolescents, but they limit their analyses to youth in romantic relationships.

ROMANTIC RELATIONSHIPS, SEXUAL ACTIVITY, AND STRAIN

Sexual activity, a second dimension of adolescent romance, may also contribute to offending. Indeed, several investigations document a significant association between sexual intercourse and crime (Armour and Haynie 2007; Elliott and Morse 1989; Little and Rankin 2001; Wilder and Watt 2002). Many studies, however, do not consider a causal explanation for the relationship. Agnew's (2006) general strain theory highlights one of the mechanisms through which sexual activity may influence offending. He argues that relationships produce strain when they block goals, lead to the loss of something valued, or introduce unwanted behaviors or experiences. Several factors can intensify strain, including its duration, clustering, threat to one's identity, and the extent to which people see the strain as unjust or disturbing.

While sexual activity likely provides adolescents with pleasurable returns, it may also introduce strain as a result of conflict in relationships with others, from one's partner (e.g., jealousy and rejection) to parents (e.g., fear of discovery) and friends (e.g., rejection). Strain can arise from regrets about "going too far too early" in a relationship, from the distress of an intimate partner's decision to end a relationship, from concerns about one's reputation in a wider circle of peers at school and in other settings, and from anxieties about sexually transmitted infections and pregnancy.[4] Although strain is also

---

[3] Moffitt and colleagues (2001) suggest that close romantic relationships may also deter crime among "adolescent-limited" offenders by increasing their sense of participation in an "adult" activity (see Piquero et al. 2005).

[4] Federal health officials estimate that in 2003 to 2004, one in four U.S. teenage females had a sexually transmitted infection (Altman 2008).

common in nonsexual romantic relationships, sexual activity introduces additional sources of strain. In the language of general strain theory, sexual activity increases the likelihood of loss and unwanted experiences.

There is a tendency to view romantic-relationship strain as highly gendered, but recent research finds that many adolescent males' desire for intimacy resembles the feelings commonly associated with teenage females (Tolman et al. 2004). Furthermore, Giordano and colleagues (2006a) report that adolescent boys are less confident and more emotionally engaged in romantic relationships than traditional characterizations suggest, and that sexual involvement is often emotionally charged for them (see also Smith, Guthrie, and Oakley 2005).

People respond to strain in a variety of ways, including increased anger, rage, contempt, guilt, hatred, and depression. Similar to the feelings associated with being in love, destructive emotions may be temporary or dispositional, and people may offend in response to either. In some situations, relationship strain may encourage crimes closely tied to an external objective, such as getting revenge or attracting attention. In other contexts, delinquency may be more internally oriented; it may resolve emotional tension by releasing anger or by reducing the intensity of feeling heartbroken or depressed. Offending may also diminish dissonance between old and emerging self-concepts. Participating in a prohibited, but not necessarily illegal, activity may enable youth to accept or internalize a deviant identity (Becker 1963).

All sexually active youth likely have some exposure to the relationship strains described above; however, the *relationship context* in which sex occurs likely affects the probability and intensity of strain. We suspect that the strain associated with sexual activity is less likely when sexual intimacy occurs in emotionally close relationships and more likely when sex involves partners who do not have a romantic connection (Giordano, Manning, and Longmore 2005; Giordano, Longmore, and Manning 2006b; Graber, Britto, and Brooks-Gunn 1999; Manning, Longmore, and Giordano 2005).[5]

Nonromantic liaisons may be figuratively and literally more careless. They may exacerbate the risks for sexually transmitted infections and pregnancy, increase the likelihood of conflict in relationships with parents and friends, and lead to intense regrets. In addition, they may heighten shame and other emotions that are a response to being labeled and internalizing the label of a "slut" or one who "sleeps with sluts."

Meier (2007) demonstrates the importance of context in her analysis of the effect that sexual intercourse has on depression among youth. Using the Adolescent Health data, she finds that the dissolution of an emotionally committed, sexual relationship does not significantly increase depression. Although close relationships involve more intense emotions, the attachment they engender may moderate the negative emotions associated with the end of a relationship. Conversely, depression was pronounced for adolescents whose first sexual intercourse occurred in a relationship characterized by weak emotional commitments and for those whose relationships were known to others.[6] Meier (2007) suggests that for these youth, a relationship's lack of commitment and public nature increase regrets about having sex. Most adolescents prefer romantic partners and sexual activities that do not jeopardize their status among their peers, and it is difficult to hide sexual affairs when much of high school life focuses on who is doing what with whom (Bearman, Moody, and Stovel 2004).

Prior research suggests that the effects of romantic love and sexual activity may also be conditioned by gender, age, and race. For example, compared with males, females experience greater social control from an array of forces (Hagan, Simpson, and Gillis 1988; McCarthy et al. 2004), and romantic love may add little to these powerful constraints. We hypothesize that both males and females may experience the stress associated with sexual activity, but we cannot ignore prior research suggesting that stress may be exacerbated for females (Anderson 1999; Meier 2007; Tolman 2002; Welsh et al. 2003). Sexually-based strain may

_____

[5] In contrast, other relationship-based strain—such as that caused when one partner unexpectedly ends a relationship—may be pronounced for youth in relationships characterized by intensive romantic love.

[6] Meier (2007) finds that these processes are pronounced for females and younger adolescents.

also be more intense for younger teens whose "sexual debut" occurs "early" or "off-time" (Elliott and Morse 1989), or for members of racial or ethnic groups that differ in the onset, development, and acceptance of sexual activity (Furstenberg et al. 1987). We include age, gender, and race/ethnicity interaction terms in our equations to test for these effects.

We expect love and sexual activity to have both immediate and long-term consequences. The logic of social bond theory suggests that each attachment cumulatively helps develop sensitivity to others and investments in conventional goals and activities that discourage crime, and that these effects extend past the relationship that initially inspired them (Sampson and Laub 1997). In essence, people develop attachment trajectories whereby each attachment raises the probability of establishing a subsequent attachment, unless a turning point occurs that directs a person in the opposite direction.

Sexual activity may also initiate a trajectory that increases the likelihood of sexual relationships in the future. While the strain engendered by sexual activity may be intense in the period during which the sex occurs, there may also be long-term consequences. For example, the discovery of a son or daughter's sexual activity may incite parental anger that intensifies family strain in both the short and long term. The data we use are best suited to analyses of the long-term effects of love and sexual activity, but we also discuss results from analyses that consider more immediate consequences.

ALTERNATIVE HYPOTHESES

The Adolescent Health data allow us to examine three alternative explanations for connections between love, sexual activity, and crime. These explanations overlap considerably at the conceptual level; however, we use different methodological techniques to investigate them. The first approach implies that an *omitted variable* is responsible for any connections between romantic love, sexual activity, and crime. For example, a negative association between love and crime may result from the loss of criminal opportunities (e.g., spending time with one's romantic partner) or a romantic partner's involvement in offending (e.g., spending time with a criminal mentor) rather than attachment.

Meanwhile, a positive association between sexual activity and crime may not be due to strain, but to sexually active youth pursuing a profligate "party" lifestyle (Hagan 1991; see also Seffrin et al. forthcoming). In this lifestyle, the emotional or psychic thrills of sexual activity may increase the attractiveness of other proscribed activities—such as crime—that provide comparable excitement (Katz 1988). Participation in these activities may encourage youth to embrace a new, wild identity that increases their confidence that they can transgress other social rules with impunity. We introduce several control variables, discussed in our measurement section, that capture these concerns.

A second and related perspective maintains that any connections between romantic relationship features and crime reflect a *selection effect.* Involvement in romantic relationships and offending may express the same underlying problem, perhaps a propensity for heedless sensate behaviors that have long-term costs. According to Gottfredson and Hirschi (1990), individuals' propensity to engage in these activities results primarily from poor socialization and weak self-control (i.e., insensitivity to others' needs and an inability to recognize risks or defer gratification). People with low self-control may self-select into both dating and illegal behavior, rendering spurious the links between the characteristics of romantic relationships and offending. A parallel possibility is that biological factors, such as early physical maturity, initiate a process in which certain individuals select into both dating and crime at an earlier age than their peers (e.g., Moffitt et al. 2001; Simons et al. 2002). We address this issue by adding an estimate from a sample selection correction model to our analysis.

A third approach argues that sexual activity and crime are part of a *syndrome of prohibited behaviors* and thus are not causally connected. For example, Jessor and Jessor (1977; see also Rodgers 1996) hypothesize that a desire for unconventionality encourages youth involvement in a range of age-inappropriate behaviors, including sexual activity and minor crime. This approach suggests that sexual activity and offending are too closely connected for one to influence the other; they are both manifestations of a single phenomenon. We explore this possibility with a confirmatory factor analysis.

DATA, VARIABLES, AND ANALYSES

We examine our hypothesized connections with panel data from the National Longitudinal Study of Adolescent Health (Add Health). This study is based on a probability sample of U.S. adolescents in grades 7 to 12 (Bearman, Jones, and Udry 1997). The study used stratified sampling to ensure representation with respect to region, ethnicity, urbanism, and school type and size. Approximately 90,000 students completed a self-administered, in-school questionnaire in 1994 to 1995. We selected several of our control variables from this in-school survey.

In 1994 to 1995, the study randomly surveyed a subset of students and their parents in their homes (N = 20,745). Students listened to detailed questions about romantic relationships on headphones and entered answers into a computer (audio CASI) to reduce misreporting sensitive information. In 1996, 14,736 of these youth completed a second-wave survey (graduating seniors and youth from a differently-abled sample were not reinterviewed).

Our analyses involved a series of decisions about which data to use, how to measure key variables, and the preferred analytical approach (for a discussion of these decisions and results, see the Online Supplement at the *ASR* Web site [http://www2.asanet.org/journals/asr/2008/toc066.html]). We focus on longitudinal models of second-wave offending that use data on independent variables from the in-school and first-wave parent and in-home surveys. We also refer to cross-sectional results, but the data limitations described below limit our confidence in them. We use robust standard errors to address concerns with heteroskedasticity and sample weights provided with the data because of the clustering in the sample; missing cases and sample weights reduce our sample to 12,801 (Chantalla and Tabor 1999).

DEPENDENT VARIABLES

We evaluate the net effects of relationship characteristics on two scale measures (see Appendix, Table A1 for details). Our first scale focuses on crime and combines nine ordinal-level measures that refer to the months between the first and second surveys (between 4 and 16 months): shoplifted, drove a car without the owner's permission, theft under $50, theft over $50, burglary, robbery, drug selling, assault, and pulling a gun or knife on someone. This scale is highly skewed, and its variance is greater than its mean. We thus analyze these data with negative binomial regression.

We replicate our crime analyses with data on substance use. Our measure refers to the use of any of six substances between the first- and second-wave surveys: alcohol, cigarettes, marijuana, cocaine products, inhalants, or any other illegal drug.[7] Because of the dissimilarity in the response categories for our item, we divide our sample into "any" or "no" use and estimate logit models of substance use.

RELATIONSHIP MEASURES

Our research examines three key relationship variables: being in a romantic relationship, romantic love, and sexual activity. We focus on a series of questions that began with an inquiry about whether a respondent participated in a "special romantic relationship" during the 18 months prior to the first-wave survey. Self-designated dating teens then provided information about their relationships for up to three dating partners. We code youth as being in a relationship if they self-reported any romantic relationship activity in the 18 months prior to the first-wave survey, including both cross-gender and same-gender relationships.[8] Approximately 52 percent of respondents had a romantic relationship during this period.[9] The majority of

---

[7] Scale diagnostics indicate that alpha would increase only marginally with the deletion of the weakest items (use of inhalants and use of cocaine products). A scale limited to the use of the four completely banned substances is also not viable (alpha = .274).

[8] We respect students' assessments of relationship status and code youth who answered "no" to this question as not in a relationship. These students are categorized as "liked," "nr," or "rx" in the Add Health data (see the Online Supplement for alternative specifications).

[9] People differ in their interpretations of a relationship, and many self-reports were not reciprocally reported (a pattern that also occurs for friend nominations). This does not mean that a relationship did not exist. Carver and colleagues (2003) note that about one-third of respondents may have had difficulties answering questions about romantic relationships. It is not clear, however, if these difficulties were random or systematic.

these youth (about 63 percent) reported only one relationship, which we use to measure relationship characteristics. For youth who had more than one relationship, we use the longest relationship to measure relationship attributes.

We create weighted scale measures for romantic love and sexual activity based on results from an exploratory factor analysis of yes/no questions answered by youth who had romantic relationship experience (we assign the "no" category to youth who did not date).[10] A factor analysis of tetrachoric correlations (recommended for binary variables) for these items produces a two-factor solution (i.e., factors with an eigenvalue of > 1): a 10-item factor (eigenvalue = 7.246) that we use to construct a weighted scale for romantic love and a three-item factor (eigenvalue = 2.220) that measures sexual activity.[11]

The items in the love factor asked whether respondents and their partners had done the following: went out alone, held hands, kissed, gave each other presents, met a partner's parents, saw themselves as a couple, were considered a couple by others, and told each other they were in love.[12] We assume that romantic love involves distinct emotions, cognitions, behaviors, identifications, and a state of being. Our scale consists of behaviors and activities (e.g., holding hands and giving presents), as well as items that go beyond behavioral measures. These include self and other identification as a couple, meeting a partner's parents, and saying and being told "I love you."[13]

We do not have direct measures of stress related to sexual activity. Instead, we use a sexual activity scale as a proxy. Our measure of sexual activity includes having touched each other under clothing, touched each other's genitals, and had intercourse.[14] Although most research on sexual activity and delinquency focuses on intercourse, privileging intercourse may obscure the effect of the onset of other sexual activities. Moreover, it ignores the possibility that for some youth, "heavy petting" may be as opprobrious as intercourse.

Kissing was the most popular romantic activity among romantically involved youth (reported by 90 percent), and about three-quarters of these adolescents reported experience with the other items (e.g., 73 percent met a partner's parents, 69 percent gave a present, and 78 percent said a partner professed love for them). Sexual activity was less common: approximately two-thirds reported some sexual activity, about one-half stated they had genital contact, and approximately one-third said they had intercourse.

We examine the interaction between sexual experiences and relationship context with information on sexual activity in different kinds of relationships. In addition to inquiring about romantic partners, the Add Health study collected data on sexual intercourse with nonromantic partners (but not on other measures of sexual activity). We use this information to divide youth into four groups: those who had

---

[10] These missing responses are not random. As Allison (2001) notes, constant substitution and dummy variable inclusion are acceptable in this instance because the unobserved values (i.e., scores on love and sex scales) do not exist. The only differences in the equations between those in a relationship and those not in a relationship are that those in a relationship have the characteristic terms (i.e., love and sex scores) and a different intercept.

[11] The two-factor solution's CFI of .945 and RMSEA of .113 are improvements on those for a one-factor solution (CFI = .872 and RMSEA = .191). The significant chi-square test for differences (2946.729, df = 1) further supports treating love and sex as separate factors.

[12] Other researchers have used various subsets of these items as indicators of emotional commitment (Bearman and Bruckner 2001): intimacy, commitment, and reduced social connectedness (Carver et al. 2003); romantic involvement (Haynie et al. 2005); and romantic behaviors (Giordano et al. 2005). It is unclear if previous scales were created on the basis of a factor analysis of the tetrachoric correlations for the items.

[13] Our scale includes items that reflect two of the five dimensions of romantic relationships highlighted by Collins (2003): relationship content (shared activities) and cognitive and emotional processes. Our model also includes a measure of a third dimension, partner attributes.

[14] Conditioning on sexual activity also enhances the validity of our measure of love. Adjusting for sexual activity purges the partial coefficient for love of variance related to sexual instrumentalism (sexual instrumentalism may lead some youth to participate in the behaviors and to profess the state of being that we use as measures of love).

intercourse exclusively in "special romantic relationships," those who had intercourse exclusively with nonromantic partners, those who had intercourse with romantic and nonromantic partners, and abstainers. Following prior analyses that examine the effect of sexual intercourse on crime, we treat abstainers as the comparison group (e.g., Elliot and Morse 1989; Jessor and Jessor 1977). About 10 percent of the youth in our sample had sexual intercourse exclusively in romantic relationships. Approximately 12 percent had intercourse exclusively in nonromantic relationships, and about 12 percent had sexual intercourse in both types of relationships.

CONTROL VARIABLES

Our analyses have a diverse set of controls, including gender, race/ethnicity (i.e., White, Black, Hispanic/Latino(a), Asian, Native American, and other race),[15] and age (measured as a spline because of its nonlinear association with crime, with segments for ages 12 to 16 and 17 to 21 years). We use two proxies for parents' socioeconomic status: adolescents' reports of their parents' receipt of public assistance and parents' education.[16]

We introduce several variables that reflect concerns highlighted in prominent explanations of juvenile crime and that may render spurious any effects of love and sexual activity. Measures of attachment to parents and educational commitment (desire to go to college and grade point average [GPA]) reflect factors central to theories of social control, while a measure of child maltreatment addresses a concern of general strain theory.[17] We use questions on carelessness

and present-orientation to create a scale measure of self-control (Gottfredson and Hirschi 1990).[18] We include measures of romantic partner's and friends' delinquency to capture a major component of differential association. Following Haynie and colleagues (2005), we link the romantic partners and friends listed by in-home respondents to the in-school surveys, in which respondents provided information on their own involvement in minor delinquency. These measures address concerns that respondents' answers about others' delinquency are based on their own offending; however, the extent of missing cases compromises these variables (e.g., data are missing for partners and friends who attended a different school than the respondent), as does the focus on minor forms of delinquency (i.e., skipping school, smoking cigarettes, being drunk, and fighting).[19] We also include an indicator of the age difference between the respondents and their romantic partners.[20]

The Add Health data do not include measures of criminal opportunities or items that quantify how respondents spent their time in the period between the first- and second-wave studies. The study did ask respondents about the amount of time they spent with friends the week before the second-wave interview. Given the social nature of many crimes, we assume that opportunities for offending increase with time spent with peers. We also assume that although adolescent time use varies over the course of a year, changes in general socializing patterns are mod-

---

[15] We categorize youth as Hispanic/Latino/a if they chose that designation in a question about ethnic origin, regardless of the race they indicated in a separate question.

[16] We considered using three measures from the parent surveys (i.e., education, income, and receipt of public assistance), but they had more missing data than did the youth measures. In analyses that substitute the parent items for the youth items, we find results similar to those reported in the text.

[17] Questions for the child maltreatment scale are from Wave 3 of the Add Health survey, completed in 2001 to 2002. About 73 percent of the original Wave 1 respondents (15,170) participated in Wave 3, but

about 24 percent of these youth did not complete a Wave 2 interview.

[18] We also considered including a measure of impulsiveness (i.e., rely on gut feelings when making decisions), as well as indicators of ADHD (collected at Wave 3). A scale that combines these items with the ones we use had a small alpha (.177).

[19] We use mean substitution for control variables missing more than 5 percent of observations, and listwise deletion for those missing fewer than 5 percent of cases.

[20] The Add Health study does not contain a direct question on romantic partner's age. We estimate this from information on a partner's and respondent's ages at the start of the relationship and the start date of the relationship. We truncate this age difference at seven years to address the outliers that appear to be the result of respondents reporting how long they knew their partner, rather than the length of the romantic relationship.

est. We thus use this item as the best available proxy for opportunities for illegal activities.

We are also limited in the measures we can use to control for a party lifestyle or the embracement of a party identity. One indicator of this involves questions about the joint occurrence of substance use and sexual intercourse. These items inquired about respondents' alcohol and drug use and drunkenness at the time of their first and most recent intercourse. We combine these six yes/no items into a scale measure of joint-occurrence.[21] Each of our models also includes first-wave measures that mirror the scales we use to measure our dependent variables. Our analyses thus examine the effects of romantic love and sexual activity on changes in offending and substance use over time.[22]

CORRECTING FOR SELECTION

We use a two-equation estimation procedure (based on Heckman 1976) to address self-selection into relationships and offending. First, we predict the probability of being in a relationship using a probit model. Second, we construct an inverse Mills ratio (by dividing the probability density function by the cumulative distribution function) based on this model (i.e., the hazard of nonselection). To assist interpretation, we recode the inverse Mills ratio so we can predict the hazard of selection into a relationship. Third, we enter the hazard in our substantive equation. The strongest selection model requires variables that have two features: they predict the probability of selection and they are associated with the substantive outcome (e.g., crime), but only through the selection process (in alternative cases, the model is identified solely on functional form). Finding such instruments is challenging, particularly given the paucity of research on romantic relationships and offending. We cast a wide net and include measures highlighted in research on adolescent popularity, sexual debut, and offending.

Our selection equation includes the measure of self-control described earlier to address concerns raised by Gottfredson and Hirschi (1990). In addition, we include a scale measure of delinquency from the in-school survey. This scale mirrors those described earlier for partner's and friends' delinquency and refers to involvement before the first-wave at-home survey. To control for the possibility that early physical maturity leads to precocious dating, we add three variables: weight, a scale for physical development, and an attractiveness scale (as assessed by the interviewer). We also introduce two common network measures: popularity and friendliness (Haynie 2003). *Popularity* refers to the number of other adolescents who nominated a respondent as a friend; *friendliness* is the number of people a respondent nominated as friends. Depression is linked to both dating and delinquency, and so we include a measure of it (Hagan and Foster 2003; Joyner and Udry 2000). Previous research on sexual activity using the Add Health data highlights two additional variables (Bearman and Bruckner 2001): permissiveness of a respondent's attitudes toward sex and parental disapproval of sex for their children. We add these together with age, gender, race/ethnicity, parental variables, and GPA to obtain a strong selection model.[23]

Our analysis has six parts: (1) confirmatory factor analyses of the structure of the key theoretical and dependent variables, (2) a probit model of romantic relationship involvement, (3) regression models of the relationship between love, sexual activity, and crime, controlling for selection and other correlates, (4) alternative regression models that examine the consequences of using different measures, (5) regression models that examine the moderating effects of age, gender, and race/ethnicity, and (6) regression models that examine the contextual effects of sexual intercourse.

---

[21] We thank one of the anonymous reviewers for this suggestion.

[22] The largest square root VIF factor is 1.53 for sexual activity, suggesting that our results are not adversely affected by multicollinearity.

[23] In a preliminary equation, we included other variables (i.e., making a virginity pledge, perceived weight, religiosity, child maltreatment, and participation in extracurricular sporting activities) that had significant bivariate effects on dating. We dropped these variables from our final equation because their effects were not significant ($p < .10$).

Table 1. Confirmatory Factor Analysis of Love, Sexual Activity, Substance Use, and Crime

Tests of Model Fit

Model #	Description	Df	χ^2 Test of Model Fit	χ^2 Test for Difference Testing	RMSEA	TLI	CFI
Model 1	One latent variable	122	39231.848**	—	.131	.709	.691
Model 2	Two latent variables (separating love)	128	19808.111**	5639.460**	.091	.860	.844
Model 3	Three latent variables (separating love and sexual activity)	148	8270.095**	3726.180**	.054	.950	.936
Model 4	Four latent variables (separating love, sexual activity, substance use, and serious crime)	154	6824.274**	651.754**	.048	.960	.947

Factor Loadings for Four-Factor Model

Variable	Indicator	Loading	SE	Variable	Indicator	Loading	SE
Love	Met parents	1.000	—	*Substance Use*	Alcohol	1.000	—
	Held hands	1.189	.024		Cigarettes	1.010	.019
	Kissed	1.222	.025		Marijuana	1.303	.022
	Out alone	1.092	.022		Cocaine	1.126	.026
	Identify as couple	1.175	.023		Inhalants	.900	.034
	Seen as couple	1.265	.024		Other drugs	1.199	.021
	Gave present	1.385	.024				
	Got present	1.385	.024	*Crime*	Shoplifting	1.000	—
	Said in love	1.555	.026		Theft < $50	1.018	.013
	Told in love	1.537	.026		Theft > $50	.873	.013
					Burglary	.875	.013
Sexual	Touch under clothes	1.000	—		Robbery	.803	.017
Activity	Touch genitals	.993	.007		Auto crime	.628	.016
	Sexual intercourse	.918	.006		Drug sale	.940	.012
					Assault	.590	.014
					Weapon use	.766	.017

Note: N = 12,639.
** *p* < .01 (two-tailed).

ANALYSES OF SEX, LOVE, AND CRIME

We use a series of confirmatory-factor models to examine the possibility that sexual activity and crime are part of a behavioral syndrome and not empirically distinct (see Table 1). Chi-square tests for differences (Loehlin 2004) indicate that a four-factor model—that separates sexual activity from substance use, crime, and love—significantly improves upon one-, two-, and three-factor models.[24] These findings concur with those of Rodgers and Rowe (1990:283; see also Elliott and Morse 1989), who note that the correlation between sexual intercourse and deviance is typically "low enough to suggest that the majority of the variability in one is left unaccounted for by the other."

Table 2 summarizes a probit model that is the first stage of our two-step sample selection correction. Consistent with theoretical expectations, selection into dating is significantly and positively associated with prior delinquency, physical maturity, attractiveness, liberal attitudes toward sex, depression, popularity, and age

---

[24] Modification indices indicate that the largest gains in model fit do not involve allowing indicators of sexual activity to load on the substance use or crime factors. We find comparable results for con-

firmatory factor analyses that use cross-sectional data.

Table 2. Probit Regression of the Hazard of Wave 1 Romantic Relationship Involvement

Variable	b	Robust SE	Increase from Minimum to Maximum[b]
Gender	.160	(.035)**	.063
Ages 12 to 16	.148	(.028)**	.233
Ages 17 to 21	.154	(.019)**	.272
Black	−.037	(.046)	−.014
Hispanic	−.065	(.045)	−.026
Asian	−.332	(.093)**	−.132
Native American	.171	(.092)	.066
Other race	.306	(.150)*	.115
Parent education[a]	.028	(.008)**	.078
Parental attachment[a]	−.011	(.004)**	−.133
GPA	−.047	(.020)*	−.055
Self-control	−.011	(.006)	−.086
Depression	.027	(.004)**	.315
Weight	−.005	(.001)**	−.623
Physical maturity	.076	(.005)**	.453
Attractiveness	.026	(.008)**	.122
Attitudes toward sex[a]	.038	(.006)**	.443
Popularity[a]	.041	(.006)**	.404
Friendliness	.018	(.007)**	.072
Parents' attitude about sex[a]	−.033	(.012)**	−.052
Prior delinquency[a]	.057	(.005)**	.400
Constant	−3.647		
Log pseudolikelihood	−10269		
BIC'	−2913.6		

Note: N = 17, 264.

[a] Dummy variable included for missing cases.

[b] Change in the hazard associated with the change in an independent variable from its minimum to maximum value.

* $p < .05$; ** $p < .01$ (two-tailed).

(friendliness and parents' education also have significant but smaller positive effects). Body weight has the most notable negative association with romantic involvement. Compared with females and White youth, males and Asian adolescents are significantly less likely to have had a romantic relationship, whereas youth from other races (i.e., not Hispanics, Blacks, or Native Americans) are more likely to have dated. Three other factors—parental attachment, GPA, and parental disapproval of sex—have smaller but significant negative associations with romantic involvement. Our measure of self-control is also negatively related to dating, but it is significant only with a one-tailed test ($p < .05$).

We now turn to our analyses of second-wave crime and substance use in Tables 3 and 4. In each table, we begin with a reduced equation that includes relationship involvement, romantic love, and sexual activity. Romantic love has

a significant, negative association with both crime and substance use, whereas sexual activity and romantic relationship involvement are positively and significantly related to both measures of illegal behavior.[25] We introduce our correction for selection and our control variables in a second equation. As expected, the selection correction variable is strongly and significantly associated with both crime and substance use. Also, our correction for selection and our control variables reduce the effects of having had a romantic relationship to nonsignificance. The effects of romantic love and sexual activity are also weaker, but both remain significant. Consistent with our predictions, first-wave

_____

[25] The correlation between romantic love and sexual activity is positive and significant, but only moderate in size (r = .318).

Table 3. Negative Binomial Regression of Second-Wave Crime on Romantic Relationships

Variable	Equation 3.1		Equation 3.2		
	b	Robust SE	b	Robust SE	%CEC+
Gender	—	—	−.318	(.052)**	−27.2
Ages 12 to 16	—	—	−.172	(.027)**	−15.8
Ages 17 to 21	—	—	−.184	(.029)**	−16.8
Black	—	—	−.022	(.061)	−2.1
Hispanic	—	—	.179	(.069)**	19.6
Asian	—	—	.099	(.115)	10.4
Native American	—	—	.099	(.121)	10.4
Other race	—	—	.060	(.166)	6.2
Parent education[a]	—	—	−.006	(.013)	−.6
Public assistance[a]	—	—	.029	(.074)	3.0
Parental attachment[a]	—	—	−.017	(.006)*	−1.7
Child maltreatment[a]	—	—	.038	(.007)**	3.8
GPA	—	—	−.160	(.037)**	−14.8
College expectations	—	—	−.004	(.014)	−.4
Self-control	—	—	−.032	(.009)**	−3.2
Delinquent friends[a]	—	—	.271	(.123)*	31.1
Time spent with friends	—	—	.100	(.024)**	10.6
Delinquent romantic partner[a]	—	—	−.030	(.036)	−3.0
Partners' age difference[a]	—	—	−.041	(.018)*	−4.0
Joint occurrence of sex/substance use	—	—	.034	(.035)	3.6
First-wave offending	—	—	.206	(.009)**	22.9
Romantic relationship	.524	(.132)**	−.018	(.122)	−1.8
Love[a]	−.454	(.109)**	−.221	(.107)*	−19.9
Sexual activity[a]	.528	(.069)**	.200	(.063)**	22.2
Hazard of relationship[a]	—	—	.509	(.093)**	66.5
Constant	−.167		3.324		
Alpha	3.057	.107	1.809	.074	
Log pseudolikelihood	−25366918		−23546697		
BIC'	−264771		−3905000		

Notes: N = 12,801. %CEC+ = percent change in expected count.

[a] Dummy variable included for missing cases.

* $p < .05$; ** $p < .01$ (two-tailed).

romantic love and sexual activity are both significantly associated with changes in crime and substance use from the first to the second wave. These effects occur net of selection into these relationships and net of the large effects of peer delinquency, prior offending, and respondent and parent characteristics.

The expected counts and change in odds indicate the size of the effects our independent variables have on crime and substance use (see Long and Freese 2006). Our results indicate that expected crime drops by 20 percent (b = −.221, se = .107) with a one-unit increase in romantic love and rises by 22 percent (b = .200, se = .063) with a similar increase in the sexual activity scale. Meanwhile, the odds of second-wave

substance use decrease by 29 percent (b = −.345, se = .153) with a one-unit increase in the first-wave romantic love scale, and the odds rise by 34 percent (b = .291, se = .096) with a one-unit increase in first-wave sexual activity.

Our equations indicate that crime and substance use also decrease from Wave 1 to Wave 2 as youth age, and that both outcomes are negatively related to GPA and self-control. Both activities increase with delinquent friends, time spent with friends, and first-wave involvement.[26]

---

[26] The significant bivariate relationship between partner's delinquency and offending is dramatically

Table 4.   Logit Regression of Wave 2 Substance Use on Romantic Relationships

Variable	Equation 4.1		Equation 4.2		
	b	Robust SE	b	Robust SE	%CO+
Gender	—	—	−.042	(.070)	−4.2
Ages 12 to 16	—	—	−.160	(.037)**	−14.8
Ages 17 to 21	—	—	−.134	(.038)**	−12.5
Black	—	—	−.737	(.090)**	−521.0
Hispanic	—	—	−.017	(.114)	−16.0
Asian	—	—	−.090	(.120)	−8.6
Native American	—	—	−.287	(.189)	−25.0
Other race	—	—	−.456	(.306)	−36.6
Parent education[a]	—	—	.010	(.020)	1.0
Public assistance[a]	—	—	−.176	(.111)	−16.2
Parental attachment[a]	—	—	−.008	(.007)	−.1
Child maltreatment[a]	—	—	.019	(.014)	1.9
GPA	—	—	−.232	(.046)**	−20.7
College expectations	—	—	−.003	(.020)	−.3
Self-control	—	—	−.042	(.013)**	−4.1
Delinquent friends[a]	—	—	.759	(.142)**	113.6
Time spent with friends	—	—	.192	(.031)**	21.2
Delinquent romantic partner[a]	—	—	.096	(.060)	10.1
Partners' age difference[a]	—	—	.009	(.031)	.9
Joint occurrence of sex/substance use	—	—	.459	(.160)**	58.3
First-wave offending	—	—	1.882	(.068)**	557.0
Romantic relationship	.935	(.185)**	.106	(.207)	11.2
Love[a]	−.337	(.138)*	−.345	(.153)*	−29.2
Sexual activity[a]	1.111	(.105)**	.291	(.096)**	33.8
Hazard of relationship[a]	—	—	1.343	(.138)**	283.4
Constant	−.069		1.417		
Log pseudolikelihood	−7775.2652		−6149.2161		
BIC'	−804.186		−3772.948		

Notes: N = 12,639. +%CO = percent change in odds.

[a] Dummy variable included for missing cases.

* $p < .05$; ** $p < .01$ (two-tailed).

Behavior-specific effects indicate that, compared with White youth and females, Hispanic youth and males report significantly greater involvement in second-wave crime. Black youth report less second-wave substance use than do their White peers. Crime is negatively related to partners' age difference and parental attachment, and it is positively associated with maltreatment in childhood. The joint occurrence

diminished with the inclusion of friends' delinquency and prior offending. In additional analyses (not shown), we did not find significant interaction effects involving partner's delinquency with romantic love or sexual activity for either crime; however, as noted earlier, our measure of partner's delinquency has several limitations.

of sexual intercourse and substance use is positively associated with subsequent substance use, but its effect on involvement in crime is not significant.[27]

The patterns we report for romantic love and sexual activity are fairly consistent across several alternatives to the measures, sample, and

[27] As a second test of involvement in a "party" lifestyle, we added a first-wave dichotomous measure of substance use to our crime equation. Substance use has a sizable effect on crime (b = .583, se = .065), but adding it to our equation has only modest consequences for the coefficients for romantic love and sexual activity. The effects of both variables remain significant (b = −.231, se = .110; b = .183, se = .060).

models we use in our analyses. Briefly, we tested the following approaches (see the Online Supplement for further details): relaxing the designation of being in a romantic relationship to include youth who engaged in dating activities but did not self-designate as being in a relationship, altering the number of items used to make our love and sexual activity scales, changing our selection model to focus on selection into sexual intercourse (rather than being in a relationship), using dummy variables to control for the time in a relationship, and exploring alternative approaches to estimation and missing data. These alternative samples, measurements, and models typically introduce only minor variations in effect sizes and standard errors, thereby increasing confidence in our findings.

Additional analyses examine the continuity in relationship attributes over time, as well as the more immediate consequences of love and sexual activity (results not shown). The correlation between love at Wave 1 and at Wave 2 is sizable and significant ($r = .397$), as is the cross-wave association between sexual activity ($r = .435$). Our cross-sectional analyses have several important limitations (issues related to temporal order and missing data). Nonetheless, these results indicate that love is negatively and significantly associated with both first- and second-wave crime, and with substance use at the second wave (the association with Wave 1 substance use is negative but nonsignificant). Sexual activity is positively related to both crime and substance use in both waves (see the Online Supplement for cross-sectional results). Moreover, adding second-wave measures of love and sexual activity to our crime equation diminishes the first-wave coefficients (–.239 to –.207 and .206 to .097, respectively). Introducing these second-wave measures into our substance use equation has less consequence for the first-wave coefficient for love (–.356 versus –.345), but it notably reduces the coefficient for sexual activity (.291 from .148). Collectively, these results offer additional support for our hypothesis that love and sexual activity have important consequences for crime in both the short and long terms.

We next examine interaction effects involving love, sexual activity, gender, age, and race/ethnicity (see Appendix, Table A2). Only three of these 32 centered interaction terms have significant effects on offending. We also consider the possibility that demographic factors moderate the effects of a romantic relationship on crime and substance use. Only one of these 16 centered interactions is significant.[28] Significant interaction effects are often difficult to document in studies that use individual data and a large number of covariates. Nonetheless, the paucity of significant effects suggests that the associations between romantic love and sexual activity on crime may not be specific to a particular age, gender, or race/ethnic group.[29]

THE CONTEXT OF SEXUAL INTIMACY

Having established the opposing effects of romantic love and sexual activity on crime, our final analyses explore the interaction effects of relationship context and sexual activity. Specifically, we examine the associations between offending and sexual intercourse in one of three relationship contexts: exclusively in romantic relationships, exclusively in nonromantic relationships, and in a combination of romantic and nonromantic relationships. Sexual abstainers are our comparison group.

The results in Table 5 suggest that the elevating effect of sexual intercourse on crime depends on the context. Exclusive nonrelationship sex and the combination of relationship and nonrelationship sex are significantly associated with increases in crime and substance use from Wave 1 to Wave 2 (however, one of the four effects is significant only with a one-tailed test). Compared with celibacy, the expected crime count increases by 14 percent for youth who have sexual intercourse in both romantic and nonromantic relationships ($b = .130$, se $= .074$). The expected crime count rises by 20 percent for those who have intercourse only with a partner

---

[28] Interaction effects involving love and sexual activity with dummy variables for age (12 to 13, 14 to 15, 16 to 17, and 18+) are also nonsignificant. However, compared with youth ages 18 and older, being in a romantic relationship is significantly and positively related to crime for each of our younger age groups, and to substance use for the youngest age group (see Appendix, Table A2).

[29] Meier (2007) finds several significant three-way interactions in her study of sexual intercourse and depression, and similar patterns may occur for offending.

Table 5. Sexual Intercourse, Relationships, and Wave 2 Crime and Substance Use

Variable	Negative Binomial Model of Crime		
	b	Robust SE	%CEC+
Hazard of relationship	.515	(.095)**	67.8
Sexual intercourse only in a romantic relationship	.033	(.085)	3.4
Sexual intercourse in romantic and nonromantic relationships	.130	(.074)	13.9
Sexual intercourse exclusively outside of a romantic relationship	.182	(.055)**	20.0
Constant	3.285		
Alpha	1.807	.074	
Log pseudolikelihood	−23545722		
BIC'	−3925000		
N	12,801		

	Logit Model of Substance Use		
	b	Robust SE	%CO+
Hazard of relationship	1.330	(.137)**	279.8
Sexual intercourse only in a romantic relationship	−.055	(.123)	−5.4
Sexual intercourse in romantic and nonromantic relationships	.458	(.129)*	58.0
Sexual intercourse exclusively outside of a romantic relationship	.271	(.105)**	31.2
Constant	1.471		
Log pseudolikelihood	−6139		
BIC'	−3782.762		
N	12,639		

Note: +CEC = percent change in expected count; %CO = percent change in odds.
* $p < .05$; ** $p < .01$ (two-tailed).

with whom they are not romantically attached (b = .182, se = .055). The odds of substance use jump by 31 percent (b = .271, se = .105) when intercourse occurs exclusively with a nonromantic partner. Substance use escalates by 58 percent (b = .458, se = .129) when intercourse takes place in a combination of romantic and nonromantic relationships.[30]

By contrast, first-wave intercourse that occurs exclusively in a romantic relationship is not significantly associated with second-wave crime (b = .033, se = .085) or substance use (b = −.055, se = .123).[31] In other words, sex exclusively in a romantic relationship and absten-

tion appear to have similar consequences for the change in offending over time.[32]

The correlations between first- and second-wave measures of sexual intercourse suggest some continuity over time (results not shown, but available from the authors on request). All the first-wave measures are significantly associated with their second-wave counterparts (e.g., the correlation between sexual intercourse in a romantic relationship at Waves 1 and 2 is .165). Moreover, these correlations are all stronger than those that involve sexual intercourse in different contexts (e.g., the correlation between Wave 1 romantic relationship intercourse and Wave 2 nonromantic relationship intercourse is −.135). Although our cross-sectional analyses have several limitations, the results indicate that the contemporaneous associations between sexual intercourse and both crime and

---

[30] Analyses of interaction effects involving demographic variables and the relationship context of sexual intercourse reveal only five significant effects on offending (out of 46) (see Appendix, Table A2).

[31] Wald tests indicate that, for substance use, the coefficient for those who had sexual intercourse in a romantic relationship is significantly smaller than for those who had intercourse in other contexts. This is not true for crime.

[32] For example, the effects for abstention and sexual intercourse within a relationship are not significantly different from each other in the crime and substance use equations in which intercourse outside of a romantic relationship is the comparison category.

substance use are consistently larger than the over-time associations. Also, adding second-wave measures to our crime and drug models notably reduces the first-wave coefficients, except those for sexual intercourse in a romantic relationship. In both the crime and substance use models, sex in a romantic relationship during the first wave has a significant negative effect, independent of second-wave intercourse and the other controls we include.[33]

CONCLUSION

Many adults vividly recall their first romantic and sexual experiences. These defining moments often evoke strong emotions when recalled years later, and many people link their adult romantic experiences to those they had in adolescence. We hypothesize that romantic and sexual relationships also have more immediate consequences, including changing involvement in illegal activities. In contrast to previous work, we move from a focus on dating and consider the consequences of relationship characteristics. We find that the positive correlation between being in a romantic relationship and crime disguises two opposing effects. First, we document negative relationships between first-wave romantic love and second-wave crime and substance use. *Our controls for prior offending suggest that romantic love's deterrent effect encourages youth who have offended to decrease their involvement in crime.* Our analyses highlight one factor that may help answer Hirschi's (1969:34) famous question about breaking the law: "Why don't we do it?" Perhaps romantic love discourages offending by strengthening the social bond.

Second, we find that second-wave offending increases with the level of sexual activity in a romantic relationship before the first wave. However, the positive association between sexual activity and offending also masks countervailing trends: relationship-exclusive sexual intercourse prior to Wave 1 is not significantly associated with Wave 2 offending, whereas crime is positively related to sexual intercourse that occurs either in nonromantic relationships or in a combination of romantic and nonromantic relationships. We find evidence that romantic relationships identified as exclusive and loving can eliminate the significant positive association between teenage sexual activity and offending. By contrast, the association between sexual intercourse and crime is intensified in relationships short on love. Perhaps the connections between sexual intercourse and other negative outcomes—from those that are well documented, such as sexually transmitted diseases, to more ambiguous ones such as school grades, employment, and mental health (Billy et al. 1988)—may also be contingent on the loving versus loveless context in which sex occurs (Meier 2007).

Consistent with the process suggested by several theorists, we find that the association between involvement in romantic relationships and crime reflects a selection process influenced by developmental, background, social, personality, and contextual variables. Correcting for selection does not, however, eliminate the independent associations between romantic love, sexual activity, and illegal involvement.

Contrary to predictions suggested by much of the research on teenage romantic relationships, we find limited evidence that gender, age, or race/ethnicity interact significantly with love or sexual activity in influencing offending. However, several recent studies recognize that young men and women adopt a variety of approaches in their dating and sexual relationships. Some adolescent males express a strong desire for emotional intimacy, while some young women actively pursue sex outside of romantic relationships and avoid emotionally close relationships (Thompson 1995; Tolman 2002).

Echoing the results of Giordano and colleagues' (2006a) study, our findings suggest that within-gender heterogeneity may minimize potential interaction effects between gender and relationship attributes. Harding (2007) suggests that this heterogeneity reflects the diversity of relationship and sexual scripts that contemporary culture offers adolescents. Like many societies, the United States presents mixed messages about adolescent sexuality. Popular media often portray sexual activity in a favorable light, and

---

[33] The associations involving intercourse outside of romantic relationships and in both romantic and nonromantic relationships are *significantly* larger than those for intercourse in only a romantic relationship. However, only one of the cross-sectional associations involving intercourse in only a romantic relationship is nonsignificant (i.e., Wave 1 crime).

the media have a notable effect on adolescents' decisions about sex (Brown, Steele, and Walsh-Childers 2002; L'Engle, Brown, and Kenneavy 2007). Nonetheless, conservative views increased in popularity during the 1990s. Public opinion polls indicate a rise in the disapproval of teenage sex that contrasts sharply with the more permissive views common in the 1970s and 1980s (Luker 2006; Treas 2002). The support for virginity pledges, abstinence programs, and other deferred sex campaigns in the 1990s highlights the increased prevalence of the view that adolescent sex is wrong and a source of stigma (Bearman and Bruckner 2001; Little and Rankin 2001; Luker 2006). Indeed, there is a nontrivial movement that supports abstinence beyond adolescence. A group at Harvard University, "True Love Revolution," advocates celibacy until marriage. At one point, its Web page claimed that "early sexual activity is strongly associated with all manner of terrible outcomes, from increased risk of depression to greater likelihood of marital infidelity, divorce and maternal poverty" (Patterson 2008:3). At Princeton, an informal advisor to its Anscombe Society (an abstinence support group) has argued that premarital sexual activity "deeply compromises human dignity" and results in "personal unhappiness and social harm" (Patterson 2008:3). The political and cultural climate of the United States may be intensifying sexually-related strain for many youth, not just those from one gender, age, or racial group. Moreover, this strain may be exacerbated for youth whose early sexual experiences include sex with nonromantic partners.

Our research adds to a growing number of studies on the role of emotions in offending (see Hagan and Foster 2003). Much of this work focuses on feelings that involve negative evaluations of behaviors or character, such as shame, rage, anger, or defiance. We adopt a different approach and focus on romantic love, an affirmative emotion, and add to research showing that positive relationships with others enhance adolescent well-being (Keyes 2006).

There are several caveats to our findings. Our analyses control for many variables central to explanations of juvenile offending, yet several measures are limited by their scope (e.g., a small number of items for self-control), by missing data (e.g., partner's delinquency), or by the distributional qualities of measures (e.g.,

substance use). Moreover, the Add Health data contain only a few indicators of the various relationship features that may contribute to offending. Future research should consider a greater array of relationship and partner attributes, as well as improving upon the measures we use here. For example, a more precise estimate of the size of the association between love and offending may be obtained with additional indicators of romantic love, such as those contained in Hatfield and Sprecher's (1986) passionate love scale (e.g., see Giordano et al. 2006a). These items offer one way of measuring the complexity of romantic love and reflect the need to connect it with both people and context.

We suggest that sexual activity, particularly sex with nonromantic partners, influences offending by increasing strain. We do not, however, have direct measures of the strains that may arise from sexual activity, nor of the various emotions that may occur in response to strain (e.g., anger, shame, or resentment). Although we include a control for the link between sexual activity and substance use, this variable is a limited indicator of a "party" identity or lifestyle pathway through which sexual activity may affect crime. Future research will hopefully have access to direct indictors of these variables. In addition, future studies should examine how other factors, such as neighborhood conditions, influence relationships between romantic-relationship attributes and crime (Browning, Leventhal, and Brooks-Gunn 2005; Harding 2007). Research should also consider how the identities adopted by adolescents who date, fall in love, and have sex influence offending (Seffrin et al. forthcoming). Finally, although we include an array of variables to model the process by which adolescents select into romantic relationships, our approach may still neglect key variables that predict both selection into relationships and involvement in illegal behavior.

Our analysis focuses on youth, but our results may have implications beyond adolescence. Our findings resonate with Sampson and Laub's (1993) argument that particular aspects of marital or romantic relationships play salient roles in the etiology of illegal behavior. We extend their research by examining more directly the consequences of romantic love, a variable at which they hint but do not measure. As their and

our research suggests, this relationship feature plays an important role in offending at several stages across the life course.[34] Moreover, our analyses point to the possibility that romantic love may fill a void that occurs in adolescence between the weakening of parental control and the onset of a marital bond. Indeed, teenage love may presage adult attachment.

Our findings that crime is influenced by adolescent love, sexual activity, and the relational context in which sex occurs also challenge the assumption that adolescent and adult romantic experiences have little in common. As Schwartz (2006:52) notes, scholars must set aside preconceived ideas about adolescence:

> When we put the words, teens, love, sex and even attachment together, our social construction is to immediately problematize them. But . . . clearly our bodies were designed to get us into lustful and emotionally intense relationships as early, or earlier than puberty. Our bodies do not know about waiting for marriage, or getting through college. . . . We give [unique] names to teenage sexuality and decision making about relationships that describe exactly the same phenomena we see in adults.

Future research must explore the cognitive, emotional, and behavioral intricacies of romantic relationships in greater detail if we are to understand how they influence offending across various stages of the life course. We need a more nuanced approach to romantic relationships—as well as relationships with parents, friends, and others—if we are to advance our understanding of their consequences for illegal behavior.

Bill McCarthy *works in the department of sociology at the University of California-Davis. His current research interests are adolescent crime, homicide, and stigma.*

Teresa Casey *studies at the University of California-Davis. Her doctoral research focuses on relationships and criminal involvement. She is also interested in incarceration, re-entry into the community, and desistance from crime.*

---

[34] Consistent with our analysis, Laub and colleagues (1998) also report some courtship effects in which attachment to one's dating partner discourages offending.

Table A1. Variable Descriptions and Descriptive Statistics

Variable Name	Description	Mean	SD
Dependent Variable			
Second-wave crime	9-item scale (α = .755). Number of times committed the following in the past 12 months: shoplifted, drove a car without the owner's permission, stole something worth < $50, stole something worth > $50, burglary, robbery, drug sale, assault, pulled a gun or knife on someone. 0 = never, 1 = one to two times, 2 = three to four times, 3 = five or more times.	1.260	2.485
Second-wave substance use	6-item scale (α = .641). Since the last interview: tried cigarette smoking; had a drink of beer, wine, or liquor more than two or three times; tried or used marijuana; tried or used any type of cocaine; tried or used inhalants; tried or used any other type of illegal drug. 0 = no, 1 = yes to one or more.	.648	.477
Relationship Variables			
Romantic relationship[a]	In the past 18 months, have you had a special romantic relationship with anyone? 0 = no, 1 = yes.	.520	.500
Love[a]	10-item weighted scale (KR – 20 = .820). Number of items respondent engaged in with a romantic partner in the past 18 months: went out alone, held hands, kissed, met parents, said you were a couple, considered a couple by others, gave partner a present, received a present from partner, partner said they loved respondent, respondent told partner that s/he loved him/her.	.481	.521
Sexual activity[a]	3-item weighted scale (KR – 20 = .846). Number of items respondent engaged in with a romantic partner in the past 18 months: touched each other underneath clothes, touched each other's genitals, had sexual intercourse.	.265	.415
Sexual intercourse only in a romantic relationship[a]	Engaged in sexual intercourse only with a person/people whom the respondent identified as being a partner in a "special romantic relationship."	.083	.277
Sexual intercourse in a romantic relationship and with others[a]	Engaged in sexual intercourse with a person/people whom the respondent identified as being a partner in a special romantic relationship *and* with a person/people whom the respondent did not identify as being a partner in a romantic relationship.	.119	.324
Sexual intercourse exclusively outside of romantic relationships[a]	Engaged in sexual intercourse only with a person/people whom the respondent *did not* identify as being a partner in a special romantic relationship.	.108	.310
Control Variables			
Gender[a]	0 = male, 1 = female.	.501	.500
Ages 12 to 16 (spline)[a]	Respondent's age to 16 years of age = age; respondents aged >16 = 16.	15.075	1.076
Ages 17 to 21 (spline)[a]	Number of years over age 16.	.450	.777
Black[a]	0 = non-Black, 1 = Black.	.154	.360
Hispanic[a]	0 = non-Hispanic (Latino/a), 1 = Hispanic (Latino/a).	.117	.322
Asian[a]	0 = non-Asian, 1 = Asian.	.040	.195
Native American[a]	0 = non-Native American, 1 = Native American.	.025	.156
Other race[a]	0 = non-other race, 1 = other race.	.011	.105
Public assistance[a]	0 = no, 1 = yes.	.106	.298

Table A1. *(continued)*

Variable Name	Description	Mean	SD
Control Variables			
Parental education[a]	1 = 8th grade or less; 2 = more than 8th grade, but did not graduate; 3 = business, trade, or vocational school instead of high school; 4 = high school graduate or GED; 5 = business, trade, or vocational school after high school; 6 = some college, but did not graduate; 7 = graduated from college/university; 8 = professional training beyond college or university. Variable takes higher of mother's or father's education.	5.249	1.853
Parental attachment[a]	8-item scale (α = .859). Mother/father is warm and loving toward you, satisfied with way you and mother/father communicate, satisfied with relationship with mother/father, mother encourages you to be independent, when you do something wrong your mother talks to you about it and helps you understand why it is wrong. 1 = strongly disagree, 2 = disagree, 3 = neither, 4 = agree, 5 = strongly agree.	33.585	4.162
Child maltreatment (measured at Wave 3)	4-item scale (α = .803). By the time you started 6th grade, how often had your parents or other adult caregivers: Left you home alone when an adult should have been with you? Not taken care of your basic needs (e.g., providing clothing, food)? Slapped, kicked, or hit you? Touched you in a sexual way, forced you to touch him/her in a sexual way, or forced you to have sexual relations? 0 = never, 1 = one time, 2 = twice, 3 = 3 to 5 times, 4 = 6 to 10 times, 5 = 11 or more.	2.187	2.483
Delinquency of romantic partner[b]	4-item scale (α = .701). During the past 12 months: How often did you smoke cigarettes? Get drunk? Skip school without an excuse? Physically fight? 0 = never, 1 = once or more.	1.687	2.876
Partners' age difference[a]	Calculated as: partner's age when relationship started – (respondent's age at Wave 1 – the number of years since relationship began).	.205	1.150
GPA[a]	1 = D or less, 2 = C, 3 = B, 4 = A.	2.805	.775
College expectations[a]	2-item scale (r = .695). Do you want to attend college? How likely is it that you will attend college? 1 = low, 3 = medium, 5 = high.	8.609	1.973
Self-control[a]	5-item scale (α = .711). To accomplish your goals it takes hard work. There are many approaches to a problem. Do you: research solutions, use rational decision making, evaluate outcomes of all decisions? 1 = strongly disagree, 2 = disagree, 3 = neither, 4 = agree, 5 = strongly agree.	8.784	2.456
Delinquent friends[b]	Proportion of friends who reported that they engaged in any of the following in the past 12 months: Smoke cigarettes? Get drunk? Skip school without an excuse? Been in a physical fight? 0 to 100 percent (.0 to 1).	.688	.229
Time with friends[a]	During the past week how many times did you just hang out with friends? 0 = not at all, 1 = one to two times, 2 = three or four times, 3 = five or more times.	1.999	1.000
Joint occurrence of sexual intercourse and substance use[a]	Respondent used alcohol, drugs, or was drunk prior to their first and most recent intercourse. 0 = no, 1 = yes (for each item, then summed).	.116	.515
First-wave substance use[a]	6-item scale (α = .679). Ever used marijuana, cocaine, inhalants, other illegal drugs; used alcohol in the past 12 months; smoked cigarettes in the past 30 days?	.701	.458
First-wave crime[a]	9-item scale (α = .753). Ever done the following: shoplifted, drove a car without the owner's permission, stole something worth < $50, stole something worth > $50, burglary, robbery, drug sale, assault, pulled a gun or knife on someone.	1.687	2.876

(continued on next page)

Table A1.   *(continued)*

Variable Name	Description	Mean	SD
Additional Selection Variables			
Prior delinquency[b]	4-item scale (α = .701). See delinquency of romantic partner.	3.752	3.308
Weight[a]	What is your weight in pounds?	140.936	35.028
Physical maturity[a]	4-item scale (α = .644 females; α = .631 males). Females: Have you ever had a menstrual period? 1 = yes. How big are your breasts?/How curvaceous are you? 1 = same size as grade school, 2 = little bigger, 3 = somewhat bigger, 4 = a lot bigger, 5 = whole lot bigger, as much as grown woman. Males: How much hair do you have on your face? 1 = few scattered hairs, 2 = somewhat thick, can still see skin, 3 = thick, can't see much skin, 4 = very thick, like a grown man. How much hair do you have under arms? 1 = no hair at all, 2 = a little hair, 3 = some hair, but not a lot, 4 = a lot of hair that is thick, 5 = whole lot of hair that is very thick, as much as a grown man. Is your voice lower than it was in grade school? 1 = no, about same as when I was in grade school, 2 = yes, a little lower than grade school, 3 = yes, somewhat lower, 4 = yes, a lot lower, 5 = whole lot, as low as a grown man. Both genders: How advanced is your development compared to other boys/girls your age? 1 = younger than most, 2 = younger than some, 3 = average, 4 = older than some, 5 = older than most.	11.117	2.889
Depression[a]	11-item (α = .840) version of CES-D scale. How often was each of the following true during the past week? Loss of appetite, bothered by things, felt blue, could not focus, depressed, fatigued, fearful, lonely, sad, unmotivated, talked less than usual. 0 = never or rarely, 1 = sometimes, 2 = a lot of the time, 3 = most or all of the time.	7.384	4.444
Attractiveness[a]	3-item scale (α = .770). Interviewer's assessment of three items: How physically attractive is respondent? How attractive is respondent's personality? How well groomed was the respondent? 1 = very unattractive/ungroomed, 2 = unattractive/ungroomed, 3 = average, 4 = attractive/well groomed, 5 = very attractive/very well groomed.	10.736	2.056
Attitudes toward sex[a]	8-item scale (α = .732). If you had sex … Friends would respect you more. Partner would lose respect for you. You would feel guilty. It would upset mother. It would give you great pleasure. It would relax you. It would make you more attractive to opposite sex. You would feel less lonely. 1 = strongly agree, 2 = agree, 3 = neither, 4 = disagree, 5 = strongly disagree (reverse coded where appropriate).	22.317	3.851
Popularity[b]	Social network measure of indegree: the number of times the respondent was nominated as a friend by another student.	4.564	3.102
Friendliness[a]	Social network measure of outdegree: the number of best male and female friends the respondent nominated (to a maximum of 10).	4.503	2.445
Parents' attitudes about sex[c]	You disapprove of your child having sexual intercourse at this time in his/her life. 1 = strongly disagree, 2 = disagree, 3 = neither, 4 = agree, 5 = strongly agree.	4.004	1.350
Hazard of relationship	The probability of nonselection or not being in a relationship; recoded to reflect probability of being in a relationship: $$\lambda = \frac{\varphi(predxb)}{\phi(predxb)}$$	.890	.367

Notes: N = 12,801 (N = 12,639 for substance use). Descriptive statistics based on weighted data.
[a] Wave 1 home survey.
[b] School survey.
[c] Wave 1 parent survey.

Table A2. Interaction Effects for Love, Sex, and IMR for Serious Crime and Substance Use

Results replicating Equations 3.2 and 4.3 with changes noted below	Serious Crime		Substance Use	
	b	Robust SE	b	Robust SE
Gender Interactions				
Gender × love	−.324	−(.196)	−.121	(.311)
Gender × sexual activity	.127	(.133)	−.069	(.191)
Hazard of relationship	*.513*	*(.093)**	*1.344*	*(.138)**
Gender × relationship	−.031	(.086)	−.040	(.122)
Hazard of relationship	*.511*	*(.093)**	*1.345*	*(.138)**
Age Interactions (spline)				
Ages 12 to 16 × love	−.032	(.117)	.097	(.157)
Ages 17 to 21 × love	−.013	(.146)	−.074	(.233)
Ages 12 to 16 × sexual activity	.076	(.071)	.170	−(.101)
Ages 17 to 21 × sexual activity	−.106	(.099)	−.050	(.141)
Hazard of relationship	*.560*	*(.093)**	*1.342*	*(.138)**
Ages 12 to 16 × relationship	.037	(.049)	−.216	(.059)**
Ages 12 to 16 × relationship	−.125	−(.071)	.072	(.081)
Hazard of relationship	*.506*	*(.091)**	*1.357*	*(.138)**
Age Interactions (dummy variables)				
Ages 12 to 13 × love	1.246	(1.039)	.227	(1.719)
Ages 14 to 15 × love	−.290	(.409)	−.415	(.411)
Ages 16 to 17 × love	.178	(.368)	−.386	(.682)
Ages 12 to 13 × sex	.040	(.276)	−.298	(.291)
Ages 14 to 15 × sex	.169	(.212)	.160	(.576)
Ages 16 to 17 × sex	.211	(.204)	.050	(.299)
Hazard of relationship	*.445*	*(.088)**	*1.284*	*(.135)**
Ages 12 to 13 × relationship	.505	(.208)*	.592	(.244)*
Ages 14 to 15 × relationship	.349	(.174)*	.258	(.197)
Ages 16 to 17 × relationship	.382	(.158)*	.102	(.212)
Hazard of relationship	*.438*	*(.087)**	*1.297*	*(.135)**
Race Interactions				
Black × love	−.040	(.289)	.300	(.375)
Native American × love	−.691	(.609)	−.527	(.979)
Asian × love	−.390	(.554)	−.100	(.816)
Hispanic × love	−.595	(.301)*	.144	(.462)
Other × love	−1.611	−(.914)	.700	(1.298)
Black × sex	−.316	−(.179)	−.540	(.264)*
Native American × sex	−.075	(.245)	−.813	(.606)
Asian × sex	.411	(.318)	−.217	(.471)
Hispanic × sex	−.083	(.161)	−.548	(.264)*
Other × sex	−.432	(.535)	1.179	(.995)
Hazard of relationship	*.505*	*(.094)**	*1.340*	*(.134)**
Black × relationship	.164	(.111)	−.134	(.152)
Native American × relationship	−.049	(.284)	.236	(.335)
Asian × relationship	.263	(.199)	.327	(.301)
Hispanic × relationship	−.019	(.132)	−.283	(.177)
Other × relationship	−.197	(.337)	−.095	(.664)
Hazard of relationship	*.517*	*(.092)**	*1.342*	*(.139)**
Sexual Context Interactions				
Gender × sex in relationship	.011	(.147)	−.156	(.268)
Gender × sex in and out of relationship	−.002	(.118)	.062	(.269)
Gender × sex outside romantic relationship	.041	(.131)	.129	(.232)
Hazard of relationship	*.515*	*(.096)**	*1.335*	*(.135)**

(continued on next page)

Table A2.   *(continued)*

Results replicating Equations 3.2 and 4.3 with changes noted below	Serious Crime		Substance Use	
	b	Robust SE	b	Robust SE
Sexual Context Interactions				
Ages 12 to 16 × sex in relationship	.039	(.106)	.080	(.185)
Ages 17 to 21 × sex in relationship	−.122	(.102)	.099	(.137)
Ages 12 to 16 × sex in and out of relationship	.052	(.085)	−.005	(.190)
Ages 17 to 21 × sex in and out of relationship	.063	(.079)	.091	(.128)
Ages 12 to 16 × sex outside romantic relationship	.053	(.065)	−.143	(.123)
Ages 17 to 21 × sex outside romantic relationship	−.097	(.084)	.072	(.138)
Hazard of relationship	*.513*	*(.096)***	*1.338*	*(.135)***
Black × sex in relationship	−.046	(.189)	−.660	(.275)*
Black × sex in and out of relationship	.153	(.128)	−.293	(.232)
Black × sex outside romantic relationship	.283	(.119)*	−.017	(.232)
Native American × sex in relationship	.152	(.306)	−1.072	(.648)
Native American × sex in and out of relationship	—	—	—	—
Native American × sex outside romantic relationship	−.335	(.298)	.171	(.743)
Asian × sex in relationship	.712	(.358)*	.213	(.669)
Asian × sex in and out of relationship	.441	(.435)	.567	(.636)
Asian × sex outside romantic relationship	.612	(.387)	.327	(.466)
Hispanic × sex in relationship	−.006	(.25)	−.432	(.318)
Hispanic × sex in and out of relationship	.202	(.155)	−.195	(.416)
Hispanic × sex outside romantic relationship	−.052	(.168)	−.118	(.294)
Other × sex in relationship	−1.332	(.501)**	.148	(.815)
Other × sex in and out of relationship	−.296	(.481)	1.227	(.783)
Other × sex outside romantic relationship	1.579	(.284)**	.500	(.950)
Hazard of relationship	*.527*	*(.096)***	*1.329*	*(.137)***

* $p < .05$; ** $p < .01$ (two-tailed).

REFERENCES

Agnew, Robert. 2006. "General Strain Theory: Current Status and Directions for Further Research." Pp. 101–23 in *Taking Stock: The Status of Criminological Theory.* Vol. 15, *Advances in Criminological Theory,* edited by F. T. Cullen, J. P. Wright, and K. R. Blevins. New Brunswick, NJ: Transaction.

Allison, Paul D. 2001. *Missing Data.* Thousand Oaks, CA: Pine Forge Press.

Altman, Lawrence K. 2008. "One in Four Women in Teens Have STDs, Study Finds." *New York Times,* Tuesday, March 11 (http://www.nytimes.com/2008/03/12/science/12std.html).

Anderson, Elijah. 1999. *Code of the Street: Decency, Violence, and the Moral Life of the Inner City.* New York: W. W. Norton.

Armour, Stacy and Dana L. Haynie. 2007. "Adolescent Sexual Debut and Later Delinquency." *Journal of Youth and Adolescence* 36(2):141–52.

Bachman, Jerald G., Lloyd D. Johnston, and Patrick M. O'Malley. 1976–2004. "Monitoring the Future: A Continuing Study of American Youth (8th, 10th, and 12th-Grade Surveys), 1976–2004." Retrieved October 25, 2007 (http://www.childtrendsdatabank.org/indicators/73Dating.cfm).

Bearman, Peter S. and Hannah Bruckner. 2001. "Promising the Future: Virginity Pledges and First Intercourse." *American Journal of Sociology* 106(4):859–912.

Bearman, Peter S., Jo Jones, and Richard J. Udry. 1997. *The National Longitudinal Study of Adolescent Health: Research Design.* University of North Carolina at Chapel Hill: Carolina Population Center.

Bearman, Peter S., James Moody, and Katherine Stovel. 2004. "Chains of Affection: The Structure of Adolescent Romantic and Sexual Networks." *American Journal of Sociology* 110(1):44–91.

Becker, Howard S. 1963. "Becoming a Marijuana User." *American Journal of Sociology* 59:235–43.

Billy, John O. G., Nancy S. Landale, William R. Grady, and Denise M. Zimmerle. 1988. "Effects of Sexual Activity on Adolescent Social and Psychological Development." *Social Psychology Quarterly* 51(3):190–212.

Brown, Jane D., Jeanne R. Steele, and Kim Walsh-Childers, eds. 2002. *Sexual Teens, Sexual Media: Investigating Media Influence on Adolescent*

Sexuality. Mahwah, NJ: Lawrence Erlbaum Associates.

Browning, Christopher R., Tama Leventhal, and Jeanne Brooks-Gunn. 2005. "Sexual Initiation in Early Adolescence: The Nexus of Parental and Community Control." *American Sociological Review* 70(5):758–78.

Buhi, Eric R. and Patricia Goodson. 2007. "Predictors of Adolescent Sexual Behavior and Intention: A Theory-Guided Systematic Review." *Journal of Adolescent Health* 40(1):4–21.

Carver, Karen, Kara Joyner, and J. Richard Udry. 2003. "National Estimates of Romantic Relationships." Pp. 23–56 in *Adolescent Romantic Relations and Sexual Behavior: Theory, Research, and Practical Implications,* edited by P. Florsheim. Mahwah, NJ: Lawrence Erlbaum Associates.

Cassidy, Jude and Phillip R. Shaver, eds. 1999. *Handbook of Attachment: Theory, Research, and Clinical Applications.* New York: The Guilford Press.

Chantalla, Kim and Joyce Tabor. 1999. "Strategies to Perform a Design-Based Analysis Using the Add Health Data." Retrieved October 25, 2007 (http://www.cpc.unc.edu/projects/addhealth/files/weight1.pdf).

Collins, W. Andrew. 2003. "More Than Myth: The Developmental Significance of Romantic Relationships during Adolescence." *Journal of Research on Adolescence* 13(1):1–24.

Crouter, Ann C. and Alan Booth, eds. 2006. *Romance and Sex in Adolescence and Emerging Adulthood: Risk and Opportunities.* Mahwah, NJ: Lawrence Erlbaum Associates.

Elliott, Delbert J. and Barbara B. Morse. 1989. "Delinquency and Drug Use as Risk Factors in Teenage Sexual Activity." *Youth and Society* 21(1):32–60.

Felmlee, Diane and Susan Sprecher. 2006. "Love: Psychological and Sociological Perspectives." Pp. 389–409 in *Handbook of the Sociology of Emotion,* edited by J. E. Stets and J. Turner. New York: Springer.

Florsheim, Paul, ed. 2003. *Adolescent Romantic Relations and Sexual Behavior: Theory, Research, and Practical Implications.* Mahwah, NJ: Lawrence Erlbaum Associates.

Furman, Wyndol, B. Bradford Brown, and Candice Feiring, eds. 1999. *The Development of Romantic Relationships in Adolescence.* New York: Cambridge University Press.

Furman, Wyndol and Laura Shaffer. 2003. "The Role of Romantic Relationships in Adolescent Development." Pp. 3–22 in *Adolescent Romantic Relations and Sexual Behavior: Theory, Research, and Practical Implications,* edited by P. Florsheim. Mahwah, NJ: Lawrence Erlbaum Associates.

Furstenberg, Frank F., Jr., S. Phillip Morgan, Kristin A. Moore, and James Peterson. 1987. "Race Differences in the Timing of Adolescent Intercourse." *American Sociological Review* 52(4):511–18.

Giordano, Peggy C. 2003. "Relationships in Adolescence." *Annual Review of Sociology* 29:257–81.

Giordano, Peggy C., Monica A. Longmore, and Wendy D. Manning. 2006a. "Gender and the Meanings of Adolescent Romantic Relationships: A Focus on Boys." *American Sociological Review* 71(2):260–87.

———. 2006b. "Hooking Up: The Relationship Contexts of 'Nonrelationship' Sex." *Journal of Adolescent Research* 21(5):459–83.

Giordano, Peggy C., Wendy D. Manning, and Monica A. Longmore. 2005. "The Romantic Relationships of African-American and White Adolescents." *The Sociological Quarterly* 46(3):545–68.

Gottfredson, Michael R. and Travis Hirschi. 1990. *A General Theory of Crime.* Stanford, CA: Stanford University Press.

Graber, Julia A., Pia R. Britto, and Jeanne Brooks-Gunn. 1999. "What's Love Got to Do with It? Adolescents' and Young Adults' Beliefs about Sexual and Romantic Relationships." Pp. 364–95 in *The Development of Romantic Relationships in Adolescence,* edited by W. Furman, B. B. Brown, and C. Feiring. New York: Cambridge University Press.

Hagan, John. 1991. "Destiny and Drift: Subcultural Preferences, Status Attainments, and the Risks and Rewards of Youth." *American Sociological Review* 56(5):567–82.

Hagan, John and Holly Foster. 2003. "S/He's a Rebel: Toward a Sequential Stress Theory of Delinquency and Gendered Pathways to Disadvantage in Emerging Adulthood." *Social Forces* 82(1):53–86.

Hagan, John, John Simpson, and A. R. Gillis. 1988. "Feminist Scholarship, Relational and Instrumental Control, and a Power-Control Theory of Gender and Delinquency." *British Journal of Sociology* 39(3):301–36.

Harding, David J. 2007. "Cultural Context, Sexual Behavior, and Romantic Relationships in Disadvantaged Neighborhoods." *American Sociological Review* 72(3):341–64.

Hatfield, Elaine and Susan Sprecher. 1986. "Measuring Passionate Love in Intimate Relations." *Journal of Adolescence* 9(3):383–4l0.

Haynie, Dana L. 2003. "Contexts of Risk: Explaining the Link between Girls Pubertal Development and Their Delinquency Involvement." *Social Forces* 82(2):355–97.

Haynie, Dana L., Peggy C. Giordano, Wendy D. Manning, and Monica A. Longmore. 2005. "Adolescent Romantic Relationships and Delinquency Involvement." *Criminology* 43(1):177–210.

Heckman, James J. 1976. "The Common Structure

of Statistical Models of Truncation, Sample Selection, and Limited Dependent Variables and a Simple Estimator for Such Models." *Annals of Economic and Social Measurement* 5(4):475–91.

Hirschi, Travis. 1969. *Causes of Delinquency.* Berkeley, CA: University of California.

Jessor, Richard and Shirely L. Jessor. 1977. *Problem Behavior and Psychosocial Development: A Longitudinal Study of Youth.* New York: Academic Press.

Joyner, Kara and Richard J. Udry. 2000. "You Don't Bring Me Anything but Down: Adolescent Romance and Depression." *Journal of Health and Social Behavior* 41(4):369–91.

Katz, Jack. 1988. *Seductions of Crime: Moral and Sensual Attractions in Doing Evil.* New York: Basic Books.

Keyes, Corey L. 2006. "Mental Health in Adolescence: Is America's Youth Flourishing?" *American Journal of Orthopsychiatry* 76(3):395–402.

Laub, John H., Daniel S. Nagin, and Robert J. Sampson. 1998. "Trajectories of Change in Criminal Offending: Good Marriages and the Desistance Process." *American Sociological Review* 63(2):225–38.

Laub, John H. and Robert J. Sampson. 2003. *Shared Beginnings, Divergent Lives: Delinquent Boys to Age 70.* Cambridge, MA: Harvard University Press.

L'Engle, Kelly Ladin, Jane D. Brown, and Kristin Kenneavy. 2007. "The Mass Media Are an Important Context for Adolescents' Sexual Behavior." *Journal of Adolescent Health* 38(3):186–92.

Levine, Phillip B. 2001. "The Sexual Activity and Birth-Control Use of American Teenagers." Pp. 167–218 in *Risky Behavior among Youths: An Economic Analysis,* edited by J. Gruber. Chicago, IL: University of Chicago Press.

Little, Craig B. and Andrea Rankin. 2001. "Why Do They Start It? Explaining Reported Early-Teen Sexual Activity." *Sociological Forum* 16(4):703–29.

Loehlin, John C. 2004. *Latent Variable Models: An Introduction to Factor, Path, and Structural Equation Analysis,* 4th ed. Mahwah, NJ: Lawrence Erlbaum Associates.

Long, J. Scott and Jeremy Freese. 2006. *Regression Models for Categorical Dependent Variables Using Stata,* 2nd ed. College Station, TX: Stata.

Luker, Kristin. 2006. *When Sex Goes to School: Warring Views on Sex—And Sex Education—Since the Sixties.* New York: W.W. Norton.

Manning, Wendy D., Monica A. Longmore, and Peggy C. Giordano. 2005. "Adolescents' Involvement in Non-romantic Sexual Activity." *Social Science Research* 34(2):384–407.

McCarthy, Bill, Diane Felmlee, and John Hagan.

2004. "Girlfriends are Better: Gender, Friends, and Crime among School and Street Youth." *Criminology* 42(4):805–36.

Meier, Ann M. 2007. "Adolescent First Sex and Subsequent Mental Health." *American Journal of Sociology* 112(6):1811–47.

Miller, Brent C., J. Kelly McCoy, Terrance D. Olson, and Christopher M. Wallace. 1986. "Parental Discipline and Control Attempts in Relation to Adolescent Sexual Attitudes and Behavior." *Journal of Marriage and the Family* 48(3):503–12.

Moffitt, Terrie E., Avshalaom Caspi, Michael Rutter, and Phil A. Silva. 2001. *Sex Differences in Antisocial Behaviour: Conduct Disorder, Delinquency, and Violence in the Dunedin Longitudinal Study.* New York: Cambridge University Press.

Patterson, Randall. 2008. "Students of Virginity." *New York Times Magazine,* March 30 (http://www.nytimes.com/2008/03/30/magazine/30Chastity-t.html?pagewanted=1&_r=1).

Piquero, Alex R., Timothy Brezina, and Michael G. Turner. 2005. "Testing Moffitt's Account of Delinquency Abstention." *Journal of Research in Crime and Delinquency* 42(1):27–54.

Rebellon, Cesar J. and Michelle Manasse. 2004. "Do 'Bad Boys' Really Get the Girls? Delinquency as a Cause and Consequence of Dating Behavior among Adolescents." *Justice Quarterly* 21(2):355–89.

Rodgers, Joseph Lee. 1996. "Sexual Transitions in Adolescence." Pp. 85–110 in *Transitions through Adolescence: Interpersonal Domains and Context,* edited by J. A. Graber, J. Brooks-Gunn, and A. C. Petersen. Mahwah, NJ: Lawrence Erlbaum Associates.

Rodgers, Joseph Lee and David C. Rowe. 1990. "Adolescent Sexual Activity and Mildly Deviant Behavior: Sibling and Friendship Effects." *Journal of Family Issues* 11(3):274–93.

Ryff, Carol and Corey Lee Keyes. 1995. "The Structure of Psychological Well-Being Revisited." *Journal of Personality and Social Psychology* 69(4):719–27.

Sampson, Robert J. and John H. Laub. 1993. *Crime in the Making: Pathways and Turning Points through Life.* Cambridge, MA: Harvard University Press.

———. 1997. "A Life-Course Theory of Cumulative Disadvantage and the Stability of Delinquency." Pp. 133–61 in *Developmental Theories of Crime and Delinquency.* Vol. 7, *Advances in Criminological Theory,* edited by T. P. Thornberry. New Brunswick, NJ: Transaction Publishers.

———. 2005. "A Life-Course View of the Development of Crime." *ANNALS American Academy of Political and Social Science* 602(1):12–45.

Schwartz, Pepper. 2006. "What Elicits Romance, Passion, and Attachment, and How Do They Affect our Lives throughout the Life Cycle?" Pp. 49–60 in *Romance and Sex in Adolescence and Emerging Adulthood,* edited by A. C. Crouter and A. Booth. Mahwah, NJ: Lawrence Erlbaum Associates.

Seffrin, Patrick M., Peggy C. Giordano, Wendy D. Manning, and Monica A. Longmore. Forthcoming. "The Influence of Dating Relationships on Friendship Networks, Identity Development, and Delinquency." *Justice Quarterly.*

Simons, Ronald L., Eric Stewart, Leslie C. Gordon, Rand D. Conger, and Glen H. Elder Jr. 2002. "A Test of Life Course Explanations for Stability and Change in Antisocial Behavior from Adolescence to Young Adulthood." *Criminology* 40(2):401–33.

Smith, Laureen H., Barbara J. Guthrie, and Deborah J. Oakley. 2005. "Studying Adolescent Male Sexuality: Where Are We?" *Journal of Youth and Adolescence* 34(4):361–77.

Thompson, Sharon. 1995. *Going All the Way: Teenage Girls' Tales of Sex, Romance, and Pregnancy.* New York: Hill and Wang.

Tolman, Deborah L. 2002. *Dilemmas of Desire: Teenage Girls Talk about Sexuality.* Cambridge, MA: Harvard University Press.

Tolman, Deborah L., Renée Spencer, Tricia Harmon, Myra Rosen-Reynoso, and Meg Striepe. 2004. "Getting Close, Staying Cool: Early Adolescent Boys' Experiences with Romantic Relationships." Pp. 235–55 in *Adolescent Boys: Exploring Diverse Cultures of Boyhood,* edited by N. Way and J. Y. Chu. New York: New York University Press.

Treas, Judith. 2002. "How Cohorts, Education, and Ideology Shaped a New Sexual Revolution on American Attitudes Toward Nonmarital Sex, 1972–1998." *Sociological Perspectives* 45(3):267–83.

Welsh, Deborah P., Catherine M. Grello, and Melinda S. Harper. 2003. "When Love Hurts: Depression and Adolescent Romantic Relationships." Pp. 185–212 in *Adolescent Romantic Relations and Sexual Behavior: Theory, Research, and Practical Implications,* edited by P. Florsheim. Mahwah, NJ: Lawrence Erlbaum Associates.

Wilder, Esther I. and Toni Terling Watt. 2002. "Risky Parental Behavior and Adolescent Sexual Activity at First Coitus." *The Milbank Quarterly* 80(3):481–524.

Wong, Siu Kwong. 2005. "The Effects of Adolescent Activities on Delinquency: A Differential Involvement Approach." *Journal of Youth and Adolescence* 34(4):321–33.